

# 2021–2023 CATALOG

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**Seattle College District**

Siegal Administrative Center  
1500 Harvard Avenue  
Seattle, Washington 98122  
206.934.4100  
[seattlecolleges.edu](http://seattlecolleges.edu)

**Seattle Central College**

1701 Broadway  
Seattle, Washington 98122  
206.934.3800  
[seattlecentral.edu](http://seattlecentral.edu)

**North Seattle College**

9600 College Way N  
Seattle, Washington 98103  
206.934.3600  
[northseattle.edu](http://northseattle.edu)

**South Seattle College**

6000 16th Avenue SW  
Seattle, Washington 98106  
206.934.5300  
[southseattle.edu](http://southseattle.edu)

**Specialized Training Centers**

Georgetown Campus  
Health Education Center  
NewHolly Learning Center  
Seattle Maritime Academy  
Wood Technology Center

**eLearning /Distance Education**

Worldwide Virtual Campus  
[seattlecolleges.edu/programs/elearning](http://seattlecolleges.edu/programs/elearning)

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**About the catalog:** This catalog is published for information purposes and is designed to assist prospective students in program planning. Every effort is made to ensure accuracy at the time of publication; however, the catalog is not an irrevocable contract between the student and the Seattle Colleges. The colleges reserve the option to amend, modify or revise any content or provisions of this catalog without notice, because of changes in policies, personnel, curricula or funding. For the most current information, go to [www.seattlecolleges.edu](http://www.seattlecolleges.edu).

# What Do You Want To Learn?

With three colleges and more than 130 programs, you can study almost anything. Find the programs that interest you and visit [seattlecolleges.edu/programs](http://seattlecolleges.edu/programs) to learn more.



## Arts, Design, and Graphics

2D Fine Arts – C, N, S  
 3D Fine Arts – N, S  
 Apparel Design and Development – C  
 Architecture – C  
 Art History – C, N  
 Digital Art and Photography – C, N, S  
 Drama – C  
 Graphic Design – C  
 Jewelry and Metals – N  
 Music – C, N, S  
 Music History – S  
 Visual Media – C



## Business and Accounting

Accounting – N, S  
 Business – C, N, S  
 Business Technology Management – C  
 Economics – C, N, S  
 International Business – N  
 Real Estate – N  
 Residential and Commercial Property Management – N



## Culinary, Hospitality, and Wine

Culinary Arts – C, S  
 Hospitality Management – S  
 Specialty Desserts and Breads – C  
 Wine Studies – S



## Education and Human Services

Applied Behavioral Science – C  
 Chemical Dependency – C  
 Child and Family Studies – C  
 Early Childhood Education – N  
 Education – S  
 Elementary Education (K-8) – C  
 Social and Human Services – C  
 Social Work – C



## Health and Medical

Allied Health – C, N  
 Care Navigation and Coordination – C  
 Community Health and Education – C  
 Dental – C  
 Emergency Medical Technician – N  
 Global Health – C  
 Health Care Service Management – C  
 Medical Assisting – C  
 Nursing – C, S  
 Nutrition Science – C, S  
 Pharmacy Technician – N  
 Phlebotomy – N  
 Prenursing – C, N, S  
 Public Health – C, S  
 Respiratory Care – C  
 Surgical Technology – C



## Science, Technology, Engineering, and Math

Astronomy – C  
 Biology – C, N, S  
 Chemistry – C, N, S  
 Computer Science – C, N, S  
 Earth Sciences – C  
 Engineering (Computer, Civil, Aerospace, etc.) – C, N, S  
 Environmental Health – C  
 Environmental Science – C, N, S  
 Environmental Studies – C, S  
 Geology – C, N  
 Information Technology – C, N  
 Kinesiology, Sports and Exercise Science – S  
 Math – C, N, S  
 Physics – C, N  
 Physics and Astronomy – S  
 Sustainable Agriculture – C  
 Sustainable Building Science Technology – S



## Skilled Trades and Technical Training

Aeronautical Technology – S  
 Automotive Technology – S  
 Building Trades Apprenticeships – N  
 CNC Machining – S  
 Construction – C  
 Diesel and Heavy Equipment Technology – S  
 Electronics Technology – N  
 Engineering Graphics and Design – N  
 Landscape Horticulture – S  
 Manufacturing Academy – S  
 Maritime – C  
 Maritime Shipyard Welding – S  
 Multi-Occupation in Engineering and Technology (MOET) – S  
 Multi-Occupational Trades (MOT) – S  
 Pre-Apprenticeship Construction Training (PACT) – C  
 Watch Technology Institute – N  
 Welding Fabrication Technology – S



## Social Sciences, Humanities, and Language

Anthropology – C, N  
 Communication Studies – C, N, S  
 English, Literature, and Writing Studies – C, N, S  
 Equity and Social Justice – C, N  
 Ethnic Studies – C, N  
 Gender, Women, and Sexuality Studies – C, N  
 Global Studies – C  
 History – C, N, S  
 Humanities and Cultural Studies – C, N, S  
 Philosophy – C, N  
 Political Science – C, N, S  
 Psychology – C, N, S  
 Sociology – C, N  
 Social Sciences – C  
 World Languages – C, N

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# About Seattle Colleges

## Mission

As an open-access learning institution, Seattle Colleges prepares each student for success in life and work, fostering a diverse, engaged, and dynamic community.

## Vision

Seattle Colleges is recognized as an exemplary learning institution that transforms lives, promotes equity, and enriches the community.

## Values

- **Accessibility** for all learners and partners
- **Collaboration** through open communication and commitment to working together
- **Diversity, inclusion, and equity** for all individuals, particularly the underserved in our community
- **Fiscal sustainability** for long-term viability and excellence in service and operations
- **Growth and development** of faculty and staff through professional development
- **Innovation** in instruction, student services, operations, and organizational culture
- **Integrity** by adhering to the highest standards of ethics and public stewardship

## Accreditation

Seattle Colleges includes North Seattle College, South Seattle College, and Seattle Central College. Each college is a state-supported public institution individually accredited by the Northwest Commission on Colleges and Universities (NWCCU), an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education.

Accreditation of an institution of higher education by the NWCCU indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one that has available the necessary resources to achieve its stated purposes through appropriate education programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the NWCCU is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered or of the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding an institution's accredited status by NWCCU should be directed to the administrative staff of the individual institution. Individuals may also contact: NWCCU, 8060 165th Ave NE, Suite 100, Redmond, WA 98052, (425) 558-4224, nwccu.org.

## 2019–2020\* Annual Profiles

**Annual Attendance** 30,740

## SPECIAL ENROLLMENTS 2019–2020

(Unduplicated headcount across the district)

Distance Education/eLearning	18,607
Running Start	2,113
International Students	3,012
Worker Retraining	1,568

## DEGREES & CERTIFICATES 2017–2018

Annual awarded	3,780
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## EMPLOYEES 2020–2021\*\*

Total	1,702
Teaching faculty	862
full-time/part-time	322/540
Non-teaching faculty	71
Classified	428
Exempt	346

## Fall 2019 profiles

### Students

Median age	28
Ethnic diversity	43%
Male/Female	43%/47%
With bachelor or higher degrees	13%
Full-time/Part-time attendance	35%/65%

### Programs

College Transfer	43%
Career and Technical	46%
Basic Skills, Pre-college and other	11%

## Course Funding Sources

State-funded	69%
Contract-supported	17%
Student-supported	14%

*NOTE: Duplicated enrollment across the district may result in totals different from 100%.*

*\* Source: Seattle College District database. Fall Quarter based on state-funded enrollment unless otherwise noted.*

*\*\* State-funded*



## Campuses and Centers

[seattlecolleges.edu/welcome/our-locations](http://seattlecolleges.edu/welcome/our-locations)

Seattle Colleges is comprised of three colleges, five specialty centers, and a district office.

### Land Statement

Our campuses are on the traditional land of the First People of Seattle, ancestral home of the Coast Salish people, the traditional home of all tribes and bands within the Duwamish, Squamish, Tulalip, and Muckleshoot nations. We honor with gratitude the land itself and thank the original caretakers of the land, past and present.

### Seattle Colleges District Office at Siegal Center

1500 Harvard Avenue  
Seattle, WA 98122  
[seattlecolleges.edu](http://seattlecolleges.edu)

The district office is located one block south of Seattle Central's Broadway Edison Building in Seattle's Capitol Hill neighborhood at Siegal Center.

The district office represents Seattle Colleges on the State Board for Community and Technical Colleges (SBCTC) for purposes of enrollment and budget allocations. With offices in Siegal Center, the chancellor's senior administrative leadership team leads and coordinates districtwide functions, activities, and services. Administrative units—including Academic and Student Success; Accounting, Finance, and Purchasing; Advancement/Foundation; the Chancellor; District Communications; Government Relations; Human Resources; Information Technology; and Workforce Education—have offices here that serve the entire district.

### Seattle Central College

1701 Broadway  
Seattle, WA 98122  
[seattlecentral.edu](http://seattlecentral.edu)

Seattle Central is located on Capitol Hill, a vibrant neighborhood that reflects the diversity and activity of the city. The campus is minutes from downtown Seattle and accessible from every part of the city via public transportation including bus, trolley, and light rail.

Central administers three specialty training centers.

### Health Education Center at Pacific Tower on Beacon Hill

1200 12th Avenue S  
Seattle, WA 98144

Our excellent healthcare programs now have a world-class training facility in the new Health Education Center located in the historic Pacific Tower on Beacon Hill.

### Seattle Maritime Academy in Ballard

4455 Shilshole Avenue NW  
Seattle, WA 98107

Affiliated with Seattle Central, Seattle Maritime Academy is located in a new, state-of-the-art facility in Seattle's Ballard neighborhood.

### Wood Technology Center

2310 S Lane Street  
Seattle, WA 98144

Affiliated with Seattle Central, the Wood Technology Center is located in a new, state-of-the-art facility in Seattle's Central District. Note: the Wood Technology Center is closed on Fridays.

### North Seattle College

9600 College Way North  
Seattle, WA 98103  
[northseattle.edu](http://northseattle.edu)

North Seattle College is located in Seattle's Northgate/Licton Springs residential neighborhood. The campus includes interesting modern architecture and environmentally sensitive wetlands, which have inspired a college-wide commitment to sustainability.

## South Seattle College

**6000 16th Avenue SW**

**Seattle, WA 98106**

**[southseattle.edu](http://southseattle.edu)**

Located on an 87-acre hilltop campus in West Seattle, South Seattle College offers panoramic views of the city skyline and surrounding mountains. South's campus features a six-acre Arboretum which serves as an outdoor classroom, next to the Seattle Chinese Garden.

South administers two specialty training centers.

## Georgetown Campus

**6737 Corson Avenue S**

**Seattle, WA 98108**

Affiliated with South, the Georgetown campus is known as the area's premier workforce education and training center. The campus is located in Seattle's Georgetown neighborhood.

## NewHolly Learning Center on Beacon Hill

**7058 32nd Avenue S**

**Seattle, WA 98118**

South Seattle College's NewHolly Learning Center is a community resource for southeast Seattle. It is located on Beacon Hill on the second floor of the Learners Building.

## SCCtv

### Seattle Colleges Cable Television

**(206) 934-3966 or (206) 395-5539**

**[seattlecolleges.tv](http://seattlecolleges.tv)**

The Seattle Colleges Cable Television, SCCtv, offers high-quality educational and community programming. SCCtv broadcasts to Seattle residents on Comcast Channel 28, Wave Channel 19, CenturyLink Ch8005/HD-Ch8505, and simulcasts to the world via [seattlecolleges.tv](http://seattlecolleges.tv). Emmy-award-winning SCCtv creates unique original programming, such as Professor Fred's Movie Marvels and shares these programs with college television stations across the country. The video production team at self-funded SCCtv also creates high-quality video for Seattle Colleges and non-College clients. Programming information is available on the website.

In January 2021 SCCtv launched a new education channel, KNW (Knowledge NW), broadcasting original educational content created by SCCtv and our education partners, like the University of Washington. KNW can be seen throughout Seattle and King County on Comcast Channel 77, Wave Ch 23, Century Link/Lumen Ch 8006, and live simulcasts at [seattlecolleges.tv](http://seattlecolleges.tv).

# Degrees and Training

## Pre-college

### Pre-college and ESL

Pre-College and ESL courses provide instruction for adults who want to:

- Improve their English language skills (ESL) for work or college
- Earn a high school diploma or GED®
- Get college-ready with their reading, writing, communication, and math skills
- Begin college or job-training while earning a high school diploma
- Brush up on skills in order to get better jobs or prepare for college

Each of the programs below are designed to meet a particular set of student needs.

- Adult Basic Education
- Developmental Education
- English as a Second Language
- English as a Second Language (Transitional)
- GED® Prep
- High School Completion
- High School Completion Tuition Waiver
- High School to College Preparation Programs
  - Learning Center Seattle Colleges
  - Career Link High School
  - TRIO
  - Upward Bound
- High School/College Concurrent Programs
- Running Start
- I-BEST

### For more information

**Seattle Central College**

**Basic & Transitional Studies**

**(206) 934-4180**

[seattlecentral.edu/programs/basic-and-transitional-studies](http://seattlecentral.edu/programs/basic-and-transitional-studies)

**North Seattle College**

**Basic & Transitional Studies Division**

**(206) 934-7420**

[northseattle.edu/academics/transitional-studies-and-pre-college](http://northseattle.edu/academics/transitional-studies-and-pre-college)

**South Seattle College**

**Basic & Transitional Studies Division**

**(206) 934-5363**

[southseattle.edu/basic-transitional-studies](http://southseattle.edu/basic-transitional-studies)

### Adult Basic Education

**Central (206) 934-4180**

**North (206) 934-4537**

**South (206) 934-5363**

Adult Basic Education (ABE) classes are for adults who wish to improve their reading, writing, communication, and math skills. Students can start at a level matching their current skills and progress at their own pace. Classes in basic math, reading, writing, and communication skills are designed to help adults become more self-sufficient, improve their job prospects, prepare for the high school equivalency options (such as the GED®), or qualify for entry into college-level programs. Course descriptions are listed under ABE, though some classes may also be listed under HSC for students who enroll in GED and High School+ classes concurrently. Classes are noncredit. Tuition is low, currently \$25 per quarter (subject to change).

### Developmental Education

#### English, Mathematics, and Human Development

Many students entering college or returning after time away from studies need additional work to prepare for college-level courses. For these students, Seattle Colleges offers a series of courses in English, mathematics, and human development. Placement in one or more of these courses is determined by performance on placement tests required for admission to the specific college program or courses. Courses in this category are those numbered below 100. They are described in the course description sections for English, mathematics, and human development.

### English as a Second Language (ESL)

**Central (206) 934-4180**

**North (206) 934-7420**

**South (206) 934-5363**

ESL classes are offered to help nonnative speakers communicate in English, increase their understanding of American culture, and advance toward their college and career goals. Conversation, pronunciation, reading, writing, and grammar are taught in the context of work and college readiness, digital literacy, and other topics designed to help students advance along career pathways. These noncredit courses cost \$25 per quarter tuition (subject to change). Course descriptions are found under ESL. When students' skills are ready, they can move on to Transitional ESL classes (ESL 93-99 at Central, or ENG 98-101 at North and South), which concentrate on academic preparation skills.

Note: International students should take Intensive English classes through International Programs, page 28.



## ESL (Transitional)

Placement in Transitional ESL classes (ESL 093-099) is done by standardized placement testing. These courses prepare students for college-level work, with increasing emphasis on note taking, composition, oral presentation, and class discussion at high levels. Although these classes do not count as credit for college-level work, ESL 093-099 can be covered by financial aid. Tuition for these classes is the same as regular tuition.

NOTE: International Students should take intensive English classes through International Programs, page 28.

## GED® Preparation

**Central (206) 934-4180**

**North (206) 934-4537**

**South (206) 934-5363**

Adults may demonstrate that they have reached an education level equal to a high school diploma by taking the GED® test. Students who pass the GED® tests earn a GED® certificate, accepted by colleges, vocational programs, trade unions, and many employers as equivalent to a high school diploma. Contact the college offices for fee information. To prepare for this test, Seattle Colleges offers courses that cover the subjects tested: reasoning through language arts, mathematics, science, and social studies.

A prerequisite for enrollment in GED® classes is the ability to read at or above eighth-grade level or completion of ABE Level 4. Tuition is low, currently \$25 per quarter (subject to change).

## High School Completion Options

**Central (206) 934-5408**

**North (206) 934-4537**

**South (206) 934-7946**

- All students who are 21 years of age and older and who earn an associate degree of any type from Seattle Colleges are eligible to submit a written request for and to receive a college-based high school diploma. These individuals are not required to complete the State Board of Education high school graduation requirements.
- Running Start students who complete an associate degree are eligible to request a high school diploma at any age. These individuals are not required to complete the State Board of Education high school graduation requirements.
- Seattle Colleges also offers high school completion options to students who have not completed their high school diploma. With this option, students must have a minimum of 24 credits (credit requirements vary depending on graduation year), which includes required courses.

- Students planning to work toward a high school diploma should obtain a copy of “Requirements for the High School Diploma” from the Advising, Basic and Transitional Studies (at North Seattle College) or Admissions Office for complete information. These individuals are required to complete the State Board of Education’s high school graduation requirements. The requirements are listed below.

### Option A: Standard High School Diploma

**120 college credits are required since the class of 2019. (Up to 2 credits can be waived locally based on a student’s unusual circumstances.)**

A high school diploma may be earned by completing 120 college credits (requirements vary depending on graduation year), including required and approved elective courses. Transfer credit may be approved for courses completed at other institutions; the final course must be taken at one of the colleges, and a minimum of 2.0 GPA must be achieved.

Students who have not completed high school and are age 19 or older and WA state residents may enroll in this option for a reduced tuition rate. Students 18 or younger must pay full tuition unless enrolled in a Running Start program through a participating high school.

Requirements may vary slightly from college to college. A number of other courses may be substituted for these requirements. Obtain a copy of “Requirements for the High School Diploma” and advice from a counselor or advisor at the college you plan to attend.

*Note: A 5-credit class equals one year of study in high school.*

English (class of 2019 and beyond) . . . . .	20
Fine Arts (Drama, Music, or Art) . . . . .	5
Fine Arts of Personalized Pathway (class of 2019 and beyond) . .	5
World Language or Personalized Pathway . . . . .	10
(class of 2019 and beyond)	
Pacific Northwest or Washington State History	
(non-credit requirement class of 2016 and beyond)	
U.S. History I (includes U.S. Constitution) . . . . .	5
Contemporary World Problems, World History,	
or World Geography . . . . .	5
Social Studies Elective (class of 2016 and beyond) . . . . .	2.5
Civics (class of 2016 and beyond) . . . . .	2.5
Mathematics series (Algebra 1, Geometry, Algebra . . . . .	2
(class of 2013 and beyond), or math class at student’s	
placement level—15 credits for the Class of 2013 and beyond	
Science (three science courses (class of 2019 and beyond) . 2	
(class of 2019 and beyond) of which one must be a lab	
science, for which prerequisites have been met . . . . .	15
(class of 2019 and beyond)	
Occupational Education (may be chosen from	
any Career and Technical course) . . . . .	5
Physical Education (may be waived with permission	
at C, S: not at N) . . . . .	10
(7.5 credits class of 2016 and beyond) and (2.5 credits	
Health class of 2016 and beyond)	

Approved Electives (from college transfer or career and technical courses; quantity varies, depending on number of required courses) . . . . . minimum (20 class of 2016 and beyond)  
 Required credits . . . . . 100  
 (class of 2019 and beyond)

ELECTIVE CREDITS . . . . . 20  
 (class of 2019 and beyond)

TOTAL CREDITS . . . . . 120  
 (class of 2019 and beyond)

## Option B: Associate Degree Conversion Diploma

*NOTE: This option is not automatic, and procedures vary from campus to campus. Consult an advisor.*

Upon successful completion of the Associate of Arts (A.A.), Associate of Science (A.S.), or Associate in Business (A.B.) degree, and by taking the following courses, the student may be granted a high school diploma in addition to the associate degree: U.S. History I (5) or POLS&202 (5) and Washington State History (2.5) or satisfaction of requirement. Check with advisor.

### SUBSTITUTING COURSES

Several pre-college transfer and college transfer courses may be substituted for required high school courses. Students who want to earn college credit while fulfilling high school graduation requirements should consult with the Advising Center or high school completion program (advisor).

### ELECTIVE COURSES

Elective courses may be selected from the high school completion program and the following areas: vocational, general studies (liberal studies), college preparatory courses in math and English. Work experience may also qualify for credit at some colleges. Check with your college advisor. Credits could be granted on proof of satisfactory employment (405 hours = 1 high school credit or 5 college credits).

## Option C: (High School +)

Adults without a high school diploma now have a new way to earn their high school credential. High School+ allows students to earn high school credit by completing coursework in our Basic and Transitional Studies division. It's less expensive than the Standard High School Diploma program, and graduates earn a Washington state diploma rather than a GED® or other certificate.

To be eligible, students must be 18 or older, have not earned a high school diploma and attend an orientation session where they qualify to receive services from the BTS division. Students must also provide a copy of their high school transcript, as they will take classes based on any gaps between their transcript and the graduation requirements established by the Washington State Board of Education. Those gaps can be filled by taking coursework, by demonstrating mastery of competencies of the graduation requirements in a way other than coursework, or by providing evidence of prior learning, such as professional certifications, college transcripts, or other documentation.

## High School Completion Tuition Waiver

Eighty percent of the regular tuition is waived for students who fulfill the following criteria:

1. Age 19 or older
2. Resident of the state of Washington

To receive a tuition waiver, a student must submit an application for high school diploma completion.

Students 18 years old and younger who have not graduated from high school must pay the standard tuition fees for their courses unless they enroll in Running Start (see page 9). Nonresidents will be charged the resident tuition fee. These students must also be approved to attend one of the Seattle Colleges by the director of Admissions or the college underage advisor and obtain a letter of release from their school district. Seattle Public Schools students should contact the Office of Student Placement.

## High School to College Preparation Programs

### Learning Center Seattle – Central (206) 934-6959

Learning Center Seattle (LCS) is an Open Doors program that serves students ages 16 to 21 who have separated from high school without a diploma. LCS offers college readiness and basic skills instruction that leads students to and through their GED® credential and into college programs. Tuition and course materials are free for eligible students, and additional support is provided to keep students in school. Students receive individual case management and college navigation support.

### Career Link High School – South (206) 934-6475

[southseattle.edu/programs/career-link](https://southseattle.edu/programs/career-link)

Career Link at South prepares students for success in college and their careers while they work toward earning a high school diploma. The program serves students between the ages of 16 and 21 who have left high school without a diploma. Tuition and materials are free, and support is available for other needs.

Career Link at South offers support through this program and other campus programs for students to enroll in regular college classes. All Career Link students receive ongoing academic advising and assistance to ensure they are on track to graduate and have a High School & Beyond plan in place.

## TRIO Educational Talent Search – South

(206) 934-6401

[southseattle.edu/trio/talent-search](https://southseattle.edu/trio/talent-search)

The purpose of TRIO Talent Search is to help low-income and potential first-generation college students successfully graduate from secondary school and enroll in postsecondary education. This federally funded program serves 580 students each year from five secondary schools and two middle schools located in West Seattle. Students are provided with services directly at their school sites during the school year by program staff. Students must apply for the program, be deemed eligible, and be accepted before receiving any program services. Services that are offered and provided to students, both in individual and group settings, include academic advising and assistance with secondary course selection, postsecondary information and application assistance, financial aid information and application assistance, financial literacy information, college entrance examinations information and registration assistance, career awareness and planning information, connections to tutorial services, and college campus tours and visits.

## Upward Bound – South

(206) 934-6676

[southseattle.edu/programs/trio/upward-bound](https://southseattle.edu/programs/trio/upward-bound)

The purpose of TRIO Upward Bound is to provide low-income and potential first-generation students with the skills and motivation to complete high school, go to college, and graduate from college. This federally funded TRIO program serves 132 students each year from four secondary schools in West Seattle and Seatac, via two Upward Bound grants. The goal is to maximize students' potential for graduation from high school and subsequent college enrollment. Students are provided with services directly at their school sites during the school year by program staff and on campus at South Seattle College during their summer program. Students must apply for the program and be accepted before receiving any program services. TRIO Upward Bound students receive services, which include instruction in math, science, foreign language, SAT preparation, and arts/other electives; academic tutoring and instruction in core academic subjects; academic advising and assistance with secondary course selection; post-secondary information and application assistance; financial aid information and application assistance; financial literacy information; college entrance examinations information; registration assistance; career exploration and planning; and educational field trips and activities. The year-round program includes a six-week summer program on campus at South for intensive academic and college preparatory activities.

## High School/College Concurrent Programs

These programs allow students to begin college studies while in high school, with credit for both high school and college courses.

### Running Start

**Central (206) 934-3820**

[seattlecentral.edu/programs/high-school/running-start](https://seattlecentral.edu/programs/high-school/running-start)

**North (206) 934-3682**

[northseattle.edu/running-start](https://northseattle.edu/running-start)

**South (206) 934-5387**

[southseattle.edu/running-start](https://southseattle.edu/running-start)

Running Start allows qualified high school juniors and seniors to register for college-level courses while remaining enrolled at their local high school. Full to partial tuition is paid for by the state; students pay mandatory fees, buy their own books, and provide their own transportation. To qualify, students must take a placement test and be ready for college-level coursework. As a dual enrollment program, students receive both high school and college credit, thus accelerating their progress through the education system. Running Start is a good option for high school students who are ready to start college early.

For information about preparing for and taking placement tests, visit [beforeyoutest.org](https://beforeyoutest.org).

For more information about the Running Start program, visit [sbctc.edu/becoming-a-student/high-school/dual-credit-student.aspx](https://sbctc.edu/becoming-a-student/high-school/dual-credit-student.aspx).

## Integrated Basic Education & Training (I-BEST)

**Central (206) 934-5459**

[seattlecentral.edu/programs/basic-and-transitional-studies/i-best](https://seattlecentral.edu/programs/basic-and-transitional-studies/i-best)

**North (206) 934 4585**

[northseattle.edu/programs/i-best](https://northseattle.edu/programs/i-best)

**South (206) 934-5363**

[southseattle.edu/basic-transitional-studies/i-best-career-training](https://southseattle.edu/basic-transitional-studies/i-best-career-training)

I-BEST (Integrated Basic Education and Skills Training) is a special program for Pre-College and ESL students who are interested in job training classes or transitioning into a transfer pathway. Students start certificate and/or degree programs and receive extra academic support in the classroom, as well as navigation support outside the classroom. Some examples of I-BEST programs at Seattle Colleges are Information Technology (IT), Early Childhood Education, Accounting, and a pathway to a transfer associate degree. In an I-BEST classroom, a career training instructor and a transitional skills instructor teach together to help students learn better and faster. That way, students can be learning job-based or academic content while enhancing skills such as reading, writing, critical thinking, and time management. There are up to five additional hours of classroom support in skills practice offered each week.

## Certificates

### Certificate Programs

Certificate programs of one to seven quarters in length are designed to prepare graduates for employment in a wide variety of careers or to upgrade the skills of incumbent workers.

Requirements include satisfactory completion of an approved program of study with a minimum 2.0 cumulative grade point average. Tests and a minimum proficiency may be required for certain programs. Waiting lists and application fees may be required of others. Education and work experience may be accepted to satisfy part of the requirements if specifically related to the individual program of study. Credits earned in certificate programs are generally applicable toward the A.A.S. degree. Note: Courses must be numbered 100 or above to count toward certificate programs.

### Short-term Certificates

[seattlecolleges.edu/shortcertificates](http://seattlecolleges.edu/shortcertificates)

Short-term certificates have fewer than 20 credits. They usually cover an entry-level or specific skill set needed for that industry. Students can complete a short-term certificate and enter/re-enter the workplace with improved skills. They may also continue on a pathway to a higher certificate or degree, and some or all of the credits from the short-term certificate may apply to the next-level certificate or degree. Some programs are composed of short-term certificates that are specifically designed to build, or “stack,” sequential skills and credits.

### Related Instruction for Certificates and Degrees

#### Definition

Each career and technical certificate or degree of 45 credits or more includes related instruction, the nontechnical portion of study providing instruction in the areas of communication, computation, and human relations.

#### Rationale

The purpose of related instruction is to provide educational depth and breadth through development of essential skills in reading and writing, research and information literacy, in-person and media-based communication, critical thinking, problem-solving, understanding individuals and cultures, and quantitative or symbolic reasoning. These transferable skills support students as they continue in higher education, move forward in careers, and continue the process of lifelong learning.

## College Transfer

The College Transfer program offers courses in a wide range of academic fields common to undergraduate study in colleges and universities. These courses meet requirements for associate degrees and will transfer to four-year institutions within guidelines established by those schools. The courses and programs offered are designed to enable the student to make a successful transition to a baccalaureate (four-year) institution. Students who plan to transfer to a specific college or university should work with a transfer advisor and also request information from the baccalaureate institution(s) they want to attend.

- Associate of Arts (A.A. – DTA) Degree
- Associate in Business – Direct Transfer Agreement (A.B.-DTA) Degree
- Associate of Science – Transfer (A.S.-T) Degree
- Associate of Science – Direct Transfer Agreement (A.S.-DTA) Degree
- Associate of Fine Arts (A.F.A.) Degree

For general information please refer to page 38.

### Transfer Degrees Summary

C-Central N-North S-South

DTA – Direct Transfer Agreement

#### Associate of Arts (A.A.-DTA)

C,N,S

Two-year degree designed to transfer to a baccalaureate college or university.

#### Associate in Business (A.B.-DTA)

C,N,S

Two-year degree designed to transfer to a baccalaureate (four-year) college or university.

#### Associate of Science - Transfer Degree (A.S.-T)

C,N,S

Two-year degree designed to transfer to a four-year college or university in two major areas of science.

**Option 1** Biological sciences, environmental/resource sciences, chemistry, geology, and earth sciences

**Option 2** Engineering, computer science, physics, and atmospheric science

#### Associate of Science (A.S.-DTA)

C,N,S

Two-year degree designed to transfer to a four-year college or university.

#### Associate in Fine Arts (A.F.A.)

N

#### Associate of Applied Science (A.A.S. and A.A.S.-T) Degrees

C,N,S

### Associate of Arts (A.A. – DTA) Degree

The Associate of Arts (A.A.) – Direct Transfer Agreement (DTA) degree is a 90-credit transfer degree that fulfills the general education requirements for most four-year degrees in arts and sciences. To earn the A.A. degree, students must achieve a cumulative grade point average of 2.0 or better in courses numbered 100 and above, complete at least 15 credits at the college awarding the degree, and meet the requirements outlined below.

Students should contact college advising offices for listings of courses that satisfy degree requirements. Students planning to transfer to a four-year institution should be aware that they must complete all admission requirements for their destination institution. In addition, students are encouraged to give early consideration to possible majors and obtain information about requirements for these majors at their destination college or university.

### A.A. Degree Learning Outcomes

The Seattle Colleges A.A. degree is designed to fulfill a set of learning outcomes for the general education of a college undergraduate in the United States in the 21st century. These learning outcomes include the following:

1. Communication skills (reading, oral or signed, written, or other forms of expression): Explain meaning of written work, presentations, arts, and media in different contexts, and present oral, signed, written, or other forms of expression to increase knowledge, foster understanding, or promote change in an audience.
2. Critical thinking, inquiry and analysis, and problem-solving: Explore issues, ideas, phenomena, and artifacts to define and articulate problems or to formulate hypotheses. Analyze evidence to formulate an opinion, identify strategies, develop and implement solutions, evaluate outcomes, and/or draw conclusions.
3. Global learning and intercultural knowledge and competence: Critically analyze complex, interdependent, national, and global systems, and their legacies and implications, regarding the distribution of power. Reflect on how one's position in these systems affects both local and global communities. Apply a set of cognitive, affective, and behavioral skills that support effective and appropriate interaction in a variety of cultural contexts.



4. Quantitative literacy: Reason and solve quantitative problems in a wide array of contexts, and use quantitative evidence to develop and communicate sound arguments.
5. Creative thinking: Synthesize existing ideas, images, or expertise in original ways.
6. Information literacy: Identify, locate, and evaluate needed information in a complex and changing environment. Effectively and responsibly use that information to develop ideas, address issues, and solve problems.
7. Technology literacy: Effectively and critically evaluate, navigate, and use a range of digital technologies.
8. Integrative learning: Connect disciplinary and divergent ideas across contexts by synthesizing and transferring integrative learning principles to complex situations within and/or beyond the classroom.
9. Collaboration: Work effectively with others to learn, complete tasks, and pursue common goals that shape, influence, and benefit the individual and/or society.
10. Ethical reasoning: Examine, assess, and articulate core beliefs and values, and apply that knowledge to analyze and evaluate complex ethical situations from various perspectives.
11. Civic engagement: Promote the quality of life in the civic community through actions that enrich individual life and benefit the community.
12. Foundations and skills for lifelong learning: Transfer previous learning to new situations, reflect on learning experiences, and initiate steps to apply effective learning strategies to improve and expand knowledge, skills, and competence.

*See page 13 for detailed A.A. degree requirements at Seattle Colleges.*

### Associate of Arts or Sciences: Special Emphasis Areas

Students planning to transfer to a baccalaureate (four-year) institution and pursue a specific field of study should work closely with their advisor to plan their A.A. or A.S. degrees. In addition to the A.A. or A.S. degree, special courses of study have been designed for the following areas of emphasis at the Seattle Colleges.

#### ■ **Global Health – Central**

The Global Health emphasis can be completed within either the A.A. or A.S. transfer degree and places a priority on improving health and achieving health equity. The focus is on worldwide health access and improvement, reduction of disparities, and protection against global health challenges. It prepares students to work with diverse populations, provide international service, and understand the nuances of global health care. Contact Central Advising Office for further information.

#### ■ **Global Studies – Central**

This emphasis can be completed within either the A.A. or A.S. transfer degree and integrates the study of politics, economics, and the arts with the analyses of cultural practices, beliefs, and social systems. Students learn to appreciate and understand world cultures, focus on themes of global significance, and develop an interdisciplinary approach to international issues. Contact Central Advising Office to learn more.

#### ■ **Sustainable Agriculture (SAGE) – Central**

This innovative emphasis offers interdisciplinary courses, hands-on service learning, and internship opportunities in the emerging field of urban agriculture. The emphasis provides a foundation of knowledge and skills for students interested in pursuing related education at four-year institutions or entering the green workforce. For details, contact Central Advising Office or visit [seattlecentral.edu/learn/sage](http://seattlecentral.edu/learn/sage).

### Associate in Business – Direct Transfer Agreement (A.B.-DTA) Degree CENTRAL, NORTH, SOUTH

The Associate in Business degree is designed to satisfy lower-division general education and business requirements at Washington's public four-year colleges and universities.

### Associate of Science – Transfer (A.S.-T) Degree

The Associate of Science (A.S.) is a transfer degree for students who wish to transfer as juniors to baccalaureate institutions in the state of Washington.

Degree requirements include satisfactory completion of at least 90 approved credits with a 2.0 cumulative GPA; however, certain transfer institutions may require a GPA higher than 2.0. At least 15 credits in college-level courses (100 or above) must be earned at the college granting the degree.

Two different study options are offered:

1. Biological sciences, environmental/resources sciences, chemistry, geology, and earth sciences
2. Engineering, computer science, physics, and atmospheric science

Students should contact an advisor for specific program requirements.



## Associate of Science – Direct Transfer Agreement (A.S.-DTA) Degree

The Associate of Science – Direct Transfer Agreement (A.S.-DTA) is a transfer degree. There are certain major areas of study in which the student may not be able to take all the courses necessary to transfer with junior standing in his or her major. Contact an advisor for information on this degree program. For specific courses leading to a premajor in a number of science fields, refer to the College Transfer section for each college.

Degree requirements include satisfactory completion of at least 90 approved credits with a 2.0 cumulative GPA; however, certain transfer institutions may require a GPA higher than 2.0. At least 15 credits in college-level courses (100 or above) must be earned at the college granting the degree.

## Associate of Fine Arts (A.F.A.) Degree

North Seattle College offers an Associate of Fine Arts (A.F.A.) degree. This degree requires at least two years of study and includes many of the A.A. degree requirements as well as specific requirements in art. While the A.F.A. degree prepares students to transfer to four-year institutions, the only college to which an A.F.A. recipient can currently transfer with junior standing is The Evergreen State College.

See North, page 40.

### College Transfer

#### A.A. Degree Requirements

<b>Basic Requirements</b>	<b>15 credits</b>
<b>Electives</b>	<b>30 credits</b>
<b>Areas of Knowledge</b>	
<b>Distribution Requirements</b>	<b>45 credits</b>

#### A.A. DEGREE TOTAL 90 CREDITS

##### Special Requirements included within the 90-credit total

Within the 90 credits required for the A.A. degree, students must complete special requirements in Integrated Studies, Communication, U.S. Culture, and Global Studies, as listed below. Students should consult their college advising office for a current listing of these courses. Specially designated courses that satisfy these requirements differ by college. Special designation credit for courses taken at one of the Seattle Colleges will transfer to other colleges in the district.

- Integrated Studies. (This requirement may be met through specially designated individual courses, linked courses, or coordinated studies programs.)
- At least one course in Communication.
- At least one course in U.S. Cultures.
- At least one course in Global Studies.

## Basic Requirements

**15 Credits**

### English &101 and &102

**10 credits**

### Quantitative/Symbolic Reasoning

**5 credits**

Students completing the QSR requirement will be able to use quantitative or symbolic reasoning to understand, analyze, interpret, and solve problems. Successful completion of any of the following classes satisfies the QSR requirement for Seattle Colleges. These courses may also satisfy the QSR requirement at baccalaureate institutions. Students should check the requirements of their destination institution.

- MATH &107\*, 109, 116, 120\*\*, &131\*\*, &132\*\*, 136†, &141, &142, &146, &148, &151, &152, &163, 220, 224, 238, 239

(\*If using MATH &107 to meet both the IA proficiency requirement and the QSR requirement, students must earn a minimum 2.0 grade in the course.)

(\*\* MATH 120, &131, and &132 do not meet the QSR requirement at University of Washington.)

- PHIL &120

## Electives

**30 Credits**

Electives include:

- All college transfer courses numbered 100 or above
- Accounting, business administration, and transfer engineering classes
- Physical education activity courses (3-credit maximum)
- A maximum of 15 credits from a combination of the following:
  - Workforce Education Career and Technical courses numbered 100 and above
  - Human Development courses (HDC) numbered 100 and above
  - Library research courses
  - Cooperative Work Experience (CWE) courses numbered 100 and above

## College Transfer A.A. Degree Requirements (Continued)

### Areas of Knowledge Distribution Requirements

**45 Credits**

This listing may change. Students should confer with their college advising office for the most current information.

### Visual, Literary, and Performing Arts (Humanities and Arts)

**15 Credits**

Choices must include a minimum of two different course prefixes, and no more than five credits each of a world language at the 100 level and a studio/performance class (\*asterisked below) may be applied to the distribution requirements.

**Arabic: ARAB** 101, 102, 103

**Art: ART** &100, 101\*, 102\*, 103\*, 104, 105, 106, 110\*, 111\*, 112\*, 113\*, 114\*, 115\*, 121\*, 122\*, 123\*, 124\*, 163, 166\*, 170, 171, 201\*, 202\*, 203\*, 205\*, 206\*, 207\*, 209\*, 210\*, 211\*, 212\*, 213\*, 214\*, 215\*, 216\*, 217\*, 221\*, 222\*, 223\*, 231\*, 232\*, 240\*, 251, 252, 253, 254, 255, 256, 257, 258, 281\*, 282\*, 283\*, 284\*, 285\*, 290, 291

**American Sign Language: ASL** &121, &122, &123, 210, &221, &222, &223

**Chinese: CHIN** &121, &122, &123, &221, &222, &223

**Communication: CMST** &101, &102, 115, 145, 155, 175, 185, 195, 205, &210, 215, &220, &230, 235, 240, 245, 255, 265, 275, 285, 295

**Drama: DRMA** &101, 103, 105, 108\*, 109\*, 110\*, 112, 114\*, 116\*, 120\*, 121\*, 122\*, 123\*, 131, 170\*, 171\*, 172\*, 173\*, 174\*, 180\*, 182\*, 204\*, 205\*, 206\*, 221\*, 222\*, 223\*, 284, 285, 286

**English: ENGL** 104, 109, &111, &112, &113, &114, 115, 116, 117, 125, 135, 140, 151, 152, 153, 161, 162, 201, 204, 205, 210, 214, 218, 219, &224, &225, &226, &227, &228, 231, 232, 233, 240, 241, &244, &245, &246, 247, 251, 252, 253, &254, &256, 257, 258, 259, 260, 263, 265, 266, 267, 270, 291, 292, 293

**French: FRCH** &121, &122, &123, 204, 205, 206, 212, &221, &222, &223, 231, 232, 233

**German: GERM** &121, &122, &123

**Humanities: HUM** 104, 105, 110, 112, 115, &116, &117, &118, 120, 121, 125, 130, 135, 140, 145, 150, 155, 160, 200, 210, 234, 261, 270

**Italian: ITAL** 121, 122, 123

**Japanese: JAPN** &121, &122, &123, &221, &222, &223

**Journalism: JRN** 101, 102, 103

**Linguistics: LAN** 101, 110

**Literature: LIT** 234, 236, 238

**Music: MUSC** 100, &105, 106, 109, 110, 113, 116, 117, 118, 119\*, 120\*, 124, 125, 126\*, 127\*, 128\*, 130\*, 134\*- 140\*, &141, &142, &143, 144\*, 145\*, 146\*, 147\*, 148\*, 150\*, 151\*, 156\*, 157\*, 158\*, 160, 161, 163, 164\*, 165\*, 166\*, 171\*, 172\*, 173\*, 182\*, 185, 186, 204, 205, 213, 221\*, 222\*, 223\*, &231, &232, &233

**Russian: RUSS** &121, &122, &123

**Spanish: SPAN** &121, &122, &123, &221, &222, &223, 236, 238

**Vietnamese: VIET** &121, &122, &123

### Individuals, Cultures, and Societies (Social Sciences)

**15 Credits**

Choices must include a minimum of two different course prefixes.

**American Ethnic Studies: AME** 150, 151, 160, 201

**Anthropology: ANTH** &100, &106, 113, &125, 130, 135, 190, 201, &206, &210, 211, 212, 213, &216, &227, &228, 250, 270, 275

**American Sign Language: ASL** 120, 125

**Biology: BIOL** 150

**Economics: ECON** 100, 101, 102, &201, &202, 240

**Environmental Science: ENVS** &100, 101, 150, 160, 170, 200, 202, 206, 208, 214, 240, 294

**Geography: GEOG** &100, &200, 207, 230, 260

**History: HIST** 105, 106, 108, 120, &126, &127, &128, 131, 132, &136, &137, 138, 140, 145, &146, &147, &148, 150, 191, 200, 208, 210, 211, 212, &214, &219, 221, 230, 240, 241, 242, 251, 268, 269, 273

**Humanities: HUM** 105, 121, 170, 230

**International Studies: ISP** 101, 105, 110, 120, 160, 170, 200, 201, 205, 210, 220, 234, 251, 255, 260, 261, 270

**Philosophy: PHIL** &101, 102, 110, 111, 118, 160, 215, 210, 220, 240, 245, 250, 255, 267

**Political Science: POLS** &101, 105, 111, 112, 170, &200, &201, &202, &203, 205, 206, 213, 220, 255

**Psychology: PSYC** &100, 120, &200, 205, 207, 209, 210, 217, &220, 225, 230, 235, 245, 250, 255, 257, 260, 294

**Religion: REL** 150, 151

**Sociology: SOC** &101, 102, 105, 106, 107, 120, 130, 150, 170, &201, 215, 220, 230, 245, 250, 253, 265, 271, 275, 280

**Social Science: SSC** 101, 103, 187, 330

**Social Welfare: SWF** 200

**STEM: STEM** 118

**Women's Studies: WMN** 140, 200, 205, 213, 257

**The Natural World (Natural and Physical Sciences, Mathematics)****15 Credits**

Choices must include a minimum of two different prefixes; five credits must be in a lab science (\*asterisked below). Students may choose up to five credits from the following list of courses: Anthropology, Computer Science, Engineering, Geography, Mathematics, Philosophy OR Psychology (see specific courses below).

**Anatomy & Physiology:** BIOL 128\*, &241\*, &242\***Astronomy:** ASTR &100, 102\*, 104\*, &110\*, &115\*, 201**Biology:** BIOL &100\*, 102\*, 106\*, 107\*, 109, 120\*, 125\*, 128\*, 130\*, 150, &160\*, 161\*, 195, 196, &211\*, &212\*, &213\*, 228\*, 229\*, 239\*, &260\*, 282\*, 285\*, 286\*, 287\*, 290, SPS 201\***Botany:** BOT 110\*, 112\*, 113\***Chemistry:** CHEM 106\*, &110\*, &121\*, &122\*, &123\*, &131\*, &139, &161\*, &162\*, &163\*, 191\*, 192\*, 211\*, &241, &242, &243, &251\*, &252\*, 255, 256, &261, &262, &263**Environmental Science:** ENVS &100, &101\*, 150, 160, 170, 199, 201, 202\*, 203, 204\*, 205, 206\*, 208, 216\*, 221**Geology:** GEOL &101\*, &103\*, 104\*, 105\*, 106, 108\*, &110\*, 111\*, &115\*, 118\*, 202\*, 207\*, &208\***Health:** HEA 125, 150, 160, 225, 228**Meteorology:** MEY 100**Material Science:** MSC 101**Nanotechnology:** NANO 101\***Nutrition:** NTR 105\*, 150, 155  
NUTR 100, &101**Oceanography:** OCEA &100, &101\***Physics:** PHYS &100, 107\*, &114\*, &115\*, &116\*, &121\*, &122\*, &123\*, &221\*, &222\*, &223\***Science:** SCI 100, 101\*, 104, 107\*, 110\*, 111\*, 112\*, 113\*, 114\*, 115\*, 116\*, 117\*, 118\*, 119\*, 121\*, 122\*, 129\*, 131\*, 132\*, 133\***STEM:** STEM 118**Sustainability:** SUST 101**Up to five credits total allowed from the following group:****Anthropology:** ANTH &204, &205, 275**Computer Science:** CSC 110, 111, 142, 143**Engineering:** ENGR 110, &111, 140, 142, &214, &215, &224, &225, 240, 271**Geography:** GEOG 205**Math:** All MATH college transfer courses number 102 and above.  
*Technical math courses NOT usable for transfer purposes.***Philosophy:** PHIL &106, &120**Psychology:** PSYC 222**Total Credits Required for Associate of Arts Degree****90 Credits**

## Washington 45

### First Year Transfer Courses

The “Washington 45” is a list of courses offered in the community and technical college system that satisfy general education core requirements at the state’s public universities and most of its private universities. It was developed at the direction of the 2011 Washington State Legislature, which passed a bill requiring community and technical colleges to work with four-year institutions of higher education on the list. However, the “Washington 45” does not replace any transfer degree or articulation agreement between your college and universities. For more information, contact your campus advisor or the four-year institution where you are planning to transfer.

## Transfer Policy and Processes

### Transfer Assistance

Transfer services and information are available at all three colleges through the campus Advising/Transfer Centers. During their first few quarters of study at the Seattle Colleges, students are encouraged to explore the various options for majors at four-year institutions and to become knowledgeable about admissions and graduation requirements for any majors they are considering.

Representatives from local four-year institutions visit all three Seattle Colleges campuses on a regular basis to provide information regarding admissions deadlines and transfer requirements.

Students are responsible for becoming knowledgeable about the admissions and graduation requirements of the four-year institution they plan to attend.

### Reciprocity Agreement

Washington community and technical colleges offer reciprocity to students transferring within the state’s community and technical college system who are pursuing A.A., A.B., A.S., or A.S.-T degrees. Students who complete an individual course that meets distribution degree requirements or fulfills entire areas of their degree requirements at one college will be considered to have met those same requirements if they plan to complete the same degree when they transfer to another community or technical college in Washington. These degree requirements include Communication Skills, Quantitative Skills, or one or more Distribution Area requirements. Students must initiate the review process and must be prepared to provide necessary documentation. For complete information, students should contact the Registrar’s Office at each college.

*See “Common Course Numbering” on page 230.*

## Transfer of Credits to Baccalaureate Institutions

Students who plan to transfer to a four-year college or university are advised to give careful consideration to the following information:

1. Students transferring to a four-year institution may apply a maximum of 90 (quarter) transferable community college credits to a baccalaureate degree. More credits may transfer at the discretion of the receiving institution.
2. It is possible to transfer with fewer than 90 credits, but special requirements may be imposed.
3. Students who plan to graduate with the A.A. or A.S. degree should make sure they have also met the admission requirements for the transfer institution. Completion of the A.A. degree alone may not necessarily fulfill admission requirements at some four-year institutions.
4. Transferable courses are numbered 100 and above, but not all courses so numbered are transferable. Receiving institutions determine which credits transfer into the college. Students planning to transfer should plan as early as possible, contacting those institutions to which they plan to transfer.
5. Unless a transfer agreement with the Seattle Colleges is in effect, the four-year school may impose additional general education requirements.
6. Graduation requirements for the bachelor’s degree are established by the four-year institution. Students at the college should choose courses according to graduation requirements of their chosen college or university. Those planning to transfer should plan as early as possible in their college programs using the following guide:
  - Consult a current catalog of the chosen school to determine entrance requirements and suggested freshman and sophomore programs in the major field of interest.
  - Confer with a college advisor about fulfilling these requirements.
  - Confer with an admissions officer at the baccalaureate institution regarding further curriculum and transfer regulations.
  - Check carefully a quarter or two before transfer to be sure all requirements will be met to the satisfaction of the four-year institution.

## Transfer Rights & Responsibilities

Source: Washington Student Achievement Council  
wsac.wa.gov/transfers

### Student Rights and Responsibilities

1. Students have the right to clear, accurate, and current information about their transfer admission requirements, transfer admission deadlines, degree requirements, and transfer policies that include course equivalencies.
2. Transfer and freshman-entry students have the right to expect comparable standards for regular admission to programs and comparable program requirements.
3. Students have the right to seek clarification regarding their transfer evaluation and may request the reconsideration of any aspect of that evaluation. In response, the college will follow established practices and processes for reviewing its transfer credit decisions.
4. Students who encounter other transfer difficulties have the right to seek resolution. Each institution will have a defined process for resolution that is published and readily available to students.
5. Students have the responsibility to complete all materials required for admission and to submit the application on or before the published deadlines.
6. Students have the responsibility to plan their courses of study by referring to the specific published degree requirements of the college or academic program in which they intend to earn a bachelor's degree.
7. When a student changes a major or degree program, the student assumes full responsibility for meeting the new requirements.
8. Students who complete the general education requirements at any public four-year institution of higher education in Washington, when admitted to another public four-year institution, will have met the lower-division general education requirements of the institution to which they transfer.

### College and University Rights and Responsibilities

1. Colleges and universities have the right and authority to determine program requirements and course offerings in accordance with their institutional missions.
2. Colleges and universities have the responsibility to communicate and publish their requirements and course offerings to students and the public, including information about student transfer rights and responsibilities.
3. Colleges and universities have the responsibility to communicate their admission and transfer-related decisions to students in writing (electronic or paper).

## Transfer Agreements

### Direct Transfer Agreements with Baccalaureate Institutions

The baccalaureate (four-year) colleges and universities in Washington state listed below subscribe to the Intercollege Relations Commissions (ICRC) guidelines for direct transfer agreement (DTA). Seattle Colleges offers both Associate of Arts and Associate of Science DTA degrees that meet ICRC guidelines. The DTA associate degrees are recognized as fulfilling most, if not all, of the general education requirements for these institutions. Students who complete a DTA will normally be granted junior standing upon admission. Students should check with their intended transfer institution for further details regarding any additional general education, major prerequisites, and admission requirements. This list is subject to change. See your advisor for updated information and details of transfer.

### DIRECT TRANSFER AGREEMENT (DTA) ASSOCIATE DEGREE

#### Public Four-Year/Research

- University of Washington
- Washington State University

#### Public Four-Year/Comprehensive

- Central Washington University
- Eastern Washington University
- The Evergreen State College
- Western Washington University

#### Independent/Private Four-Year

- Bastyr University
- Gonzaga University
- Heritage University
- Northwest University
- Pacific Lutheran University
- Saint Martin's University
- Seattle Pacific University
- Seattle University
- Walla Walla University
- WGU Washington
- Whitworth University

#### Tribal Colleges and Universities

- Northwest Indian College

### ASSOCIATE OF SCIENCE – TRANSFER (A.S.-T) DEGREES

#### A.S.-T Track 1

#### Public Four-Year/Research

- University of Washington
- Washington State University

#### Public Four-Year/Comprehensive

- Central Washington University
- Eastern Washington University
- The Evergreen State College
- Western Washington University



**Independent/Private Four-Year**

- Heritage University
- Pacific Lutheran University
- Saint Martin's University
- Seattle Pacific University
- Seattle University
- Walla Walla University
- Whitworth University

**ASSOCIATE OF SCIENCE – TRANSFER (A.S.-T) DEGREES****A.S.-T Track 2****Public Four-Year/Research**

- University of Washington
- Washington State University

**Public Four-Year/Comprehensive**

- Central Washington University
- Eastern Washington University
- The Evergreen State College
- Western Washington University

**Independent/Private Four-Year**

- Gonzaga University
- Heritage University
- Saint Martin's University
- Seattle Pacific University
- Seattle University
- Walla Walla University

**MAJOR RELATED PROGRAMS (MRPS) BASED ON THE DTA OR A.S.-T****Biology DTA/MRP****Public Four-Year/Research**

University of Washington  
Washington State University

**Public Four-Year/Comprehensive**

Central Washington University  
Eastern Washington University  
The Evergreen State College  
Western Washington University

**Independent/Private Four-Year**

Saint Martin's University  
Seattle Pacific University  
Seattle University  
Whitworth University

**Business DTA/MRP****Public Four-Year/Research**

University of Washington  
Washington State University

**Public Four-Year/Comprehensive**

Central Washington University  
Eastern Washington University  
The Evergreen State College  
Western Washington University

**Independent/Private Four-Year**

Gonzaga University  
Heritage University  
Pacific Lutheran University  
Saint Martin's University  
Seattle Pacific University  
Seattle University  
Walla Walla University  
Whitworth University

**Computer Science DTA/MRP****Public Four-Year/Research**

University of Washington  
Washington State University

**Public Four-Year/Comprehensive**

Central Washington University  
Eastern Washington University  
The Evergreen State College  
Western Washington University

**Independent/Private Four-Year**

Gonzaga University  
Heritage University  
Pacific Lutheran University  
Seattle Pacific University  
Seattle University  
Whitworth University  
Community and Technical Colleges  
Bellevue College

**Construction Management DTA/MRP****Public Four-Year/Research**

University of Washington  
Washington State University

**Public Four-Year/Comprehensive**

Central Washington University  
Eastern Washington University

**Engineering A.S.-T 2/MRP****Public Four-Year/Research**

University of Washington  
Washington State University

**Public Four-Year/Comprehensive**

Eastern Washington University



**Independent/Private Four-Year**

Gonzaga University  
 Saint Martin's University  
 Seattle Pacific University  
 Seattle University  
 Walla Walla University

**Engineering Technology A.S.-T 2/MRP****Public Four-Year/Research**

Central Washington University  
 Eastern Washington University

**Public Four-Year/Comprehensive**

Western Washington University

**Math Education DTA/MRP****Public Four-Year/Research**

Washington State University

**Public Four-Year/Comprehensive**

Central Washington University  
 Eastern Washington University  
 Western Washington University

**Music DTA/MRP****Public Four-Year/Research**

University of Washington  
 Washington State University

**Public Four-Year/Comprehensive**

Central Washington University  
 Eastern Washington University  
 The Evergreen State College  
 Western Washington University

**Nursing RN-B.S.N. DTA/MRP****Public Four-Year/Research**

University of Washington  
 Washington State University

**Public Four-Year/Comprehensive**

Western Washington University

**Independent/Private Four-Year**

Saint Martin's University  
 WGU Washington

**Community and Technical Colleges**

Bellevue College  
 Columbia Basin College  
 Olympic College  
 Wenatchee Valley College

**Pre-Nursing DTA/MRP****Public Four-Year/Research**

University of Washington-Seattle  
 Washington State University

**Independent/Private Four-Year**

Pacific Lutheran University  
 Seattle Pacific University  
 Seattle University  
 Walla Walla University

**Transfer Agreements**

Seattle Colleges has partnerships and transfer agreements with numerous other in-state and out-of-state four-year institutions and is continually developing new ones. For the most accurate list of all transfer agreements, visit the Advising and Transfer Centers or [seattlecolleges.edu/district/programs/transferagreement.aspx](http://seattlecolleges.edu/district/programs/transferagreement.aspx).

**Transfer Opportunities at North and South****Bachelor's Degree Program Partnerships with North**

- Eastern Washington University: B.S. in Electrical Engineering
- Washington State University Online: Various online degrees
- Western Washington University: Elementary Teacher Education (B.A.E.) with Special Education and Elementary Teacher Certification

**Bachelor's Degree Program Partnerships with South**

- Eastern Washington University: B.S. in Technology, Applied Technology Option

## Career and Technical Education

Seattle Colleges offers many workforce education and training programs designed to prepare students for specific careers. These programs offer certificates and/or degrees, and they vary from one to seven quarters in length. Most of our Career and Technical Education programs are on education pathways that lead to baccalaureate degrees and beyond. To learn more about these programs, visit the College to Career website at [seattlecolleges.edu/collegetocareer](http://seattlecolleges.edu/collegetocareer). To learn more about certificate programs visit page 10. To learn more about bachelor's degrees go to page 22.

### Degrees and Certificates

#### Short-Term Certificates

Designed to cover entry-level or specific skills needed for industry. Usually 20 credits or less.

#### Associate of Applied Science (A.A.S.) Degree and One-Year Certificates

Designed to prepare students for employment in a wide variety of career and technical careers. Usually 90 credits or less.

#### Associate of Applied Science - Transfer (A.A.S.-T) Degree

Designed to assist students who initially enroll for a career and technical degree and then seek a bachelor's degree. Usually 90 credits.

#### Bachelor of Applied Science (B.A.S.) Degree

Compared with traditional bachelor's degrees, our B.A.S. degrees incorporate more applied, hands-on learning focused on a particular industry and include strong internship components.

#### Credit for Nontraditional Learning

Credit for nontraditional learning (also known as prior learning) is a term used to describe learning gained outside a traditional academic environment. Credit for nontraditional learning is the evaluation and assessment of an individual's life learning for college credit, certification, or advanced standing toward further education or training.

Options for students to receive credit for prior knowledge and experiences at Seattle Colleges include recognition of industry/professional credentials, military training, credit by exams, standardized tests, and portfolio-based assessments.

### Short-term Certificates

[seattlecolleges.edu/shortcertificates](http://seattlecolleges.edu/shortcertificates)

Short-term certificates have fewer than 20 credits. They usually cover an entry-level or specific skill set needed for that industry. Students can complete a short-term certificate and enter/re-enter the workplace with improved skills. They may also continue on a pathway to a higher certificate or degree, and some or all of the credits from the short-term certificate may apply to the next-level certificate or degree. Some programs are composed of short-term certificates that are specifically designed to build, or "stack," sequential skills and credits.

### Associate of Applied Science (A.A.S.) Degree

The A.A.S. degree prepares students for employment through development of technical and related skills. To earn an A.A.S. degree within the Seattle Colleges, a student must complete at least 90 credits and have a minimum cumulative grade point average of 2.0. At least 15 credits must be earned at the college granting the degree. Students should consult an advisor or division counselor for specific GPA requirements in their programs of study.

Programs are designed and updated by advisory committees, made up of local industry leaders and labor representatives, to reflect current employment trends. Instructors bring industry experience as well as education and training to the classroom. All full-time instructors hold vocational instructor certificates and stay informed of industry changes. For this degree, college-level courses (100 and above) in communications, computation, and human relations, as well as selected courses from humanities, natural sciences, and social sciences, are required. Some A.A.S. programs and some courses in A.A.S. degree programs may transfer to four-year colleges or universities. Consult a program advisor or transfer institution concerning course transferability prior to enrollment.

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## **Associate of Applied Science – Transfer (A.A.S.-T) Degree**

The A.A.S.-T degree is designed to serve as the first two years of an applied bachelor's degree. Select partner institutions also accept A.A.S.-T Degrees for transfer into bachelor's degree programs. Degree requirements include satisfactory completion of at least 90 approved credits with a 2.0 cumulative GPA. At least 15 credits in college-level courses (100 or above) must be earned at the college granting the degree.

The A.A.S.-T degree is based on technical courses required for job preparation but also includes transfer degree general education courses. This degree is not designed for general transfer to other colleges or universities; the A.A.S.-T degree prepares students for specific bachelor's degree programs at specific institutions. Students should contact the appropriate college division dean or Advising Office for a current list of baccalaureate institutions accepting the A.A.S.-T degree.

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## **Bachelor of Applied Science (B.A.S.) Degrees**

*See page 22.*

## Bachelor's Degrees

Seattle Colleges offers bachelor's degrees that create educational pathways, build on two-year technical degrees, and expand career opportunities.

When compared to traditional bachelor's degrees, these four-year Bachelor of Applied Science (BAS) degrees incorporate more applied, hands-on learning focused on a particular industry and include strong internship components. They often offer credit for prior learning and workplace experience.

### Accounting with International Accounting

[northseattle.edu/programs/accounting/  
accounting-international-accounting-bas](http://northseattle.edu/programs/accounting/accounting-international-accounting-bas)

This program prepares graduates with the knowledge and skills required for employment in the field of accounting. The degree builds on an associate of applied science (AAS-T) degree in business, accounting, or real estate, and provides students with preparation for, and a clear pathway toward, meeting the Washington State CPA licensure requirements. The degree will provide knowledge and skills regarding the application of FASB/GAAP principles and GAAS auditing standards, effective business communications, understanding of legal and ethical frameworks for business, intermediate transaction posting and financial statement preparation, use of general ledger software, and a thorough understanding of International Financial Reporting Standards (IFRS).

### Application Development at North

[northseattle.edu/programs/bas-application-development](http://northseattle.edu/programs/bas-application-development)

This program prepares graduates for lucrative careers in software development, focusing on skills needed to create and modify general computer application software, cloud computing, mobile applications, and specialized utility programs. Curriculum includes foundational computer science skills with project work that mirrors industry trends and features a strong emphasis on industry-based applied learning.

### Applied Behavioral Science at Central

[educationhumanservices.seattlecentral.edu/programs/  
bas-in-applied-behavioral-science](http://educationhumanservices.seattlecentral.edu/programs/bas-in-applied-behavioral-science)

This program prepares graduates to provide culturally relevant services, apply ethical practices based on internalized professional values, and integrate knowledge from relevant disciplines. It is designed for those who are in human services professions, such as early childhood education/child welfare, chemical dependency counseling, family support and social services, public/community health, and interpreting/translation services.

### Community Health & Education/ Allied Health at Central

[healthcare.seattlecentral.edu/programs/  
community-health-and-education](http://healthcare.seattlecentral.edu/programs/community-health-and-education)

This track is designed to build on a health care professional's training and experience. This program develops the skills to promote healthy behaviors and help prevent disease in the community through education and outreach. Graduates can pursue positions in nonprofit health organizations, public-sector agencies, patient care centers, medical institutions, and colleges.

### Dental Hygiene/Allied Health at Central

[healthcare.seattlecentral.edu/programs/dental-hygiene](http://healthcare.seattlecentral.edu/programs/dental-hygiene)

In this program, students will learn the skills to provide quality oral health care, such as teeth cleaning, placing dental fillings, taking X-rays, and administering local anesthetics. Graduates can work in private dental offices, public health clinics, hospitals, nursing homes, and oral research facilities. The American Dental Association Commission on Accreditation approves this program.

### Early Childhood Education by North at Central

[northseattle.edu/programs/bas-early-childhood-education](http://northseattle.edu/programs/bas-early-childhood-education)

This program provides professional development training for early care and education professionals, allowing them to keep pace with the increasing professionalization of the field. The curriculum is designed to align with accreditation standards established by the National Association for the Education of Young Children and the Council for Accreditation of Educator Preparation. Classes are held at Seattle Central College.

## Health Care Services Management/ Allied Health at Central

[healthcare.seattlecentral.edu/programs/healthcare-services-management](https://healthcare.seattlecentral.edu/programs/healthcare-services-management)

This track is designed for experienced health care professionals who want to transition their careers to health administration and management. Students will learn skills to provide administrative and management support in hospitals, healthcare facilities, and medical offices. Graduates will be prepared to direct, coordinate, and supervise healthcare delivery to improve the quality of patient care.

## Hospitality Management at South

[southseattle.edu/programs/bas/hospitality-management](https://southseattle.edu/programs/bas/hospitality-management)

This program focuses on applied management training in the hospitality industry. Students learn a broad set of competencies in the industry, which includes tourism, hotel operations, restaurant management, catering, cruise ship operations, casino operations, and travel. The degree will also open doors in rapidly expanding sectors, such as assisted and independent living facilities, destination spas and resorts, corporate hospitality, and event production.

## International Business at North

[northseattle.edu/programs/bas-international-business](https://northseattle.edu/programs/bas-international-business)

Washington is the most trade-dependent state in the country, with approximately one in three jobs related to international trade. This program leverages a combination of upper-division courses in international business and applied learning to prepare graduates to work in the international business industry. Students will complete a practicum as well as an internship, giving them important real-world experience and cultural awareness.

## Residential and Commercial Property Management at North

[northseattle.edu/programs/residential-and-commercial-property-management](https://northseattle.edu/programs/residential-and-commercial-property-management)

The Bachelor of Applied Science in Residential and Commercial Property Management is a multidisciplinary program, combining business, accounting, and real estate courses with upper-division property management courses. This program is a pathway to a career-focused bachelor's degree for students who have already have an associate degree, including technical associate degrees or equivalent credits. The curriculum is focused on skills such as marketing, leasing, accounting and revenue management, customer service, and leadership, with an emphasis on sustainability throughout the program. Graduates will be prepared for careers in residential or commercial property management and are eligible to take several industry certification examinations upon program completion.

## Respiratory Care/Allied Health at Central

[healthcare.seattlecentral.edu/programs/respiratory-care](https://healthcare.seattlecentral.edu/programs/respiratory-care)

This program prepares students to work as part of health care teams to help treat patients with heart and lung disorders. Graduates have skills in respiratory disease management, critical care, diagnostic testing, and more. This degree meets the respiratory care practitioner licensure requirements of Washington state and is fully accredited by the Commission on Accreditation for Respiratory Care.

## Sustainable Building Science Technology at South

[southseattle.edu/programs/bas/sustainable-building-science-technology](https://southseattle.edu/programs/bas/sustainable-building-science-technology)

This degree prepares graduates for careers in high-performance building operations and management, including facilities manager, project manager, building engineer, capital/energy/sustainability program manager, energy analyst, and building tuneup specialist, to name a few. Classes focus on building science and finance, with energy efficiency, building automation, and sustainability at the core.

### Fall 2021–Summer 2022 Tuition Rates for B.A.S. (Upper Division) Courses

CREDITS	RESIDENT	NON-RESIDENT (U.S. CITIZEN)	INTERNATIONAL
1	\$ 226.53	\$ 241.75	\$ 637.35
2	453.06	483.50	1,274.70
3	679.59	725.25	1,912.05
4	906.12	967.00	2,549.40
5	1,132.65	1,208.75	3,186.75
6	1,359.18	1,450.50	3,824.10
7	1,585.71	1,692.25	4,461.45
8	1,812.24	1,934.00	5,098.80
9	2,038.77	2,175.75	5,736.15
10	2,265.30	2,417.50	6,373.50
11	2,276.60	2,429.60	6,385.60
12	2,287.90	2,441.70	6,397.70
13	2,299.20	2,453.80	6,409.80
14	2,310.50	2,465.90	6,421.90
15	2,321.80	2,478.00	6,434.00
16	2,333.10	2,490.10	6,446.10
17	2,344.40	2,502.20	6,458.20
18	2,355.70	2,514.30	6,470.30
19	2,570.30	2,728.90	7,095.72
20	2,784.90	2,943.50	7,721.14
21	2,999.50	3,158.10	8,346.56
22	3,214.10	3,372.70	8,971.98
23	3,428.70	3,587.30	9,597.40
24	3,643.30	3,801.90	10,222.82
25	3,857.90	4,016.50	10,848.24

Students in career and technical programs that require more than 18 credits per quarter (e.g., Culinary Arts) pay a reduced rate for those credits. See the program website.

Check current amounts at [seattlecolleges.edu/get-started/step-5-pay-and-prepare#collapse-accordion-516-2](https://seattlecolleges.edu/get-started/step-5-pay-and-prepare#collapse-accordion-516-2).

## Bachelor's to Graduate Degrees

Graduates of the bachelor's programs at Seattle Colleges have unique opportunities for continuing their education with a graduate degree. Our bachelor's programs have established articulation agreements with graduate programs at Washington Governor's University (WGU) and City University of Seattle. Each bachelor's program also has individual relationships with other graduate programs. See more about these partnerships on the respective pages for each program or visit each program's website.

### Seattle Colleges offers bachelor's degrees that:

- Create educational pathways
- Build on two-year technical degrees or approved associate degrees
- Expand career opportunities

Compared with traditional bachelor's degrees, our Bachelor of Applied Science (B.A.S.) degrees incorporate more applied, hands-on learning focused on a particular industry and include strong internship components. They often offer credit for prior learning and workplace experience.



## e-Learning/Distance Learning

Seattle Colleges offers a wide range of eLearning/Distance Education options for the completion of over 250 courses using a variety of technologies. The colleges are fully accredited, and students can earn an A.A. degree at their own pace.

Courses are taught by experienced Seattle Colleges faculty, and the content and credit are equivalent to traditional on-campus courses. While eLearning and Distance Education students have increased flexibility, most courses are not self-paced, so students will need to structure their personal schedules accordingly. Courses usually contain more reading and assignments to ensure that student learning will be as rigorous as similar on-campus classes.

Students can work directly with an advisor who will recommend courses relevant to each student's goals and develop an individualized degree completion plan. State tuition applies in most courses and may be covered by financial aid. All three campuses have eLearning/Distance Education offices that students may visit in person.

**District eLearning:** [seattlecolleges.edu/programs/elearning](https://seattlecolleges.edu/programs/elearning)

**Seattle Central College:** [seattlecentral.edu/distance](https://seattlecentral.edu/distance)

**North Seattle College:** [elearning.northseattle.edu](https://elearning.northseattle.edu)

**South Seattle College:** [sites.southseattle.edu/online](https://sites.southseattle.edu/online)

## Continuing Education

Serving the community by offering a range of courses at reasonable cost, Seattle Colleges' continuing education programs consists of three primary components:

1. Personal enrichment
2. Professional development
3. Industry training (See Corporate & Customized Contract Training)

Continuing Education classes are mostly noncredit and non-graded. Most are taught by community members who are experts in their fields. Classes may range from one evening to a full quarter in length. Costs vary by class.

Classes include areas as diverse as arts and crafts, computers, dance and exercise, food and wine, foreign languages, gardening, financial planning, leadership, business, and more. Continuing Education offers online courses as well. Industry Training courses offer you innovative education and certification for businesses in Washington State.

Each college Continuing Education Department publishes a class schedule – see websites listed below:

**Seattle Central College—(206) 934-5448 [learnatcentral.org](http://learnatcentral.org)**

**North Seattle College—(206) 934-3705 [learnatnorth.org](http://learnatnorth.org)**

**South Seattle College—(206) 934-5339 [learnatsouth.org](http://learnatsouth.org)**

### Personal Enrichment

Enjoy a hobby, improve your skills and meet people in personal enrichment classes. Learn from instructors who are experts in their fields, and meet other people with shared interests.

### Senior Adult Education

South Seattle College offers classes and discussion groups designed for senior adults. Classes normally are held during the daytime, on campus or in senior or retirement centers.

### Professional Development

Advance your job skills and professional opportunities through courses led by industry experts.

### Short-term Certificates

**[seattlecolleges.edu/shortcertificates](http://seattlecolleges.edu/shortcertificates)**

Short-term certificates have fewer than 20 credits. They usually cover an entry-level or specific skill set needed for that industry. Students can complete a short-term certificate and enter/re-enter the workplace with improved skills. They may also continue on a pathway to a higher certificate or degree, and some or all of the credits from the short-term certificate may apply to the next-level certificate or degree. Some programs are composed of short-term certificates that are specifically designed to build, or “stack,” sequential skills and credits.

### Teacher Training

- Seattle Central College offers clock hours for K-12 educators; classes held online or on campus.
- North Seattle College offers teacher clock hours for most courses, including online courses.
- South Seattle College offers Career and Technical Education (CTE) certification for business and industry professionals to become secondary school teachers. South also offers clock hours for K-12 educators; classes held online or on campus.

## Corporate & Customized Training

Seattle Colleges offers a full suite of professional training solutions developed for and provided to business, industry, and organizations.

Learn more at [seattlecolleges.edu/programs/corporate-and-customized-training](https://seattlecolleges.edu/programs/corporate-and-customized-training)

**Seattle Colleges Corporate & Customized Training Department**

**Bob Embrey, Executive Director**

**(206) 934-5856**

**[bob.embrey@seattlecolleges.edu](mailto:bob.embrey@seattlecolleges.edu)**

**Liz Strongman, Program Manager**

**(206) 934-6853**

**[liz.strongman@seattlecolleges.edu](mailto:liz.strongman@seattlecolleges.edu)**

Seattle Colleges is committed to fostering international awareness and understanding and to encouraging the global sharing of ideas and cultures. International Programs (IP) provides leadership and wrap around programming and support across the Seattle Colleges in the three areas:

1. International Students
2. Global Engagement Programming
3. Customized Group Programming

## International Programs

### International Students

Seattle Colleges is host to nearly 1,000 students from over 70 countries of origin. IP is responsible for the recruitment, admissions, orientation, and support services that help international students maintain their non-immigrant student status while meeting their academic goals.

For more detailed information go to [intl.seattlecolleges.edu/](http://intl.seattlecolleges.edu/)

For questions regarding prospective international students please contact: [IntlFutureStudent@seattlecolleges.edu](mailto:IntlFutureStudent@seattlecolleges.edu)

Questions regarding current international students can be directed to the campus offices:

North — [IntlNorth@seattlecolleges.edu](mailto:IntlNorth@seattlecolleges.edu)

Central — [IntlCentral@seattlecolleges.edu](mailto:IntlCentral@seattlecolleges.edu)

South — [IntlSouth@seattlecolleges.edu](mailto:IntlSouth@seattlecolleges.edu)

### Admission Guidelines

- First time inquiries complete our online application form at [Intl.seattlecolleges.edu/apply-now](http://Intl.seattlecolleges.edu/apply-now)  
Partial applicants and all other inquiries:  
[IntlFutureStudent@seattlecolleges.edu](mailto:IntlFutureStudent@seattlecolleges.edu)
- Applicants must demonstrate adequate financial support to cover the period of study in order to meet visa requirements. International students pay the international tuition rates.
- Applicants must be at least 16 years of age and have completed 10th grade at the time of enrollment.
- Application for admission by itself does not guarantee acceptance. Students must receive official notification of admission from the International Programs Office in order to enroll.
- For more details about requirements:  
[Intl.seattlecolleges.edu/admissions-requirements](http://Intl.seattlecolleges.edu/admissions-requirements)

*Note: International students should begin the application process well in advance of the quarter for which admission is desired in order to allow time for processing the application, to make passport and visa arrangements, and to prepare for departure.*

### Global Engagement Programming

Seattle Colleges provides wide-ranging study abroad and service-learning opportunities and resources for members of our campus communities who wish to study and learn outside of the United States.

- Global Engagement Certificate Program: a quarter-long program provides structured activities to help participants (faculty, staff, and students) enhance their intercultural skills.
- Global Impact: global health related service-learning in Peru, Morocco, or Vietnam.
- Institutional Linkages for curriculum, faculty, staff, and student collaboration and exchange
- International Professional Development Grants support faculty and staff participation in professional development opportunities outside of the USA.
- Study Abroad opportunities are outlined at [intl.seattlecolleges.edu/go-abroad](http://intl.seattlecolleges.edu/go-abroad).

For detailed information go to [resources.seattlecolleges.edu/international/default.aspx](http://resources.seattlecolleges.edu/international/default.aspx).

For questions regarding Global Engagement please contact: [global@seattlecolleges.edu](mailto:global@seattlecolleges.edu).

### Customized Group Programming

IP responds to international entities requesting customized programming and works collaboratively with relevant college departments to deliver quality programs.

For more information contact us at [global@seattlecolleges.edu](mailto:global@seattlecolleges.edu).

# North Seattle College

## Welcome

For students who intend to transfer to a four-year college or university, starting at North Seattle College offers real advantages—strong academic preparation and advising services, small classes, an innovative integrated studies program, broad eLearning options, and a variety of partnerships with four-year schools. While many graduates have continued their studies at universities such as Dartmouth, Penn State, and UC Berkeley, most North students transfer to the University of Washington. In fact, North consistently ranks among the highest of all community colleges in the number of students who are accepted to the University of Washington's main campus. And North graduates fare well. For three of the last five years, a North transfer student has won the top academic award at the University of Washington or Seattle University.

North also provides outstanding career training in more than 50 certificate and degree programs, including those in emerging fields such as nanotechnology, sustainable and conventional energy and control technology, and fraud accounting. North helps students earn GEDs, learn English, enhance basic skills, and pursue new skills or personal interests.

North Seattle College has four Bachelor of Applied Science (B.A.S.) degree programs: International Business, Information Technology Application Development, Early Childhood Education, and Property Management. All of North's B.A.S. programs are designed for working students, using a hybrid format of online learning combined with weekday evening classes. North is planning to offer additional B.A.S. programs in the future, so keep checking the college website.

The college also provides a rich student life. Concerts, plays, intramural sports, fitness programs, an award-winning literary magazine, and a diverse student population add depth to students' experiences. Conveniently located in a quiet residential neighborhood five miles north of downtown, the campus includes environmentally sensitive wetlands that have inspired a collegewide commitment to sustainability.

Come for a visit and learn how North changes lives.

## Mission

As an open-access learning institution, Seattle Colleges prepares each student for success in life and work, fostering a diverse, engaged, and dynamic community.

## Vision

Seattle Colleges is recognized as an exemplary learning institution that transforms lives, promotes equity, and enriches the community.

## Core Themes

- Advancing Student Success
- Excelling in Teaching and Learning
- Building a Sustainable Community

## Getting Started at North

<b>Admissions</b>	<b>(206) 934-3663</b>
<b>Financial Aid</b>	<b>(206) 934-3688</b>
<b>Registration</b>	<b>(206) 934-3663</b>
<b>TTY</b>	<b>(206) 934-0079</b>

## Facts at a Glance\*

### 2019–2020 ANNUAL PROFILES

Annual attendance 2019–2020	9,978
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### Special Enrollments

Distance Education	6,539
Running Start	695
International Students	917
Worker Retraining	625

### FALL 2019 PROFILES

#### Students \*\*

Median age	31
Ethnic diversity	32%
Male/Female	33%/53%
With bachelor or higher degrees	22%
Full-time/Part-time attendance	25%/75%

#### Programs

College Transfer	37%
Workforce Education	54%
Basic Skills, Pre-college, and other	9%

#### Course Funding Sources

State-funded	68%
Contract-supported	12%
Student-supported	20%

\* Source: State Board for Community and Technical Colleges Data Warehouse and Seattle College District's Database.

\*\* State-funded

# Student Services

## Advising

**(206) 934-3658**

**[advisornorth@seattlecolleges.edu](mailto:advisornorth@seattlecolleges.edu)**

**[northseattle.edu/advising](http://northseattle.edu/advising)**

Advisors help students select courses and programs to reach their educational goals. Students seeking degrees or certificates attend new student orientation sessions, where they receive information about North and their program of study and are assisted in selecting classes. Currently enrolled students work with advisors to develop educational plans based on the degrees or certificates they are pursuing. Advising provides resources and workshops on college transfer planning and provides opportunities for students to meet with four-year college representatives.

## Career Services

**(206) 934-6074**

**[careerservices@seattlecolleges.edu](mailto:careerservices@seattlecolleges.edu)**

**[northseattle.edu/career-services](http://northseattle.edu/career-services)**

Career Services provides students with full-time and part-time job listings, job search training, labor market information, and assistance with clarifying career and occupational goals. Career Services can also provide Career Search workshops in the classroom or work with students one-to-one. The WorkSource Center North Seattle, located in the Opportunity Center for Employment and Education, offers a wealth of job search resources, workshops, and events designed to help students and all job seekers find employment. A schedule of WorkSource North Seattle workshops and hiring events can be found at [worksourcewa.com](http://worksourcewa.com) (click on Career Tools).

## Externships & Practicums

Externships and/or practicums are required for some academic programs. These courses contribute to a significant applied, hands-on learning focus for the degree/certificate, giving students real-world experience that they can bring to future jobs. Externship locations, course credits, and student expectations vary depending on the program of study. Specific information is available from the instructor. Students participating in externships may be required to pay for general liability insurance.

## Internships

**(206) 934-3734**

**[northseattle.edu/internships](http://northseattle.edu/internships)**

Internships provide students with the opportunity to earn college credit while gaining practical work experience in their field of study. The Cooperative Work Experience (CWE) courses begin with CWE 101, a 2-3 variable credit course designed to assist students preparing for, developing and applying for internships. Once an internship is secured, CWE 110 provides 3 credits for the internship.

## Class Schedule Quarterly

**[resources.northseattle.edu/schedule](http://resources.northseattle.edu/schedule)**

Each college produces a quarterly class schedule listing the specific courses being offered that quarter. This schedule is available online approximately six weeks before the start of each quarter. View the online class schedule or download a PDF of the printed schedule at the website above.

## Computer Labs

**(206) 934-3630**

**[itservices.seattlecolleges.edu/computer-labs-wifi](http://itservices.seattlecolleges.edu/computer-labs-wifi)**

There are five computer labs located on campus. The Open Computer Lab IB 3303 is located in the Instructional Building, northwest corner, third floor ([northseattle.edu/locator](http://northseattle.edu/locator)) map. This Open Computer Lab is the best place to start with computer-related problems. The other computer labs are located and described below. For EAD-related problems, be prepared to show picture ID and provide ID number.

## Counseling

**(206) 934-3676**

**[northseattle.edu/counseling](http://northseattle.edu/counseling)**

Counseling offers North students free, confidential counseling appointments, classes, workshops, and online self-help to identify career interests and select programs of study. Counseling can help students cope with social-emotional concerns, identify careers, select programs of study, strengthen study skills, manage time and stress, manage crises, and find referral resources.



## Disability Services

(206) 934-3697      Fax (206) 934-3958  
 ds@seattlecolleges.edu      northseattle.edu/disability-services

Disability Services provides accommodations so qualified students with disabilities have equal opportunities at North. Some accommodations include sign language interpreters, adaptive equipment and software, testing modifications, note taking, and books in alternative format. Students should contact Disability Services as soon as possible to avoid delays in accommodations. We also offer consultations to faculty and staff about course content that provides equal access.

*For specific details and additional information on eligibility and policies, see page 229.*

## eLearning/Distance Education

(206) 934-3738  
 elearning.northseattle.edu/

North's eLearning Support Center provides logistical support to distance learners as well as on-campus students in hybrid and web-enhanced classes. Academic divisions offer many credit courses and curricula through several nontraditional delivery modes, including fully online and blended learning. These modes bring new learning options to students who have diverse learning styles, those who require flexibility in their schedules, and those who do not live within commuting distance. Students can earn an A.A. degree and/or receive specific certificates through fully online courses.

*See page 25 for complete information on eLearning options.*

## International Programs

(206) 934-3672  
 Email: IntlNorth@seattlecolleges.edu  
 intl.seattlecolleges.edu

This office provides comprehensive support services for students on non-resident visas studying at North. Key functions of the office include advising on immigration and instructional programs, housing, medical insurance, or personal concerns that may be impacting student success. Field trips and other student activities that help students adjust to life in Seattle and promote intercultural communication and an enhanced experience of American culture are also provided.

*See page 28 for additional International Programs and Services serving the Seattle Colleges, including international student admissions. Study Abroad opportunities are outlined at intl.seattlecolleges.edu/go-abroad.*

## Library Services

Library Circulation (206) 934-3607  
 Reference (206) 934-3609  
 libguides.northseattle.edu/welcome

The Library offers a wide range of services, including research assistance and instruction, individual and group study space, and computers, and access to a wide variety of resources, including class textbooks, books, magazines, journals, and media in a variety of formats.

## The Student Media Center

(206) 934-0070  
 libguides.northseattle.edu/StudentMediaCenter1

The SMC is on the upper floor of the NSC Library. The SMC provides students with access to media resources and basic instruction, enabling them to incorporate audiovisual and print media into their course assignments and presentations.

## Teaching and Learning Center

(206) 934-3776  
 webshares.northseattle.edu/tlc/index.shtm

The TLC is dedicated to the professional development of North's faculty and staff. We actively support and encourage the continuous improvement of teaching and learning at NSC through workshops; one-on-one assistance; and access to computers, educational technologies, and other equipment.

## Opportunity Center for Employment & Education (OCE&E)

(206) 934-6199  
 nscoceeinfo@seattlecolleges.edu  
 northseattle.edu/ocee

The OCE&E brings together multiple state agencies, community-based organizations, and community colleges to help customers achieve self-sufficiency through education and employment. It is the most comprehensive multiservice center on a community college campus in Washington. It offers customer-friendly employment, education, and social services for the unemployed, the underemployed, students, and their families. It provides access to WorkSource employment services, Department of Social & Health Services benefits, North's Workforce Education financial assistance programs, and other organizations—all conveniently located in one building. Students can learn more about how to access the OCE&E and its services through the website (above) or through the OCE&E Canvas (online learning management system) community.

## Student Learning Center

(206) 934-4752

[northseattle.edu/tutoring](http://northseattle.edu/tutoring)

HSSR building next to the Grove Café

The Student Learning Center offers comprehensive one-on-one and group tutoring services, including accounting, biology, chemistry, computer science, English, ESL, math, world languages, and more. The center also provides other support services, including multimedia computer labs, study rooms, and student success workshops.

## Page One Writing & Language Center

The Page One Writing & Language Center offers tutoring assistance on reading, writing, listening, or speaking assignments for any class offered at North.

## The Math/Science Learning Center

The Math/Science Learning Center (MSLC) offers free tutoring assistance to all North students currently enrolled in math, physics, chemistry, or computer science classes. Biology tutoring is also offered in a lab setting.

## Accounting and Business Learning Center

The Accounting & Business Learning Center offers students coaching on accounting and business statistics questions and problems. Other Business Engineering & Information Technology (BEIT) Division programs that offer tutoring help include Real Estate, Electronics, and Information Technology.

## Testing Center

(206) 934-3674

[NSCTesting@seattlecolleges.edu](mailto:NSCTesting@seattlecolleges.edu)

[northseattle.edu/testing](http://northseattle.edu/testing)

Students seeking a degree or certificate or enrolling in most English or mathematics classes (or classes with English or mathematics prerequisites) must take the placement tests prior to registration. These tests help the student and advisor select appropriate classes. The placement tests are offered during weekly drop-in hours. Basic Transitional Skills tests, which include ABE and ESL placement tests, are also available during drop-in hours. GED exams need to be scheduled through [ged.com](http://ged.com). For testing schedule and detailed information, visit the website or the Testing Center.

## Veterans Services

**School Certifying Official: Gregory Tessensohn**

(206) 934-7309

[gregory.tessensohn@seattlecolleges.edu](mailto:gregory.tessensohn@seattlecolleges.edu)

[northseattle.edu/office-veterans-services](http://northseattle.edu/office-veterans-services)

The Office of Veterans Services at North Seattle College offers a range of assistance to veterans, reservists, active duty personnel, and eligible family members who receive Veterans Affairs education benefits. We also offer certification services for anyone eligible for Chapter 33 Post 9/11 GI Bill®, Chapter 30 Montgomery GI Bill®, Chapter 31 Vocational Rehabilitation, Chapter 35 Aid for Eligible Family Members, and Chapter 1606/1607 Selective Reservists.

We provide help with any issues having to do with veteran status and serve as a resource for military personnel transitioning into civilian life.

*See page 216 for financial aid information.*

## WorkForce Education Programs

(206) 934-3787

[nscwfe@seattlecolleges.edu](mailto:nscwfe@seattlecolleges.edu)

[northseattle.edu/workforce-education](http://northseattle.edu/workforce-education)

## WorkFirst

(206) 934-3769

North is a WorkFirst contractor that provides tuition assistance and support for eligible students. To be eligible, students must be pursuing a career training certificate or degree, English as a second language (ESL) classes, or a high school completion or high school equivalency certificate. Students must also be receiving TANF benefits from DSHS and have a referral.

## Opportunity Grant (OG)

Opportunity Grant (OG) helps low-income Washington residents increase job skills and knowledge to become eligible for living-wage, high-demand careers in nursing, nursing assistant, general business, early childhood education, accounting, medical assistant, Allied Health, or any IBEST course. Students must be in one of these programs, be income eligible, have less than an associate degree, and complete a Free Application for Federal Student Aid (FAFSA) or Washington Application for State Financial Aid (WASFA) every year. Qualified students may receive funds to cover tuition and mandatory fees for 45 credits, up to \$1,000 for books per year, and limited emergency assistance.

## Worker Retraining

Worker Retraining provides tuition assistance for students who are eligible for unemployment insurance benefits or have exhausted unemployment benefits, veterans who have been discharged within the past 48 months, active duty military with separation orders, workers employed in a not-in-demand job, displaced homemakers due to divorce or death of spouse, or the self-employed who are now unemployed due to economic changes in their community.

## Campus Life

### Art Gallery

(206) 934-4557

[artgallery.northseattle.edu](http://artgallery.northseattle.edu)

[nscartgallery@seattlecolleges.edu](mailto:nscartgallery@seattlecolleges.edu)

The North Seattle College Art Gallery is a professional gallery featuring work by contemporary artists that seeks to foster the appreciation of the visual arts on the North Seattle College Campus. The Art Gallery actively engages the college community through dynamic learning opportunities that directly demonstrate cultural and artistic diversity. The gallery is invested in showcasing art that questions established concepts and excels visually through carefully curated thematic exhibitions.

In addition to these curated exhibitions, the NSC Art Gallery highlights our lauded for-credit Art Student and Continuing Education Art Exhibitions and presents programming, including visiting artist talks throughout the year. To view Gallery events, please visit the Art Gallery website

### Bookstore

(206) 934-4678

[northscc.bnccollege.com](http://northscc.bnccollege.com)

The Bookstore carries textbooks, supplemental course materials, food and drinks, school supplies, and North clothing. Rent textbooks and save an average of 50 percent. Purchase books online to get first pick of the used books and save time in line. The Bookstore also offers a year-round textbook buy-back service.

**8 a.m. to 4 p.m., Monday through Friday**

### Child Care Center

(206) 934-3644

[northseattle.edu/child-care](http://northseattle.edu/child-care)

For the children of students at North, the ASB Child Care Center provides a safe, supportive, welcoming, and diverse environment that fosters student access, retention, and success. The Child Care Center is licensed by the Department of Early Learning of Washington state and participates in the city of Seattle's Child Care Assistance Program. It serves children ages 18 months through 5 years old. Call for tours or fee information.

**7:30 a.m. to 4 p.m., Monday through Friday**

### The Equity & Welcome Center

(206) 934-3719

[northseattle.edu/equity-diversity-inclusion/equity-welcome-center](http://northseattle.edu/equity-diversity-inclusion/equity-welcome-center)

The Equity & Welcome Center aims to identify and implement equitable strategies to end all racial and other equity gaps at North. The President's Cabinet, students, faculty, staff and community stakeholders came together in 2018 to develop the framework for the historic Equity & Welcome Center at North. The framework supports and advocates for the success of diverse and historically underserved communities on the NSC campus. This includes communities from all cultures, ages, religious beliefs, races/ethnicities, sizes, gender identities, abilities, qualities, sexual affiliations, socioeconomic classes, veteran status, political beliefs, and citizenship status and sovereign nations. The Equity & Welcome Center currently offers you the following:

- Multicultural & Gender Equity Student Lounge
- Peacemaking Space
- Virtual Student Lounges
- United Way Benefits Hub
- Gender Equity & Multicultural Resources in Canvas, co-created by students and staff
- TRiO guidance, tutoring and community for low-income, first-generation and students with disabilities
- College Entry navigation help for new students

If you have any questions or concerns, please contact Associate Vice President Equity, Diversity & Inclusion, Campus Diversity Officer, D'Andre Fisher, (206) 934-3655.

### Food Services

(206) 934-3728

[northseattle.edu/campus-life/dining](http://northseattle.edu/campus-life/dining)

The Grove includes an espresso bar featuring local roasters Caffé D'Arte coffee; an array of fresh pastries and sweets; Grab & Go offerings, including salads, sandwiches, hot panini, snacks, and cold beverages. The Hot Line serves breakfast and lunch and features a rotating menu of Daily Plate entrées, fresh baked pizza, homemade soups, and made-to-order torpedo sandwiches, as well as other daily Grill Specials. Both venues feature local, sustainable ingredients. Food Services is able to provide some special event catering. Please contact with inquiries.

### Housing

(206) 934-3641

On-campus housing is not available. However, a bulletin board lists various accommodations that are available in the local area. Call if you need housing or if you have a room or apartment available for students to rent.

## Safety & Security

(206) 934-3636

[northseattle.edu/safety-security](http://northseattle.edu/safety-security)

Safety & Security strive to create and maintain a positive atmosphere that enables and encourages learning in a safe, efficient, and responsible environment. In addition to these efforts, and to continue this success, it is crucial that everyone maintains a proactive and responsible approach towards their safety. Please get acquainted with the services Safety & Security provides, and know we warmly welcome any questions, comments, or suggestions you have that may assist us in our continued efforts toward the goal of making North Seattle College among the safest campuses in the country.

*See page 226 for additional information on personal safety.*

## Student Clubs

(206) 934-3641

[studentleadership.northseattle.edu/clubs](http://studentleadership.northseattle.edu/clubs)

Clubs provide students with opportunities to develop leadership skills and to promote personal and intellectual growth. Participation provides experience in planning, organizing, and working in teams. For information about student clubs, see the website or visit the Student Leadership and Multicultural Programs office located on the north-end ground floor of the College Center building.

## Student Administrative Team

(206) 934-3642

[studentleadership.northseattle.edu](http://studentleadership.northseattle.edu)

The Student Administrative Team (SAT) serves as North's executive student government. SAT advocates for the student body by working with faculty, staff, and administration to ensure that student needs and concerns are addressed. SAT, including the student body president, also provides leadership and daily support to the seven student Boards:

- Student Fee Board
- Events Board
- Student Cabinet
- Research and Advocacy Board
- Communications Board
- Sustainability Board
- Club Council

Each board includes students who work with college staff, faculty, and administration on behalf of their constituents, the student body. Students who serve on a board or SAT receive an hourly wage, training, and mentoring designed to strengthen their leadership skills and to provide a foundation for success.

## Student Leadership & Multicultural Programs

(206) 934-3642

[studentleadership.northseattle.edu/](http://studentleadership.northseattle.edu/)

The department of Student Leadership & Multicultural Programs (SLMP) administers North's Student Leadership program, which consists of approximately 40 paid student leaders, and collaborates with college faculty, staff, and the administration to develop programming that engages and represents our diverse student body. SLMP promotes and aids in creating a campus climate and culture that respects and celebrates diversity.

SLMP provides leadership training and advising for student leaders as well as a variety of cultural, educational, and leisure programs that fuel a vibrant and inclusive campus life. SLMP is committed to supporting students from all backgrounds, experiences, and levels of academic preparation.

## Transportation & Parking

(206) 934-0060

[northseattle.edu/transportation](http://northseattle.edu/transportation)

North is served by several Metro bus routes. Carpooling, walking, busing, biking, and vanpooling are encouraged. Students registered for 10 or more credits are eligible to purchase a discounted ORCA transit pass issued by the college through the Cashier's Office. ORCA passes may be used to ride Community, Everett, Kitsap, Metro, Pierce, and Sound Transit systems.

## Parking

(206) 934-3636

Students may purchase a parking permit 30 days prior to the start of the quarter online at [seattlecolleges.edu/parking-permit](http://seattlecolleges.edu/parking-permit). Carpool parking is also available. Campus speed limit is 15 mph. Purchase daily parking at Cashier's Office or permit machines on the parking lots.

## The Roy Flores Wellness Center/ Student Recreation

(206) 934-3631

Information Line (206) 934-3649

[northseattle.edu/wellness-center](http://northseattle.edu/wellness-center)

The Roy Flores Wellness Center offers a variety of fitness activities, such as yoga, Pilates, resistance training, and cardiovascular training. The facility also includes a well-equipped strength and conditioning room, a running track, and a gym for playing basketball or volleyball. The Wellness Center fee of \$1.25 per credit up to 10 credits entitles students to use the facility and to participate in free drop-in sessions. The current schedule is available on the website.

## Alumni Association

The Alumni Association is an organization for North Seattle College graduates. If you completed a course, program, certificate, or a degree at North, you have earned your place in the Alumni Association. The goal of the Alumni Association is to provide graduates and current students with a strong network of North Seattle College friends and colleagues, and to offer the opportunity for you to stay connected with college. Join today.

## Seattle Colleges Foundation

**(206) 934-2939**

**[advancement@seattlecolleges.edu](mailto:advancement@seattlecolleges.edu)**

**[foundation.seattlecolleges.edu](http://foundation.seattlecolleges.edu)**

**[equitycampaign.info](http://equitycampaign.info)**

The Seattle Colleges Foundation spearheads the \$50 million Equity Can't Wait Campaign, an effort to mobilize philanthropic support for the colleges to better support students, power instructional innovation, and strengthen capacity both with new and renovated facilities and a faculty and staff who reflect the full diversity of our community. The ultimate goal: helping raise the rate of program completion for all students at the colleges—and completely eliminating the gap between students historically well-served by higher education and those historically ill-served, particularly people of Black, Latinx, and Indigenous heritage.



# Learning Outcomes

## General Education

General Education is college-level work that introduces students to the content and methods of major areas of knowledge, including humanities and fine arts, the natural sciences, mathematics, and the social sciences. General Education emphasizes the following outcomes:

- Attitudes necessary to function as a citizen and lifelong learner
- Intellectual skills required for college-level inquiry and competence
- Knowledge and awareness of the complex world in which we live

The purpose of General Education is to provide educational depth and breadth through development of essential skills in reading and writing, research and information literacy, critical thinking, problem solving, understanding individuals and cultures, creative expression, and quantitative and scientific reasoning. These transferable skills support students as they continue in higher education, move forward in careers, and continue the process of lifelong learning.

## North Seattle College Learning Outcomes

North Seattle College is committed to changing lives through progressive education by advancing student success, excelling in innovative teaching and lifelong learning, and building a responsive community. Our diverse college community is committed to infusing our guiding values into all we do. As a learning community, we foster and promote development of these four essential skills for students completing courses, certificates, or degrees. These outcomes will be achieved through the use of current and emerging pedagogies and technologies, including integrative and applied learning.

- **Inquiry** based on information accessed through ethical research
- **Problem Solving** using critical and creative thinking, quantitative and qualitative reasoning, information literacy, and disciplinary and cross-disciplinary knowledge
- **Communication** in oral, written, and artistic modes of expression, individually and in collaboration with others
- **Responsibility** for understanding and integrating intercultural competence, practicing ethical reasoning and conduct, applying sustainability principles, and demonstrating respect for self and others

## Associate of Arts Degree Learning Outcomes

See page 11.

## Associate of Science Degree Learning Outcomes

Students completing the Associate of Science degree should:

- Recognize the interdisciplinary nature of the sciences and use scientific inquiry to critically evaluate a proposal, claim, process, or theory.
- Generate significant questions about the physical world and use the tools of science or engineering to design and conduct an experiment; draw conclusions based on a systematic collection and analysis of qualitative and quantitative data.
- Recognize and interpret the meaning of quantitative and mathematical symbols and apply appropriate logic, tools, and processes to make meaningful decisions and solve problems. Utilize multiple representations, including graphical, symbolic, numerical, and narrative, to analyze and solve problems.
- Obtain, comprehend, analyze, evaluate, internalize, and act upon knowledge in order to understand and communicate complex scientific systems and reasoning.
- Use appropriate documentation to exchange spoken, written, and visual information in order to communicate effectively and to participate as an effective team member within the scientific community and other appropriate settings.
- Apply scientific or technical knowledge and practice to a variety of disciplines in order to understand issues, solve problems, and engage in responsible practices.
- Apply modes of inquiry from the social sciences to issues and problems found in individuals' lives and work in their local, national, and global communities and to find effective and ethical solutions to society's problems and challenges.
- Explore, interpret, and represent human experience through the arts.

# College Transfer

## Academic Programs

(206) 934-7306

North Seattle College offers a full range of college transfer courses that apply toward a four-year program of study. In addition to the Associate of Arts (A.A.) and Associate of Science (A.S.) degrees, North also offers an Associate in Business (A.B.) degree and an Associate of Fine Arts (A.F.A.) degree in Art. For detailed information on the A.A. degree, see page 11.

Students are encouraged to complete a two-year degree program for greater ease of transfer to a four-year institution but can take individual classes for transfer. It is strongly recommended that students confer with an academic advisor to ensure course transferability.

Students planning to earn an A.A., A.F.A., A.B., or A.S. degree must meet minimum standards of preparation. Those whose records and test scores indicate a need for additional preparation may be required to complete preliminary work in the college preparatory program.

College transfer courses are offered in several disciplines.

## Associate of Arts (A.A.)

### Direct Transfer Agreement

This 90-credit transfer degree fulfills the general education requirements for most four-year degrees in arts and sciences. To earn the A.A. degree, students must achieve a minimum cumulative GPA of 2.0 or better in courses numbered 100 and above, complete at least 15 credits at the Seattle College (Central, North, or South) awarding the degree, and meet all the degree requirements. Students should contact an advisor to develop their individual programs of study.

See page 14 for college transfer course requirements for A.A. or A.S. degree.

## Associate of Science Transfer (A.S.)

This degree is designed to transfer to a four-year college or university in the state of Washington.

A.S. degree requirements include satisfactory completion of at least 90 approved credits with a minimum 2.0 cumulative GPA. At least 15 college-level credits must be earned at the Seattle College awarding the degree.

Two different study options are offered:

1. Biological sciences, environmental/resources sciences, chemistry, geology, and earth sciences
2. Engineering, computer science, physics, and atmospheric science.

Course requirements and GPAs vary from one transfer university to another. Contact an advisor.

## Associate of Science (A.S.)

The Associate of Science (A.S.) is a direct transfer agreement. However, there are certain major areas of study in which the student may not be able to take all the courses necessary to transfer with junior standing. Please contact an advisor for more information on this degree program.

A.S. degree requirements include satisfactory completion of at least 90 approved credits with a minimum 2.0 cumulative GPA. At least 15 college-level credits must be earned at the Seattle College awarding the degree.

## Associate in Business (A.B.–DTA)

### Direct Transfer Agreement

**Workforce Instruction Division**  
(206) 934-3730

Students who complete the A.B. can fulfill many of the general education and business major prerequisites required for many Washington state public four-year college and university business programs.

A.B. degree requirements include satisfactory completion of at least 90 approved credits with a minimum 2.0 cumulative GPA. At least 15 college-level credits must be earned at the Seattle College awarding the degree.

Note: While many Washington state universities accept transfer of this degree, each has individual requirements and/or acceptable course substitutions needed for its specific program. Admission to many business schools is competitive, and higher grades are often required. It is essential to learn the requirements of your transfer school and to consult Advising.

**GENERAL EDUCATION COURSES**

ENGL& 101	English Composition I . . . . .	5
ENGL& 102	Composition II . . . . .	5
COMMUNICATION SKILLS		10
MATH 116	Applied Mathematics . . . . .	5
Following can be substituted:		
MATH&141	Precalculus I . . . . .	5
QUALITATIVE/SYMBOLIC REASONING		5
Choose from a minimum of two different prefixes with no more than 10 credits in a discipline area.		
VISUAL, LITERARY AND PERFORMING ARTS		15
ECON& 201	Micro Economics . . . . .	5
ECON& 202	Macro Economics . . . . .	5
Non-ECON course . . . . .		5
INDIVIDUAL, CULTURES AND SOCIETIES		15
MATH& 148	Business Calculus . . . . .	5
Following can be substituted:		
MATH&151	Calculus I . . . . .	5
-OR- MATH&124	Calculus w/Geometry II . . . . .	5
Physical, Biological, and/or Earth Sciences . . . . .		10
Note: Must include at least one 5-credit laboratory course		
THE NATURAL WORLD		15
ACCT& 201	Financial Accounting I. . . . .	5
ACCT& 202	Financial Accounting II . . . . .	5
ACCT& 203	Managerial Accounting . . . . .	5
BUS& 201	Business Law. . . . .	5
BUS& 210	Business Statistics. . . . .	5
BUSINESS COURSES		25
U.S. CULTURES		5
TOTAL PROGRAM CREDITS		90

**Fine Arts in Art****Arts, Humanities and Social Sciences**

A Certificate of Fine Arts is offered in Art, Jewelry Design, and an Associate of Fine Arts degree is offered in Art.

Candidates for the Associate of Fine Arts degree in Art must complete a minimum of 100 college transfer-level courses (numbered 100 and above) with a GPA of 2.0 or higher. At least 15 credits must be earned at North Seattle College (NSC). The last quarter must be in residence at NSC.

The Associate of Fine Arts (A.F.A.) degree certifies completion of approved coursework. It is suitable for students currently working in art but does not currently transfer with the same transfer rights to area colleges as the NSC Associate of Arts (A.A.) degree. However, it is accepted by Evergreen State College and some other colleges with transfer rights similar to those of the A.A. Students seeking a Bachelor of Arts or a Bachelor of Fine Arts should consult NSC A.A. degree requirements, their art advisor, and the university in which they intend to enroll about equivalency requirements. Since university requirements for admission may change annually, the students must keep themselves informed of these changes.

The A.F.A. in Art requires General Education courses as follows: ENGL&101 and one of the following computation courses: MATH&107 or above, BUS 116, ACCT 110 or above. Students must also complete 10 credits in two of the three distribution areas: 5 from Visual, Literary, and Performing Arts other than ART courses; 5 from Individuals, Cultures, and Societies; and 5 from The Natural World. There are also 45 required ART credits and a minimum of 25 ART electives. Some of the art courses are offered only once a year, so students should consult the annual schedule (e.g., ART 251, Fall; ART 252, Winter; ART 253, Spring; ART 101, Spring; ART 112 and ART 205, 206, 207, Winter and Spring but not Fall). During the final quarter, students must submit a portfolio of work of at least eight pieces for evaluation. The art faculty will provide exact details on portfolio preparation and will review and vote on acceptability toward the degree.

All A.F.A. students in art must have an art advisor to plan their program. The art advisor is Lynne Hull. Some of the art courses are offered only once a year, so students should consult the annual schedule (e.g., ART 251, Fall; ART 252, Winter; ART 253, Spring; ART 101, Spring; ART 112 and ART 205, 206, 207, Winter and Spring but not Fall). All studio art courses must be taken in sequence; however, art history courses may be taken in any order. Substitutions may be made only with the approval of the art faculty and the Arts, Humanities & Social Sciences dean, and requests for such substitutions must be made on the request for waiver form.

Listed below is a possible course sequence for the A.F.A. degree in Art; however, it may be necessary to take courses out of sequence as the quarterly schedule dictates. For more information about program or the annual schedule, contact the Humanities Division at (206) 934-3709.

**Associate of Fine Arts (A.F.A.) in Art****REQUIRED COURSES**

ART 101	Design	5
ART 102	Design	5
ART 111	Drawing	5
ART 112	Drawing	5
ART 114	Beginning Digital Photography, ART 121 Beginning Printmaking, ART 201 Beginning Painting, or ART 211 Beginning Sculpture	5
ART 2XX	Choose two art history courses from the following:	
ART 251	Art History – Ancient, ART 252 Art History – Medieval, ART 253 Art History – Modern, ART 255 Art History – Art of Asia, ART 257 Art History – Art of the Global South	10
ART 210	Digital & Graphic Art – Photoshop + Illustrator	5
ART 251	Art History	5
	Following can be substituted:	
ART 252	Art History	5
	Art History courses are taught at Seattle Central or other college.	
ART 253	Survey of Western Art: Renaissance – Present	5
	Art History courses are taught at Seattle Central or other college.	
ART 290	The Art Business	5

**GENERAL EDUCATION COURSES**

	Individuals, Cultures & Societies	5
	The Natural World	5
	Computation Course	5
	Select 5 credits from notated courses below:	
	MATH 107 (or above), BUS 116 (or above), ACCT 110 (or above)	5
ENGL&101	English Composition I	5
ENGL&102	Composition II	5

**ART ELECTIVES GROUP 1: 2-DIMENSIONAL ART**

Approved Art electives must be taken in sequence; however, completion of a sequence is not required.

ART 113	Drawing	5
ART 114	Introduction to Digital Photography I	5
ART 115	Introduction to Digital Photography II	5
ART 121	Introduction to Printmaking	5
ART 122	Introduction to Printmaking – Intermediate	5
ART 123	Continuing Printmaking: Monotype and Monoprint	5
ART 124	Screen Printing	5
ART 201	Painting	5
ART 202	Painting	5
ART 203	Painting	5
ART 204	Mural Art	5
ART 214	Digital & Graphic Art – Intermediate	5
ART 215	Advanced Digital Art	5
ART 166	Video Art	5
ART 240	Book Arts	5

GROUP 1 - 2-DIMENSIONAL ART MINIMUM 5

**ART ELECTIVES GROUP 2: 3-DIMENSIONAL ART**

Approved Art Electives must be taken in sequence; however, completion of a sequence is not required.

ART 211	Sculpture	5
ART 212	Sculpture	5
ART 213	Sculpture	5
ART 221	Ceramic Art	5
ART 222	Ceramic Art	5
ART 223	Ceramic Art	5
ART 281	Jewelry Design I	5
ART 282	Jewelry Design II	5
ART 283	Introduction to Alloying and Jewelry Casting	5
ART 284	Bench Techniques and Practices	5
ART 285	Metal Techniques for Small Scale Sculpture	5

GROUP 2 - 3-DIMENSIONAL ART MINIMUM 5

ELECTIVES BETWEEN GROUP 1 AND GROUP 2 MINIMUM 25

TOTAL PROGRAM CREDITS MINIMUM 90 + PORTFOLIO

**Liberal Arts****North Seattle College Academic Advising**

The Associate of Arts (A.A.) is a flexible degree that prepares students to transfer to a four-year institution in a variety of majors related to the humanities, literature, political science, psychology, sociology, and more. A.A. degree students receive a broad education in English composition, quantitative reasoning, and social and natural sciences. Students complete 90 credits, tailored to meet individual academic goals. Students are strongly encouraged to meet with an advisor to discuss specific career goals and recommended coursework.

**Associate of Arts (A.A.)****ELECTIVES**

See advisor for list of approved courses.

**AREAS OF KNOWLEDGE DISTRIBUTION REQUIREMENTS**

See advisor for list of approved course, or use links below.

**Science****North Seattle Academic Advising**

The Associate of Science Degree: Option 1 is intended for students planning to transfer to a four-year college or university and major in biology, environmental/resource sciences, chemistry, geology, or earth sciences.

Students will complete 90 credits, including many of the laboratory and prerequisite courses for their major prior to transferring. Students are strongly encouraged to meet with an advisor to discuss specific career goals and recommended coursework.

**BASIC REQUIREMENTS – MATHEMATICS**

Choose five credits from the following courses:

MATH 116	Applications of Math: Management, Life, and Social Sciences	5
MATH& 141	Pre-Calculus I	5
MATH& 142	Pre-Calculus II	5
MATH& 148	Business Calculus	5
MATH& 151	Calculus I	5
MATH& 152	Calculus II	5
MATH 220	Linear Algebra	5
MATH 224	Vector Calculus	5

**BASIC REQUIREMENTS – COMPUTER SCIENCE**

Choose 5 credits from the following courses:

CSC 110	Introduction to Computer Programming	5
CSC 111	Computers for Math and Science	5
CSC 142	Computer Programming I	5
CSC 143	Computer Programming II	5
ENGR 142	Computer Programming	5

**Associate of Science (A.S.)****BASIC REQUIREMENTS – ENGLISH**

ENGL& 101	English Composition I	5
ENGL& 102	Composition II	5

**AREAS OF KNOWLEDGE DISTRIBUTION REQUIREMENTS**

See advisor for list of approved courses or use links below.

Visual, Literary, and Performing Arts	15
Courses in this area include languages, literature, art, music, drama, and communication. Choices must include a minimum of two different course prefixes and no more than 5 credits each of a world language at the 100 level; a studio/performance class may be applied to the distribution requirements.	
Individual, Cultures, and Societies	15
Courses in this area include social sciences, such as anthropology, psychology, and sociology, as well as areas of study like history, philosophy, and ethnic and gender studies. Choices must include a minimum of two different course prefixes.	

**PRE-MAJOR REQUIREMENTS**

Course selection should be in compliance with major requirements as indicated by the four-year institution to which the student is planning to transfer. See an advisor or counselor prior to beginning your program of study.

The Natural World	40
Courses in this area include physical and life sciences and certain mathematics, computer science, and social science courses. Choices must include a minimum of two different prefixes; 9 credits must be in a lab science.	

**ELECTIVES**

See advisor for list of approved courses.

Elective	5
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**Special Opportunities for Upper-Division and Graduate Courses****Eastern Washington University at North**

(509) 359-6254 (EWU Department of Engineering & Design)  
[ewu.edu/CSHE/Programs/Engineering/NSCCEE](http://ewu.edu/CSHE/Programs/Engineering/NSCCEE)

EWU and North offer an ABET-accredited Bachelor of Science degree in Electrical Engineering on the North campus. Coursework is taught by faculty members from both schools through a series of distance education and regular classroom courses that include hands-on laboratories. To qualify, students must apply directly to EWU.

**Washington State University Online**

(206) 934-7306 North Advising

North and Washington State University (WSU) Online offer co-admission to North students who have earned an associate degree within 16 consecutive quarters and meet the minimum cumulative GPA. WSU Online offers a number of degrees that are earned completely through online classes.

**Western Washington University at North**

(206) 934-3719

[wce.wvu.edu/teop/north-seattle](http://wce.wvu.edu/teop/north-seattle)

Western Washington University's Teacher Education Outreach program offers the following evening programs at North Seattle College: Elementary Teacher Education, B.A.E., with Special Education major and Elementary Teacher Certification.

**Western Governors' University (WGU) – Washington**

(877) 214-7004

[washington.wgu.edu](http://washington.wgu.edu)

WGU offers associate degree graduates junior status in four baccalaureate online education pathways: education, business, information technology, and health professions. North Seattle College B.A.S. program graduates may also qualify for reduced tuition when enrolling in WGU Washington graduate education programs.



## Areas of Study

### ARTS, DESIGN, AND GRAPHICS

#### 2D Fine Arts (A.A.)

This two-year program is designed to give students a solid foundation in 2D visual art with an emphasis on craft, concept and critical analysis in one or more of several areas of study including drawing, painting, digital art, photography, and more. While in the program, students have many opportunities to gain professional experience as working artists including showcasing and selling art, installing, exhibiting, and documenting work, and submitting to literary and arts publications.

This AFA pathway program prepares students to complete their education at a four-year college or university with a Bachelor of Art (BA) with Studio Art or Art History emphasis, a Bachelor of Fine Art (BFA) or Master of Fine Art (MFA) in Visual Art, and/or entering the creative economy with a dynamic portfolio of finished works.

#### 3D Fine Arts (A.F.A.)

This two-year program is designed for students that wish to obtain an Associate of Fine Arts (AFA) degree with a specialization in 3D (Sculpture & Ceramics). The Ceramics program introduces students to hand building and wheel throwing processes for both functional and conceptually based work. The Sculpture program introduces students to a wide variety of processes including woodworking, mold making and slip casting, reductive carving, and low-tech processes in cardboard construction, found object assemblage, papier mache, and installation-based work.

Students in this pathway will also demonstrate collaborative attitude, skills, and knowledge in 3D art media, and will learn how to effectively critique and document work through a contemporary lens. Completion of this AFA pathway is designed to help students build a portfolio in 3D arts as well as prepare students for further education at a four-year college or university in the visual arts such as a Bachelor of Art (BA) with Studio Art or Art History emphasis, a Bachelor of Fine Art (BFA) or Master of Fine Art (MFA) in Visual Art, and/or entering the creative economy with a dynamic portfolio.

#### Art History (A.A.-DTA)

This two-year program is designed for students that wish to obtain an Associate of Arts Direct-Transfer Agreement (AA-DTA) degree with an emphasis in Art History. Completion of this pathway provides a visual and historical analysis of objects made throughout time. In lectures, discussions, and online content, students discover the broader context that surround works of art, design, and architecture, providing an understanding of why these objects were made, what they represent, and how they can tell us stories of humanity.

Completion of this degree is designed to prepare students for transferring into an Art History major at a four-year college or university and satisfy Art History requirements for students entering into a Studio Art major.

#### Digital Art and Photography (A.F.A.)

This two-year program is designed for students that wish to obtain an Associate of Fine Arts (AFA) degree with a specialization in Digital Art and Digital Photography. Students in this pathway will leave with fluency in Adobe software such as Photoshop, Illustrator, InDesign, Premier, and After Effects. Students will gain skills in photo editing, compositional strategies, and formal design elements. Students will also demonstrate collaborative attitude, skills, and knowledge in Digital Art and Digital Photography, and will learn how to effectively critique and document work through a contemporary lens.

Completion of this AFA pathway is designed to prepare students for further education at a four-year college or university in the visual arts such as a Bachelor of Arts degree in Studio Art or Art History, Bachelor of Fine Arts degree or Master of Fine Arts in Visual Art.

#### Fine Arts in Art Certificate

##### Arts, Humanities and ABE Division

A Certificate of Fine Arts is offered in Art, Jewelry Design and Drama, and an Associate of Fine Arts degree is offered in Art and Music. Students must complete at least 15 college transfer level credits (numbered 100 or above) with a GPA 2.0 or better at North Seattle College.

Candidates for the Certificate in Fine Arts: Art must complete 85 credits in college transfer level courses (numbered 100 and above) with a grade point average (GPA) of 2.0 or better. At least 15 credits must be earned at North Seattle College and the final quarter must be in residence at North Seattle College (NSC).



The Certificate in Fine Arts: Art certifies completion of approved work and is suitable for students currently working in art, but it is not a transfer certificate. Students seeking a B.A. or B.F.A. should consult NSCC Associate of Arts degree requirements and the graduation requirements of the university at which they intend to enroll. All CFA: Art students must plan their program with their art advisor. Some of the art courses are offered only once a year, so students should consult the annual schedule (Winter and Spring but not Fall). Substitution may be made only with the approval of the art advisor and the Dean of Arts, Humanities & Social Sciences Division. Students must submit a portfolio of at least eight pieces during their final quarter for evaluation; this portfolio will be evaluated by the art faculty. Final approval and recommendation to award the CFA: Art rests with the Art faculty.

Most General Education requirements for this certificate are met by course content in various art courses, communication by ART 251, 252, 253, and human relations by ART 290. Students must take a five credit computation course from one of the following: MATH& 107 or above, BUS 116, or ACCT 110 or above.

Although it may be possible to complete this program in two years, it is suggested that it be spread over more time to allow better assimilation of skills and more flexible scheduling. Art courses require more time than is allowed in class alone, as well as high energy and involvement for truly effective learning. The art faculty, therefore, highly recommends that students should consider two studio courses per quarter a maximum.

#### REQUIRED COURSES

ART	101	Design. . . . .	5
ART	102	Design. . . . .	5
ART	111	Drawing. . . . .	5
ART	112	Drawing. . . . .	5
ART	113	Drawing. . . . .	5
ART	251	Art History. . . . .	5
Art history courses are taught at SCC (Seattle Central College) or other college.			
ART	252	Survey of Western Art: Medieval-Renaissance. . . . .	5
Art history courses are taught at SCC (Seattle Central College) or other college.			
ART	253	Survey of Western Art: Renaissance-Present. . . . .	5
Art history courses are taught at SCC (Seattle Central College) or other college.			
ART	290	the Art Business. . . . .	5

#### GENERAL EDUCATION COURSES

Total required Computation Course credits: 5

Select five (5) credits from courses as noted below:

ACCT 110 Introduction to Accounting/Bookkeeping I . . . . 5

Following can be substituted:

ACCT course higher than ACCT 110

BUS 116 Business Math/Spreadsheets . . . . . 5

MATH& 107 Math in Society . . . . . 5

Following can be substituted:

Math course higher than MATH& 107

#### ART ELECTIVES

Total required ART Electives credits: 35 minimum between

Group 1 and Group 2

■ ART Electives – group 1: 15 credits minimum

■ ART Electives – group 2: 15 credits minimum

■ Other ART Electives: No minimum

ART Electives by group listed below

ART& 100 Art Appreciation . . . . . 5

ART 299 Special Problems in Art (up to 12 credits) . . . . 5

#### ART ELECTIVES GROUP 1: 2-DIMENSIONAL ART

Approved Art Electives must be taken in sequence; however, completion of a sequence is not required.

ART 114 Introduction to Digital Photography I . . . . . 5

ART 121 Introduction to Printmaking . . . . . 5

ART 122 Introduction to Printmaking – Intermediate . . . 5

ART 123 Continuing Printmaking: Monotype  
and Monoprint . . . . . 5

ART 201 Painting . . . . . 5

ART 202 Painting . . . . . 5

ART 203 Painting . . . . . 5

ART 210 Digital & Graphic Art – Photoshop + Illustrator . 5

ART 214 Digital & Graphic Art –Intermediate. . . . . 5

#### ART ELECTIVES GROUP 2 : 3-DIMENSIONAL ART

Approved Art Electives must be taken in sequence; however, completion of a sequence is not required.

ART 211 Sculpture . . . . . 5

ART 212 Sculpture . . . . . 5

ART 213 Sculpture . . . . . 5

ART 221 Ceramic Art . . . . . 5

ART 222 Ceramic Art . . . . . 5

ART 223 Ceramic Art . . . . . 5

ART 281 Jewelry Design I . . . . . 5

ART 282 Jewelry Design II. . . . . 5

ART 283 Introduction to Alloying and Jewelry Casting. . . 5

ART 284 Bench Techniques and Practices . . . . . 5

ART 285 Metal Techniques for Small Scale Sculpture . . 5

TOTAL PROGRAM CREDITS

85

## Jewelry Design Certificate

### Arts, Humanities and ABE Division

A Certificate of Fine Arts is offered in Art, Jewelry Design and Drama, and an Associate of Fine Arts degree is offered in Art and Music. Students must complete at least 15 college transfer level credits (numbered 100 or above) with a GPA 2.0 or better at North Seattle College.

Candidates for the Certificate in Jewelry Design must complete 60 credits in the college transfer level courses (numbered 100 and above) with a grade point average (GPA) of 2.5 or better. The required Jewelry classes (25 credits) must be taken here at North Seattle College. At the completion of the required courses, the students must mount an exhibition of their work either on campus or at an approved venue. This should be a solid body of work expressing their mastery of materials.

Final approval and recommendation to award the CJD rests with the ART faculty.

The Certificate in Jewelry Design certifies completion of approved work, and is suitable for students currently working in Art, but it is not a transfer certificate.

Students seeking a B.A. or B.F.A. should consult NSCC Associate of Arts degree requirements and the graduation requirements of the University at which they intend to enroll.

All CJD art students must have an art advisor and must plan their program with that advisor. Some of the art courses are only offered once a year and students should consult their advisor and the annual schedule. Substitution may be made with the approval of the Art advisor and the Dean of Arts, Humanities & Social Sciences Division.

Most General Education requirements for this certificate are met by course content in various Art courses. Communication (5 credits) by ART 251, 252, 253; Human Relations (5 credits) can be fulfilled by CMST& 210 or CMST& 230. Students must take a 5 credit computation course from ACCT 110 or above.

This certificate is a four-quarter program that can be completed during the regular school year and in the following summer quarter.

### REQUIRED COURSES – JEWELRY DESIGN

ART	281	Jewelry Design I . . . . .	5
ART	282	Jewelry Design II . . . . .	5
ART	283	Introduction to Alloying and Jewelry Casting . . .	5
ART	284	Bench Techniques and Practices . . . . .	5
ART	285	Metal Techniques for Small Scale Sculpture . .	5

### REQUIRED COURSES – ART

ART	101	Design. . . . .	5
ART	111	Drawing . . . . .	5
ART	210	Digital & Graphic Art – Photoshop + Illustrator. .	5
ART	251	Art History . . . . .	5
Following can be substituted:			
ART 252 – Art History (5) or ART 253 – Art History (5)			
Art history courses are taught at SCC (Seattle Central College) or other college.			
ART	290	the Art Business. . . . .	5

### GENERAL EDUCATION COURSES

Total required Communication course credits: 5

Met by ART 251 (or ART 252 or ART 253) above

Total required Human Relations course credits: 5

Total required Computation Course credits: 5

Select credits from notated courses below:

ACCT	110	Introduction to Accounting/Bookkeeping I . . . .	5
Following can be substituted:			
ACCT course higher than ACCT 110			
This course will satisfy the Computation Course Requirement.			
CMST&	210	Interpersonal Communication . . . . .	5
This course will satisfy the Human Relations Course Requirement.			
CMST&	230	Small Group Communication . . . . .	5
This course will satisfy the Human Relations Course Requirement.			

TOTAL PROGRAM CREDITS	60
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## Music (A.A.)

This program meets requirements for the Associate of Arts-Direct Transfer Agreement (AA-DTA) degree with an emphasis in Music Foundations. The degree allows students to explore the field of music through history and culture, introductory reading and writing of the musical language, electronic music, and music performance. Students select a course in each of these four areas to gain a broad perspective of the music discipline. The program prepares students for transfer in music, humanities, business, social sciences, art administration, among other fields. Students planning on majoring in music will need to take two years of music theory at the transfer institution.

## BUSINESS AND ACCOUNTING

### Accounting Associate of Applied Science Degree (A.A.S.)

#### Business, Engineering & Information Technologies Division

This two-year program in Accounting prepares students for immediate employment in a variety of accounting positions. The program includes accounting and business skills as well as college transfer and supporting courses designed to strengthen students' confidence.

#### TECHNICAL SPECIALTY COURSES

ACCT	110	Introduction to Accounting/Bookkeeping I	5
ACCT	131	QuickBooks	5
ACCT&	201	Principles of Accounting I	5
ACCT&	202	Principles of Accounting II	5
ACCT&	203	Principles of Accounting III	5
ACCT	255	Individual Income Tax	5
ACCT	257	Business Tax Accounting	5
ACCT	260	Peachtree Accounting	5
ACCT	261	Accounting Information Systems	5
ACCT	267	Not for Profit Financial Management	5
ACCT	271	Ethics in Accounting	5
CWE	110	Internship	3

#### RELATED INSTRUCTION

BUS	124	Excel for Business	5
BUS	131	Integrated Communications I	5
BUS	169	Using Computers in Business	5
Following can be substituted:			
IT 101 – Software Applications (5)			
BUS	200	Law and Society	5
Following can be substituted:			
BUS& 201– Business Law (5)			
BUS	210	Business and Economic Statistics	5
Prerequisite: MATH 098 or higher			
BUS	236	Interpersonal Communications for the Workplace	5
U.S. Cultures			5
Following can be substituted:			
Global Studies course			
See advising for list of approved courses			

TOTAL PROGRAM CREDITS 93

### Accounting Associate of Applied Science–Transfer Degree (A.A.S.-T)

#### Business, Engineering & Information Technologies Division

The Associate in Applied Science–Transfer (AAS-T) degree is built upon technical skills for job preparation but also includes a college-level general education component common to all the AAS-T degrees. The Accounting AAS-T degree is designed as a transfer program for those interested in an applied baccalaureate degree and, in particular, for students interested in the Bachelor of Applied Science (BAS) – International Business degree program here at North.

#### TECHNICAL SPECIALTY COURSES

ACCT	131	QuickBooks	5
ACCT&	201	Principles of Accounting I	5
Following can be substituted:			
ACCT 110 – Intro to Accounting/Bookkeeping I (5)			
ACCT&	202	Principles of Accounting II	5
Following can be substituted:			
ACCT 120 – Intro to Accounting/Bookkeeping II (5)			
ACCT&	203	Principles of Accounting III	5
ACCT	255	Individual Income Tax	5
ACCT	257	Business Tax Accounting	5
BUS	124	Excel for Business	5
BUS&	201	Business Law	5
BUS	210	Business and Economic Statistics	5
BUS	236	Interpersonal Communications for the Workplace	5
ECON&	201	Micro Economics	5
ECON&	202	Macro Economics	5

#### RELATED INSTRUCTION

ENGL&	101	English Composition I	5
Must be eligible for English 101 through English Placement Exam or completion of English 097/098			
MATH	116	Applications of Math: Mngmnt, Life and Soc Sci	5
May substitute MATH&141 or any math class with MATH&141 as a prerequisite.			
Natural World, the			5
To transfer to an applied baccalaureate program, a lab course in physical, biological, and/or earth science is required.			
U.S. Cultures			5
Following can be substituted: Global Studies			

#### RELATED INSTRUCTION: ELECTIVE

ACCT	251	Intermediate Accounting I	5
ACCT	252	Intermediate Accounting II	5
ACCT	256	Taxation of Corporations and Partnerships	5
ACCT	261	Accounting Information Systems	5
ACCT	265	Accounting for Not-For-Profit and Gov Entities	5
ACCT	267	Not for Profit Financial Management	5
ACCT	270	Cost Accounting	5
ACCT	271	Ethics in Accounting	5

ACCT	272	Fraud Examination . . . . .	5
ACCT	273	Introduction to Financial Crimes . . . . .	5
ACCT	274	Forensic Accounting . . . . .	5
ACCT	275	Auditing . . . . .	5
BUS&	101	Introduction to Business . . . . .	5
BUS	112	Multi-Cultural Issues in the American Workplace . . . . .	5
BUS	114	Introduction to Marketing . . . . .	5
BUS	118	Project Management Introduction and Overview . . . . .	5
BUS	119	Leadership and Management Skills . . . . .	3
BUS	151	Introduction to Entrepreneurship . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
BUS	186	Sustainable Business . . . . .	5
BUS	215	Introduction to International Trade Business . . . . .	5
BUS	229	Project Management Tools Techniques and Control . . . . .	5
CMST&	220	Public Speaking . . . . .	5
TOTAL PROGRAM CREDITS			90

Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement. Please consult a college advisor and/or the program coordinator.

## Accounting Fraud Short-Term Certificate

### Business, Engineering & Information Technologies Division

This certificate provides students with an overview of detection and prevention of financial fraud, financial abuse and economic crime. Topics include money laundering, bribery and kickback schemes, retail loss prevention, investment swindles, securities fraud and Ponzi schemes, health care and Medicare/Medicaid fraud, inventory fraud, insurance fraud, and other accounting frauds. Additionally the certificate will include case studies and discussions on preventative methods, effective internal control, and corporate culture and ethics. Instructional material will include videos of real life financial crimes, interviews with perpetrators, record reconstruction, and recorded presentations by experts in the field.

#### PREREQUISITES

ACCT	200	Accounting for Non-Accountants . . . . .	5
Following can be substituted:			
Prior accounting course or Instructor permission			

#### TECHNICAL SPECIALTY COURSES

ACCT	272	Fraud Examination . . . . .	5
ACCT	273	Introduction to Financial Crimes . . . . .	5
ACCT	274	Forensic Accounting . . . . .	5
TOTAL PROGRAM CREDITS			15

## Accounting with International Accounting Bachelor of Applied Science Degree (BAS)

### Business, Engineering & Information Technologies Division

The Accounting, with International Accounting Bachelor of Applied Science (AIA BAS) program provides graduates with the knowledge and skills required for employment in the field of accounting. The degree builds on an associate of applied science (AAS-T) degree in business, accounting, or real estate, and provides students with preparation for, and a clear pathway toward, meeting the Washington State CPA licensure requirements. The degree will provide knowledge and skills regarding the application of FASB/GAAP principles and GAAS auditing standards, effective business communications, understanding of legal and ethical frameworks for business, intermediate transaction posting and financial statement preparation, use of general ledger software, and a thorough understanding of International Financial Reporting Standards (IFRS). Students from several different business, accounting, and real estate programs will be qualified to enter the AIA program.

Associate degree or equivalent, plus the prerequisite courses listed below:

#### PREREQUISITES

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

English 101 fulfills required program general education credits. All other prerequisite courses fulfill required program elective credits.

ACCT&	201	Principles of Accounting I . . . . .	5
ACCT&	202	Principles of Accounting II . . . . .	5
ACCT&	203	Principles of Accounting III . . . . .	5
BUS&	201	Business Law . . . . .	5
BUS	210	Business and Economic Statistics . . . . .	5

Following can be substituted:

MATH& 146 – Intro to Statistics (5)

ENGL&101	English Composition I . . . . .	5
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#### TECHNICAL SPECIALTY COURSES

AIA	301	Intermediate Accounting I . . . . .	5
AIA	302	Intermediate Accounting II . . . . .	5
AIA	310	Accounting with International Accounting Ethics . . . . .	5
AIA	401	International Accounting . . . . .	5
AIA	402	International Taxation . . . . .	5
AIA	410	Cost Accounting . . . . .	5
AIA	430	Accounting Information Systems . . . . .	5
AIA	440	Auditing . . . . .	5
CWE	495	Baccalaureate Internship . . . . .	3
Internship: May be taken spring quarter of junior year, or any subsequent quarter.			
IBN	320	International Finance . . . . .	5
IBN	330	Data Analytics in Business and Accounting . . . . .	4
IBN	420	Global Business Strategy . . . . .	5
INFO	300	Information Literacy for Undergraduate Research 3	

**GENERAL EDUCATION COURSES**

CMST& 220	Public Speaking . . . . .	5
Following can be substituted:		
CMST 205 – Multicultural Communication (5) or		
HUM 105 – Intercultural Communication (5)		
Recommended course: CMST& 220 – Public Speaking		
ECON& 201	Micro Economics . . . . .	5
ECON& 202	Macro Economics . . . . .	5
ENGL& 101	English Composition I . . . . .	5
Must be eligible for ENGL& 101 through English		
Placement Exam or completion of ENGL 097/098.		
ENGL& 102	Composition II . . . . .	5
Following can be substituted:		
ENGL& 235 – Technical Writing (5)		
MATH& 107	Math in Society . . . . .	5
Following can be substituted: higher level MATH course		
Visual, Literary and Performing Arts. . . . .		10
Individual, Cultures and Societies . . . . .		5
Natural World, the . . . . .		10
Must include at least 5 credits of lab science.		
U.S. Cultures . . . . .		5
Following can be substituted: Global Studies course		

**ELECTIVES**

ACCT& 201	Principles of Accounting I . . . . .	5
ACCT& 202	Principles of Accounting II . . . . .	5
ACCT& 203	Principles of Accounting III . . . . .	5
BUS 124	Excel for Business . . . . .	5
BUS& 201	Business Law . . . . .	5
BUS 210	Business and Economic Statistics . . . . .	5
Following can be substituted:		
MATH& 146 – Intro into Statistics (5)		
100 and 200 level courses. . . . .		30
Any 100 and 200 level college credits not counted		
as General Education credits (commonly fulfilled by		
accounting/business/real estate courses).		
TOTAL PROGRAM CREDITS		180

**Advanced Tax Preparation Certificate****Business, Engineering & Information Technologies Division**

This certificate provides the student with an understanding of income tax law and procedures for individuals, corporations, and other entities. As part of the certificate program, the student prepares basic income tax returns for others.

**TECHNICAL SPECIALTY**

ACCT 110	Introduction to Accounting/Bookkeeping I . . . . .	5
ACCT 255	Individual Income Tax . . . . .	5
ACCT 256	Taxation of Corporations and Partnerships . . . . .	5
ACCT 257	Business Tax Accounting . . . . .	5
ACCT 258	Practical Income Tax Preparation . . . . .	5
ACCT 259	Practical Income Tax Preparation II . . . . .	5
ACCT 264	Tax Research Gifts and Estates . . . . .	5
TOTAL PROGRAM CREDITS		35

**Bookkeeping Assistant Certificate****Business, Engineering & Information Technologies Division**

The Bookkeeping Assistant certificate provides the student with a basic understanding of accounting principles and procedures, business and accounting computer software, and computational skill-building. It is designed to provide foundational skill development and incremental course completion that can be applied to the Bookkeeping certificate, Computerized Accounting Technology certificate, and the Accounting AAS degree. In addition, students will broaden their understanding of the accounting field through real-world job shadowing experiences in the public and/or private sector. This is an I-BEST supported certificate.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

**PREREQUISITES**

I-BEST Program Prerequisites: The I-BEST program allows students who do not meet the prerequisites below to start earlier with supporting instruction. All I-BEST applicants must meet with the I-BEST Coordinator and meet the following test score requirements. All tests must have been taken within the last 6 months.

ESL and ABE CASAS must have test scores with a minimum score of 227 in Reading and Math.

ENGL& 101	English Composition I . . . . .	5
Following can be substituted:		
or previous transcripts showing completion		
of ENGL 98 or above with minimum grade of 2.0.		
Tests must have been taken within the last 2 years.		

**TECHNICAL SPECIALTY COURSES**

ACCT 110	Introduction to Accounting/Bookkeeping I . . . . .	5
ACCT 131	QuickBooks . . . . .	5
Must have ACCT 110 or ACCT& 201 or permission		
BUS 115	Computational Skillbuilding . . . . .	2
BUS 124	Excel for Business . . . . .	5
BUS 169	Using Computers in Business . . . . .	5
CWE 101	Portfolio, Preparation & Workplace Success . . . . .	3
Following can be substituted:		
CWE 102 – Job Shadow (2)		

TOTAL PROGRAM CREDITS		24
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## Bookkeeping in Accounting Certificate

### Business, Engineering & Information Technologies Division

This program prepares graduates for bookkeeping careers and general office employment. Normally completed in three quarters, the curriculum includes critical thinking, values, and cultural understanding. Related instruction courses support skills and knowledge used in accounting and general office fields.

#### REQUIRED COURSES

ACCT	110	Introduction to Accounting/Bookkeeping I . . .	5
ACCT	120	Introduction to Accounting/Bookkeeping II . . .	5
ACCT	131	QuickBooks . . . . .	5
ACCT	257	Business Tax Accounting . . . . .	5
ACCT	267	Not for Profit Financial Management . . . . .	5
BUS	124	Excel for Business . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
BUS	236	Interpersonal Communications for the Workplace . . . . .	5
CWE	110	Internship . . . . .	3
TOTAL PROGRAM CREDITS			43

## Business (A.B.)

The Associate in Business Degree (AB) is designed to satisfy lower division general education and business requirements at Washington's public four-year colleges and universities. Students will take specific coursework in Economics, Accounting, Business Law, Statistics, and Mathematics as part of the Associate in Business degree.

Students also develop skills in business plan development, feasibility analysis, critical thinking, oral and written communication, teamwork and collaboration, leadership, risk taking, troubleshooting and problem solving with technology, professionalism, intercultural competence, and career exploration. The Associate in Business degree includes all the pre-requisite courses for transfer in a Business or Accounting major.

## Certificate of Accountancy

### Business, Engineering & Information Technologies Division

This program is designed for those who already have a four-year degree and want to meet the educational requirements to take the Certified Public Accounting (CPA) Examination.

#### PREREQUISITES

ACCT&	201	Principles of Accounting I . . . . .	5
ACCT&	202	Principles of Accounting II . . . . .	5
ACCT&	203	Principles of Accounting III . . . . .	5
ACCT	255	Individual Income Tax . . . . .	5

#### TECHNICAL SPECIALTY COURSES

ACCT	251	Intermediate Accounting I . . . . .	5
ACCT	252	Intermediate Accounting II . . . . .	5
ACCT	256	Taxation of Corporations and Partnerships . . .	5
ACCT	261	Accounting Information Systems . . . . .	5
ACCT	265	Accounting for Not-For-Profit and Gov Entities. .	5
ACCT	270	Cost Accounting . . . . .	5
ACCT	271	Ethics in Accounting . . . . .	5
ACCT	275	Auditing . . . . .	5
TOTAL PROGRAM CREDITS			40

## Certificate of Entrepreneurship

### Business, Engineering & Information Technologies Division

This program explores the challenges of starting a new business. It includes solid business planning, feasibility studies, financial structuring, market research, and other areas of knowledge for creating a successful venture. It emphasizes the importance of a responsible and professional work ethic and leadership qualities.

#### REQUIRED COURSES

ACCT&	201	Principles of Accounting I . . . . .	5
BUS	118	Project Management Introduction and Overview .	5
BUS	151	Introduction to Entrepreneurship . . . . .	5
Following can be substituted:			
BUS 154 – Exploring Entrepreneurship (5)			
BUS	152	Entrepreneurship Product/Service/ Pricing/Mkting . . . . .	5
BUS	153	Entrepreneurship Planning Business Financials .	5
BUS	156	Introduction to E-Business/Commerce . . . . .	5
Following can be substituted:			
BUS 169 – Using Computers in Business (5)			
BUS	186	Sustainable Business . . . . .	5
BUS	236	Interpersonal Communications for the Workplace . . . . .	5
TOTAL PROGRAM CREDITS			38-40

ACCT 131 – QuickBooks is recommended but not required.



## Computerized Accounting Technology Certificate

### Business, Engineering & Information Technologies Division

This certificate provides computerized accounting skills using popular accounting software. The program bridges the gap between manual and computerized accounting systems with students gaining practical experience and expertise on the computer. Graduates gain viable entry to and/or advancement in the accounting job market.

#### TECHNICAL SPECIALTY

ACCT	110	Introduction to Accounting/Bookkeeping I . . .	5
ACCT	120	Introduction to Accounting/Bookkeeping II . . .	5
ACCT	131	QuickBooks . . . . .	5
ACCT	257	Business Tax Accounting . . . . .	5
ACCT	260	Peachtree Accounting . . . . .	5
ACCT	261	Accounting Information Systems . . . . .	5
ACCT	267	Not for Profit Financial Management . . . . .	5
ACCT	268	Advanced QuickBooks . . . . .	5

#### RELATED INSTRUCTION

BUS	115	Computational Skillbuilding . . . . .	2
BUS	124	Excel for Business . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
Following can be substituted:			
IT 101 – Software Applications (5)			
BUS	236	Interpersonal Communications for the Workplace . . . . .	5
CWE	110	Internship . . . . .	3
TOTAL PROGRAM CREDITS			63

## Economics (A.B.)

This program is designed for students that wish to obtain an Associate of Business (AB) degree with an emphasis in Economics. Students in this pathway develop skills in data analysis, critical thinking, quantitative and qualitative research, verbal communication, group communication and collaboration, and leadership and facilitation. Topics include markets and prices, consumer behavior, employment, inflation, international trade, and government policy.

Completion of this AB-DTA degree prepares students for further education at a four-year college or university such as a Bachelor's degree in Economics, Business, Finance, Data Analytics, or a related field.

## Entrepreneur Foundation Short-Term Certificate

### Business, Engineering & Information Technologies Division

If you have a passion for a business venture but aren't sure how to go about implementing it, the NSC Entrepreneur Foundation Certificate program will get you started with business planning. By the time you complete the program, you'll have the beginning of business plan including information you'll need to seek financing to start your business.

#### PREREQUISITES

Many classes have prerequisites. Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior course work.

Course work earned at other institutions must be unofficially evaluated or approved by a program advisor before registering.

#### REQUIRED COURSES

BUS	151	Introduction to Entrepreneurship . . . . .	5
BUS	152	Entrepreneurship Product/Service/ Pricing/Mktg . . . . .	5
BUS	153	Entrepreneurship Planning Business Financials . . . . .	5
TOTAL PROGRAM CREDITS			13

## General Business Associate of Applied Science Degree (A.A.S.)

### Business, Engineering & Information Technologies Division

The Business programs prepare students for the workplace demands of the local community and the economic challenges of the global marketplace. Day and evening programs offer a number of college transfer business courses, information technology and highly technical courses. Areas of specialization include management, professional office support, customer service, information technology support, project management and entrepreneurship. All programs strongly support the development of interpersonal skills.

The General Business Associate degree program enables students to acquire a foundation in the basics of accounting, management, marketing, business communication, business law and finance. Students learn to apply diverse skills such as critical thinking, organization, problem-solving and professionalism to the business world. Through exploration and analysis of relevant business models, students ways of problems that commonly arise in settings from small businesses to the corporate arena.

**TECHNICAL SPECIALTY COURSES**

ACCT& 201	Principles of Accounting I. . . . .	5
ACCT& 202	Principles of Accounting II . . . . .	5
BUS& 101	Introduction to Business . . . . .	5
BUS 112	Multi-Cultural Issues in the American Workplace . . . . .	5
Students completing the Communications, Business & Media certificate may substitute the following for BUS 112: CMST 205 – Multi-cultural Communication (5)		
BUS 114	Introduction to Marketing . . . . .	5
Must complete BUS 131 – Integrated Communications 1 or be eligible for ENGL& 101 through English Placement Exam or completion of ENGL 097/098.		
BUS 169	Using Computers in Business . . . . .	5
Following can be substituted:		
BUS 171 – Information Technology II (5)		
BUS& 201	Business Law. . . . .	5
BUS 210	Business and Economic Statistics . . . . .	5
BUS 230	Business Communications . . . . .	5
Must complete BUS 131 – Integrated Communications 1 or be eligible for ENGL& 101 through English Placement Exam or completion of ENGL 097/098.		
BUS 236	Interpersonal Communications for the Workplace . . . . .	5

**GENERAL EDUCATION COURSES**

Contact the Advising Center for approved list of courses.

U.S. Cultures . . . . .	5
General Education Elective . . . . .	5

**ELECTIVES**

Electives must include a minimum of 15 credits with BUS designation (except students with CB&M certificate)

BUS course . . . . .	5
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**ELECTIVES – PATHWAY**

Total of 8-10 credits required

ACCT& 203	Principles of Accounting III. . . . .	5
BUS 118	Project Management Introduction and Overview . . . . .	5
BUS 151	Introduction to Entrepreneurship . . . . .	5
Following can be substituted:		
BUS 154 – Exploring Entrepreneurship (5)		
BUS 186	Sustainable Business . . . . .	5
BUS 205	Human Resource Management . . . . .	5
BUS 215	Introduction to International Trade Business . . . . .	5
ECON& 201	Micro Economics . . . . .	5
RES 100	Real Estate Fundamentals. . . . .	5

**ELECTIVES – GENERAL**

Total of 20-22 credits required

Any additional course(s) with a BUS designation:

- Elective BUS courses must be numbered 100 or above AND not list above under ‘Technical Specialty Courses.’
- May include BUS courses list under ‘Electives – Pathway’

Any CMST designated courses in the Communication, Business and Media (CB&M) certificate:

- Only students completing the CB&M certificate may apply CMST courses.

ACCT 131	QuickBooks . . . . .	5
ACCT& 203	Principles of Accounting III. . . . .	5
ACCT 261	Accounting Information Systems . . . . .	5
ECON& 201	Micro Economics . . . . .	5
ECON& 202	Macro Economics . . . . .	5
ENVS 160	Principles of Environmental Sustainability . . . . .	5
RES 100	Real Estate Fundamentals. . . . .	5
RES 202	Multi-Family Property Management . . . . .	3
Following can be substituted:		
RES 203 – Property Management – Commercial (3)		

TOTAL PROGRAM CREDITS	90
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Note: Students wishing to transfer to an applied baccalaureate degree should consider the General Business AAS-T program.

## General Business Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Business, Engineering & Information Technologies Division

The Business programs prepare students for the workplace demands of the local community and the economic challenges of the global marketplace. Day and evening programs offer a number of college transfer business courses, information technology and highly technical courses. Areas of specialization include management, professional office support, customer service, information technology support, project management and entrepreneurship. All programs strongly support the development of interpersonal skills.

The Associate in Applied Science-Transfer (AAS-T) degree is built upon technical skills for job preparation but also includes college-level general education component common to all the AAS-T degrees. The General Business AAS-T degree is designed as a transfer program for those interested in an applied baccalaureate degree and, in particular, for students interested in the BAS – International Business degree program here at North Seattle College.

**TECHNICAL SPECIALTY COURSES**

ACCT& 201	Principles of Accounting I. . . . .	5
ACCT& 202	Principles of Accounting II . . . . .	5
BUS& 101	Introduction to Business . . . . .	5
BUS 112	Multi-Cultural Issues in the American Workplace . . . . .	5
Following can be substituted:		
CMST 205 – Multi-cultural Communications (5) with Academic Exception approval		
BUS 114	Introduction to Marketing . . . . .	5
BUS& 201	Business Law. . . . .	5
BUS 210	Business and Economic Statistics . . . . .	5
BUS 215	Introduction to International Trade Business . . . . .	5
Following can be substituted:		
CMST 195 – Media Management Operations (5) with Academic Exception approval		
BUS 236	Interpersonal Communications for the Workplace . . . . .	5
ECON& 201	Micro Economics . . . . .	5
ECON& 202	Macro Economics . . . . .	5

**RELATED INSTRUCTION**

ENGL& 101	English Composition I . . . . .	5
	Must be eligible for English 101 through English Placement Exam or completion of English 097/098.	
MATH 116	Applications of Math: Mngmnt, Life and Soc Sci . . . . .	5
	Following can be substituted:	
	MATH&141 – PreCalculus I or any math class with MATH&141 as a prerequisite	
Natural World, the	. . . . .	5
U.S. Cultures	. . . . .	5
	Following can be substituted: Global Studies	

**ELECTIVES**

ACCT& 203	Principles of Accounting III . . . . .	5
	To transfer to the BAS-International Business program, this class is a required prerequisite.	
ACCT 255	Individual Income Tax . . . . .	5
	Following can be substituted:	
	ACCT 267 – Financial Management (5)	
BUS course	. . . . .	5
	Elective BUS course numbered 100 or above and not listed above under ‘Technical Specialty Courses.’	
	See Advising Center	

TOTAL PROGRAM CREDITS	90
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## International Business Bachelor of Applied Science Degree (BAS)

**Business, Engineering & Information Technologies Division**

The international business BAS (IB BAS) degree is designed for students who desire to work in any company that does business with another country, as well as those who already work in the trade and logistics field. It is designed to leverage a student's already existing business or logistics coursework and experience, and add IB courses that specifically prepare the student to work in an international arena. The IB BAS degree is an extension of a business, accounting, or real estate AAS-T degree, with upper division courses in international business. Students from several different business, accounting, and real estate programs will be qualified to enter the 18 program.

Associate degree or equivalent

**PREREQUISITES**

Associate degree or equivalent, plus the following prerequisite courses:

Any General Education Requirements taken as part of the associate degree can be transferred to the requirements below:

ACCT& 201	Principles of Accounting I . . . . .	5
	This course counts towards the BAS Elective credits.	
ACCT& 202	Principles of Accounting II . . . . .	5
	This course counts towards the BAS Elective credits.	
ACCT& 203	Principles of Accounting III . . . . .	5
	Following can be substituted:	
	BUS 220 – Business Finance (5)	

BUS& 201	Business Law . . . . .	5
	Following can be substituted:	
	RES 170 – Real Estate Law (5)	
	This course counts towards the BAS Elective credits.	
BUS 210	Business and Economic Statistics . . . . .	5
	Following can be substituted:	
	MATH& 146 – Intro to Statistics (5)	
	This course counts towards the BAS Elective credits.	
ENGL& 101	English Composition I . . . . .	5
	English 101 fulfills required program general education credits.	

**TECHNICAL SPECIALTY COURSES**

CWE	494	International Business Internship Preparation.	.1
CWE	495	Baccalaureate Internship . . . . .	.8
IBN	301	International Management. . . . .	.5
IBN	302	International Marketing. . . . .	.5
IBN	303	Ethics and International Business . . . . .	.3
IBN	310	Operations Management. . . . .	.5
IBN	311	International Business Law . . . . .	.3
IBN	320	International Finance . . . . .	.5
IBN	350	International Business Practicum. . . . .	.5
IBN	401	International Project Management . . . . .	.5
IBN	402	Management of Information Systems . . . . .	.5
IBN	410	International Entrepreneurship. . . . .	.3
IBN	420	Global Business Strategy . . . . .	.5
INFO	300	Information Literacy for Undergraduate Research. . . . .	.3

**GENERAL EDUCATION COURSES**

CMST& 220	Public Speaking . . . . .	5
	Following can be substituted:	
	CMST& 205 – Multicultural Communication (5) or HUM 105 – Intercultural Communication (5)	
	Recommend course is: CMST& 220 – Public Speaking	
ECON& 201	Micro Economics . . . . .	5
ECON& 202	Macro Economics . . . . .	5
ENGL& 102	Composition II . . . . .	5
	Following can be substituted:	
	ENGL& 235 Technical Writing (5)	
MATH 116	Applications of Math: Mngmnt, Life and Soc Sci . . . . .	5
	Following can be substituted:	
	MATH& 141 – Pre-Calculus I (5)	
Visual, Literary and Performing Arts.	. . . . .	5
Individual, Cultures and Societies . . . . .	one course – see advising for course list	5
Natural World, the . . . . .	must include at least 5 credits of lab science	10
U.S. Cultures	5	
	Following can be substituted: Global Studies any US or GS designated course – see advising for course list	
World Language. . . . .		5
	May take any approved VLPA courses if student is proficient in a non-native language. Must receive approval from program director.	

**ELECTIVES**

Total required Elective credits includes 25 credits from Program Prerequisites – as listed and notated above, excluding ENGL& 101 – and 35 credits as noted below

BUS 124	Excel for Business	5
Elective	30	
Any 100 and 200 level college credits not counted as General Education credits. (commonly fulfilled by accounting / business courses from associate degree)		
TOTAL PROGRAM CREDITS		180

**Marketing Certificate Certificate****Business, Engineering & Information Technologies Division**

This certificate focuses on business marketing principles, strategy development, tactics, and necessary technology tools.

**PREREQUISITES**

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement. Please consult a college advisor and/or the program coordinator.

ENGL& 101	English Composition I	5
Following can be substituted: equivalent English course		

**TECHNICAL SPECIALTY COURSES**

BUS 114	Introduction to Marketing	5
BUS 118	Project Management Introduction and Overview	5
Must be eligible for ENGL& 101 through English Placement Test of completion of ENGL 097/098 or completion of ABE 050 with minimum 2.0		
BUS 226	Advertising & Sales Promotion	5
BUS 227	Digital Marketing	5
BUS 228	Social Media Marketing	5
CWE 101	Portfolio, Preparation & Workplace Success	3
CWE 110	Internship	3
TOTAL PROGRAM CREDITS		30

**Project Management Short-Term Certificate****Business, Engineering & Information Technologies Division**

This certificate program focuses on both the development of knowledge and professional skill to become a project manager. Coursework includes topics such as leadership in the project process, planning and control, risk management, and utilization of MS project management software to develop a project plan, schedule, budget, and produce deliverables for management reporting.

**PREREQUISITES**

Individual courses may have prerequisites. See course notes below.

**TECHNICAL SPECIALTY COURSES**

BUS 118	Project Management Introduction and Overview	5
Prerequisite: Must have completed BUS 169 or BUS 171 or demonstrate equivalent		
BUS 119	Leadership and Management Skills	3
BUS 229	Project Management Tools Techniques and Control	5
Prerequisite: Must complete BUS 118; Must have completed BUS236 or an approved equivalent		
CWE 110	Internship	3
Must be taken after BUS118; May be taken concurrently with BUS229		
TOTAL PROGRAM CREDITS		19

**Real Estate Certificate****Business, Engineering & Information Technologies Division**

This certificate program forms the core of the real estate education pathway by providing a strong broad background in real estate. As a stand-alone certificate this certificate program includes the required licensing classes, as well as a core curriculum required class, and a cutting-edge class on sustainable building. This certificate prepares students for work in residential and commercial sales positions. Courses in the program apply toward the Real Estate AAS degree and other real estate certificates. The classes are approved as continuing education clock hours for real estate brokers, property managers, and appraisers by the Washington Department of Licensing.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

**TECHNICAL SPECIALTY COURSES**

RES 100	Real Estate Fundamentals	5
(DOL Pre-licensing educational requirement)		
RES 101	Technology for Real Estate	5
Following can be substituted:		
BUS 169 – Using Computers in Business I		
RES 106	Real Estate Fraud	1
RES 130	Green Real Estate	3
Following can be substituted:		
RES 217 – Real Estate Development & Sustainability (3)		
RES 140	Real Estate Sales and Practice	3
(DOL Pre-licensing educational requirement)		
RES 170	Real Estate Law	3
(DOL continuing education clock hours)		
TOTAL PROGRAM CREDITS		20

For up to date information on Real Estate certificates, degrees and courses, visit [northseattle.edu/real-estate](http://northseattle.edu/real-estate).

## Real Estate Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Business, Engineering & Information Technologies Division

The Real Estate associate in applied science (AAS-T) degree is built upon the technical skills and essential education for advanced real estate job preparation, but also includes college-level general education component common to all the AAS-T degrees. The Real Estate AAS-T Degree is designed as a transfer program for those interested in an applied baccalaureate degree in the Community College system and, in particular, for students interested in the BAS – International Business degree or the BAS – Property Management degree here at North Seattle College or programs offered at Evergreen State College or Western Governor's University.

Our program gives students a broad base of knowledge and training in the real estate field. Graduates will be prepared to enter the real estate field or start their own business in real estate sales, real estate finance, real estate investment, property management, title insurance, or escrow. As the students' progress toward their degree, they will also acquire the certificates offered in the program.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

### TECHNICAL SPECIALTY COURSES

ACCT& 201	Principles of Accounting I. . . . .	5
ACCT& 202	Principles of Accounting II . . . . .	5
ACCT& 203	Principles of Accounting III. . . . .	5
BUS& 201	Business Law. . . . .	5
RES 100	Real Estate Fundamentals. . . . .	5
	DOL Pre-licensing educational requirement	
RES 106	Real Estate Fraud . . . . .	1
RES 125	Applications of Real Estate Math . . . . .	2
RES 130	Green Real Estate. . . . .	3
	Following can be substituted:	
	RES 217 – Real Estate Development and Sustainability (3)	
RES 140	Real Estate Sales and Practice . . . . .	3
	DOL Pre-licensing educational requirement	
RES 164	Real Estate Finance Residential. . . . .	5
	Following can be substituted:	
	RES 260 – Real Estate Finance – Commercial (5)	
RES 170	Real Estate Law . . . . .	3
	DOL Continuing Education clock hours	
RES 177	Real Estate Taxes. . . . .	2
RES 197	Real Estate Title & Escrow. . . . .	3
RES 202	Multi-Family Property Management. . . . .	3
	Following can be substituted:	
	RES 203 – Property Management – Commercial (3)	
RES 220	Real Estate Economics . . . . .	3
RES 235	Sales and Marketing. . . . .	3
	Technical Electives . . . . .	5

See Advising for a list of approved and recommended classes.

### RELATED INSTRUCTION

ECON& 201	Micro Economics . . . . .	5
ECON& 202	Macro Economics . . . . .	5
ENGL& 101	English Composition I . . . . .	5
	Must be eligible for English 101 through English Placement Exam or completion of English 097/098.	
MATH 116	Applications of Math: Mngmnt, Life and Soc Sci. . . . .	5
	Following can be substituted:	
	MATH& 141 – Precalculus I (5) or any	
	MATH class with MATH&141 as a prerequisite	
	Natural World, the . . . . .	5
	To transfer to an applied baccalaureate program, a lab course in physical, biological, and/or earth science is required.	
U.S. Cultures	. . . . .	5
	Following can be substituted: Global Studies (5)	
	Recommended courses	
	HUM 105 – Intercultural Communications (5)	
	CMST 205 – Multicultural Communications (5)	

TOTAL PROGRAM CREDITS 91

For up to date information on Real Estate certificates, degrees and courses, visit [northseattle.edu/real-estate](http://northseattle.edu/real-estate).

## Real Estate Property Management Certificate

### Business, Engineering & Information Technologies Division

North Seattle's Real Estate program prepares students for work in Residential and Commercial Real Estate Sales, Appraising, Property Management, Green Real Estate, Escrow, Finance, and Investment through a series of independent short certificates and an AAS degree program. The program provides the skills and educational clock hours necessary to satisfy Washington State Department of Licensing and industry and continuing education requirements. Students learn from industry experts in settings emphasizing experiential learning.

### TECHNICAL SPECIALTY COURSES

RES 100	Real Estate Fundamentals. . . . .	5
RES 101	Technology for Real Estate. . . . .	5
	Following can be substituted:	
	BUS 169 – Using Computers in Business I (5)	
RES 120	Real Estate Principles of Maintenance and Repair . . . . .	1.5
RES 140	Real Estate Sales and Practice . . . . .	3
RES 170	Real Estate Law . . . . .	3
RES 220	Real Estate Economics . . . . .	3



**ELECTIVES**

Select total of 6 elective credits from courses listed below:

BUS	236	Interpersonal Communications for the Workplace . . . . .	.5
RES	125	Applications of Real Estate Math . . . . .	.2
RES	164	Real Estate Finance Residential . . . . .	.5
Following can be substituted:			
	RES 260	Real Estate Finance – Commercial (2)	
RES	202	Multi-Family Property Management . . . . .	.3
RES	203	Property Management – Commercial . . . . .	.3
RES	204	Community Association Management . . . . .	.3

TOTAL PROGRAM CREDITS 29.5

Note: Most employers require Property Managers to be a licensed real estate sales associate in the State of Washington and to be able to quickly learn and use industry-specific software.

For up to date information on Real Estate certificates, degrees and courses, visit [northseattle.edu/real-estate](http://northseattle.edu/real-estate).

## Residential and Commercial Property Management Bachelor of Applied Science Degree (B.A.S.)

### Business, Engineering & Information Technologies Division

The Residential and Commercial Property Management BAS (RCPM BAS) program prepares students for a career in either residential or commercial property management. It is a multi-disciplinary curriculum, combining business, accounting, and real estate courses. The RCPM BAS is an extension of a business, accounting, or real estate AAS-T degree, with upper division courses in property management. Students from several different business, accounting, and real estate programs will be qualified to enter the RCPM program.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

Associate degree or equivalent

**PROGRAM PREREQUISITES**

Associate degree or equivalent, plus the following prerequisite courses:

English 101 fulfills required program general education credits. All other prerequisite courses fulfill required program elective credits.

ACCT&	201	Principles of Accounting I . . . . .	.5
ACCT&	202	Principles of Accounting II . . . . .	.5
ACCT&	203	Principles of Accounting III . . . . .	.5
BUS	210	Business and Economic Statistics . . . . .	.5
Following can be substituted:			
	MATH& 146	Intro to Statistics	
ENGL&	101	English Composition I . . . . .	.5
RES	170	Real Estate Law . . . . .	.3
Following can be substituted:			
	BUS& 201	Business Law	

**TECHNICAL SPECIALTY COURSES**

CWE	495	Baccalaureate Internship . . . . .	.3
INFO	300	Information Literacy for Undergraduate Research . . . . .	.3
RCPM	301	Principles of Residential Property Management . . . . .	.3
RCPM	302	Stakeholder Relations & Prof Development . . . .	.4
RCPM	303	Intro to Development and Construction Management . . . . .	.3
RCPM	304	Principles of Commercial Property Management . . . . .	.2
RCPM	310	Specialty and Affordable Housing . . . . .	.2
RCPM	311	Marketing & Leasing of Residential Real Estate . . . . .	.2
RCPM	313	Marketing and Leasing of Commercial Real Estate . . . . .	.3
RCPM	315	Introduction to Negotiations . . . . .	.2
RCPM	320	Financial Accounting for Property Management . . . . .	.4
RCPM	330	Leadership and Team Building . . . . .	.3
RCPM	350	Revenue Management for Property Management . . . . .	.2
RCPM	401	Project Management for Property Management . . . . .	.5
RCPM	402	Supervision and Management . . . . .	.4
RCPM	403	Real Estate and Fair Housing Law . . . . .	.4
RCPM	410	Professional Ethics in Property Management . . . . .	.2
RCPM	420	Sustainable Facilities Management . . . . .	.5
RCPM	494	Practicum Portfolio . . . . .	.4

**GENERAL EDUCATION COURSES**

CMST&	220	Public Speaking . . . . .	.5
ECON&	201	Micro Economics . . . . .	.5
ECON&	202	Macro Economics . . . . .	.5
ENGL&	101	English Composition I . . . . .	.5
Must be eligible for ENGL& 101 through English Placement Exam or completion of ENGL 097/098.			
ENGL&	102	Composition II . . . . .	.5
Following can be substituted:			
	ENGL& 235	Technical Writing (5)	
MATH	116	Applications of Math: Mngmnt, Life and Soc Sci . . . . .	.5
Following can be substituted:			
	MATH& 141	Pre-Calculus I (5) or MATH& 142 – Pre-Calculus II (5) or MATH& 148 – Business Calculus (5) or MATH& 151 – Calculus I (5)	
Visual, Literary and Performing Arts . . . . .			
Individual, Cultures and Societies . . . . .			
Natural World, the . . . . .			
Must include at least 5 credits of lab science			
U.S. Cultures . . . . .			
Following can be substituted: Global Studies			
Recommended courses:			
	CMST 205	Multicultural Communications	
	HUM 105	Intercultural Communications	



**ELECTIVES – REQUIRED ELECTIVES**

Total of 60 elective credits can be taken one of two ways:

- 23 credits of Required Electives + 37 credits of 100/200 level courses
- 35 credits of Required Electives + 25 credits of 100/200 level courses

Select credits from course listed below:

ACCT& 201	Principles of Accounting I. . . . .	5
ACCT& 202	Principles of Accounting II . . . . .	5
ACCT& 203	Principles of Accounting III. . . . .	5
BUS& 201	Business Law. . . . .	5

Following can be substituted:

RES 170 – Real Estate Law (3)

BUS 210	Business and Economic Statistics . . . . .	5
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Following can be substituted:

MATH& 146 – Introduction to Statistics (5)

**ELECTIVES – 100/200 LEVEL COURSES**

Total of 60 elective credits can be taken one of two ways:

- 23 credits of Required Electives + 37 credits of 100/200 level courses
- 35 credits of Required Electives + 25 credits of 100/200 level courses

Select from courses/credits not counted as Gen Ed credits – commonly fulfilled by accounting/business/real estate courses. See Advising for list of approved courses.

TOTAL PROGRAM CREDITS	180
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**Tax Preparation Short-Term Certificate****Business, Engineering & Information Technologies Division**

This certificate provides the student with a basic understanding of income tax law and income tax procedures for individuals. As part of the certificate program, the student prepares basic individual income tax returns for others.

**TECHNICAL SPECIALTY COURSES**

ACCT 255	Individual Income Tax . . . . .	5
ACCT 258	Practical Income Tax Preparation . . . . .	5
ACCT 259	Practical Income Tax Preparation II . . . . .	5
TOTAL PROGRAM CREDITS		15

## EDUCATION AND HUMAN SERVICES

### Early Childhood Education Associate of Applied Science Degree (A.A.S.)

#### Health & Human Services Division

The Early Childhood Education program provides valuable training for both new and experienced teachers, available as either individual certificates, or an AAS degree by completing a total 90 credits including the certificates. Students will learn to establish or improve ECE learning environments, assess children's skills and behavior based on developmentally appropriate practices, and organize/implement classroom processes in an early learning setting.

Our program is rooted in anti-bias, applied learning. This means we recognize and address systemic racism and how it impacts the children and families we work with. We are applied, which means students reflect on their practice and learn strategies they can implement in their practice immediately.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

Students enrolling in this program should have access to early childhood settings and preschool-aged children. Observations of children and their environments is a requirement of the ECE Curriculum.

In order to successfully complete the program a 2.0 grade or higher is required in all Early Childhood Education and General Education/Related Instruction courses.

#### GENERAL EDUCATION

Total Required General Education: 10

ENGL&101	English Composition I . . . . .	5
U.S. Cultures	. . . . .	5

Following can be substituted: Global Studies

#### GENERAL EDUCATION – COMPUTATION/QUANTITATIVE ELECTIVE

Total Required C/Q Elective credits: 5

MATH at 100 level or choose from course(s) listed below:

ACCT	110	Introduction to Accounting/Bookkeeping I . . . . .	5
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#### GENERAL EDUCATION – HUMAN RELATIONS ELECTIVE

Total Required HR Elective credits: 5

Choose from one of the following courses:

BUS	236	Interpersonal Communications for the Workplace . . . . .	5
HUM	105	Intercultural Communication . . . . .	5
POLS	112	Contemporary World . . . . .	5
SOC&	101	Introduction to Sociology . . . . .	5

#### REQUIRED COURSES

CCE	240	Multicultural Dialogues in Early Childhood Educ . . . . .	3
ECE	219	Practicum- Instructional Interactions . . . . .	5
ECE	222	Math and Science Methods . . . . .	5
ECED&	105	Introduction to Early Childhood Education . . . . .	5
ECED&	107	Health, Safety, and Nutrition . . . . .	5
ECED&	120	Practicum: Nurturing Relationships . . . . .	2
ECED&	132	Infants and Toddlers . . . . .	3
ECED&	139	Administration . . . . .	3
ECED&	160	Curriculum Development . . . . .	5
ECED&	170	Environments-Young Child . . . . .	3
ECED&	180	Language and Literacy Development . . . . .	3
ECED&	190	Observing and Assessment . . . . .	3
EDUC&	115	Child Development . . . . .	5
EDUC&	130	Guiding Behavior . . . . .	3
EDUC&	150	Child Family and Community . . . . .	3
EDUC&	203	Exceptional Child . . . . .	3

#### ELECTIVE COURSES

Total Required Elective credits: 11

Select from the following courses:

CCE	145	Music and Creative Expression . . . . .	4
Credit range: 3-4/Total required credits: 4			
CCE	195	Art for Young Children . . . . .	3
CCE	200	Children and Nature . . . . .	3
CCE	261	Readings in Early Childhood Education . . . . .	6
Credit range: 1-6/Total required credits: 1-6			
ECED&	134	Family Child Care . . . . .	3
EDUC&	136	School-Age Care . . . . .	3

TOTAL PROGRAM CREDITS 90

### Early Childhood Education Bachelor of Applied Science Degree (B.A.S.)

#### Health & Human Services Division

The Early Childhood Education BAS (ECE BAS) degree is designed for students who desire to work as a lead teacher or administrator in an early learning setting, as well as those who already work in the field and seek ongoing professional development. The ECE BAS degree is an extension of the Early Childhood Education Associate of Applied Science (AAS) degree, which is built around the statewide Stackable Certificates in Early Childhood Education. However, students with AA or AAS degrees in other fields, or bachelor's degrees outside of early childhood education will be qualified to enter the baccalaureate degree program, potentially with some additional coursework.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

**PREREQUISITES**

ECED& 107	Health, Safety, and Nutrition	5
ECED& 160	Curriculum Development	5
ECED& 170	Environments-Young Child	3
EDUC& 115	Child Development	5
EDUC& 130	Guiding Behavior	3
EDUC& 150	Child Family and Community	3
ENGL& 101	English Composition I	5
ENGL& 101 is counted toward general education requirements. Must be eligible for ENGL& 101 through English Placement Exam or completion of ENGL 097/ENGL 098.		

**TECHNICAL SPECIALTY COURSES**

ECE 305	Early Childhood Education Approaches and History	3
ECE 310	Cognition and General Knowledge	5
ECE 315	Language, Literacy and Communication	5
ECE 320	Creative Expression	3
ECE 350	Practicum: Interactions	5
ECE 355	Anti-Bias Education	5
ECE 405	Partnership and Collaboration in ECE	3
ECE 410	Inclusive Early Childhood Education	4
ECE 415	Children and Media	3
ECE 420	Social and Emotional Foundations Early Learning	5
ECE 430	Linguistically Diverse Learners	3
ECE 450	Child Development and Assessment	5
ECE 480	Leadership and Professional Community	5
ECE 490	Capstone	5
INFO 300	Information Literacy for Undergraduate Research	2

**GENERAL EDUCATION**

ENGL& 101	English Composition I	5
ENGL& 101 is counted toward general education requirements. Must be eligible for ENGL& 101 through English Placement Exam or completion of ENGL 097/ENGL 098.		
ENGL& 102	Composition II	5
Following can be substituted: ENGL& 235 – Technical Writing (5)		
Visual, Literary and Performing Arts		15
Individual, Cultures and Societies		10
Natural World, the		10
One course must include lab		
U.S. Cultures		10
Following can be substituted: Global Studies or ten credits from Individuals, Cultures, and Societies		
Quantitative/Symbolic Reasoning		5
College Level MATH 101 or higher		

**ELECTIVES**

Total Required Electives Credits: 60

Any 100 and 200 level college credits not counted as General Education credits (commonly fulfilled by EDUC/ECED courses from associate degree)

**TOTAL PROGRAM CREDITS** 180

## ECE: State Early Childhood Education Certificate

**Health & Human Services Division**

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training or 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

The State Early Childhood Education certificate is awarded following completion of the one of the specialized Early Childhood Short Certificates (total of 20 credits, which includes completion of the State Initial Early Childhood Education Certificate [12 credits]) plus 27 credits in additional required coursework as noted.

**TECHNICAL SPECIALTY COURSES**

ECED& 160	Curriculum Development	5
ECED& 170	Environments-Young Child	3
Following can be substituted: ECED& 130 – Guiding Behavior (3)		
ECED& 180	Language and Literacy Development	3
ECED& 190	Observing and Assessment	3
EDUC& 150	Child Family and Community	3

**TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE**

Completion of the courses listed below equals the State Initial ECE Certificate:

ECED& 105	Introduction to Early Childhood Education	5
ECED& 107	Health, Safety, and Nutrition	5
ECED& 120	Practicum: Nurturing Relationships	2

**TECHNICAL SPECIALTY COURSES – SPECIALIZATION**

Completion of EDUC& 115 – Child Development and one of the other courses listed below:

ECED& 132	Infants and Toddlers	3
Completion this course, EDUC& 115 – Child Development (5), and the State Initial ECE Certificate courses (12) equals the State Short ECE Certificate – Infant/Toddler Care		
ECED& 134	Family Child Care	3
Completion this course, EDUC& 115 – Child Development (5), and the State Initial ECE Certificate courses (12) equals the State Short ECE Certificate – Family Child Care		
ECED& 139	Administration	3
Completion this course, EDUC& 115 – Child Development (5), and the State Initial ECE Certificate courses (12) equals the State Short ECE Certificate – Administration		
EDUC& 115	Child Development	5
EDUC& 130	Guiding Behavior	3
Completion this course, EDUC& 115 – Child Development (5), and the State Initial ECE Certificate courses (12) equals the State Short ECE Certificate – General		

EDUC& 136	School-Age Care . . . . .	3
Completion this course, EDUC& 115 – Child Development (5), and the State Initial ECE Certificate courses (12) equals the State Short ECE Certificate – School-Age Care		

**RELATED INSTRUCTION**

ENGL& 101	English Composition I . . . . .	5
Following can be substituted: English course higher than ENGL& 101		
College Level MATH course. . . . .		5
Quantitative or Computational Math above 100 or designated Q/SR		

TOTAL PROGRAM CREDITS	47
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## ECE: State Initial Early Childhood Education Certificate

**Health & Human Services Division**

The initial Certificate is a point of entry or a continuation of professional development based on Level 1 on the Washington State Career Lattice (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) The initial Certificate (level 2 Step 5) is the first “Stackable certificate” providing a foundation for the ECS Sate Credential and association degree.

**TECHNICAL SPECIALTY COURSES**

ECED& 105	Introduction to Early Childhood Education . . . . .	5
ECED& 107	Health, Safety, and Nutrition . . . . .	5
ECED& 120	Practicum: Nurturing Relationships . . . . .	2
TOTAL PROGRAM CREDITS		12

## ECE: State Short Early Childhood Education Certificate – Administration

**Health & Human Services Division**

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training or 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

The State Short Early Childhood Education Certificate – Administration is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

**TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE**

Completion of the courses listed below equals the State Initial ECE Certificate

ECED& 105	Introduction to Early Childhood Education . . . . .	5
ECED& 107	Health, Safety, and Nutrition . . . . .	5
ECED& 120	Practicum: Nurturing Relationships . . . . .	2

**TECHNICAL SPECIALTY COURSES – SPECIALIZATION**

ECED& 139	Administration . . . . .	3
EDUC& 115	Child Development . . . . .	5

TOTAL PROGRAM CREDITS	20
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## ECE: State Short Early Childhood Education Certificate – Family Child Care

**Health & Human Services Division**

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training or 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

The State Short Early Childhood Education Certificate – Family Child Care is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

**TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE**

Completion of the courses listed below equals the State Initial ECE Certificate

ECED& 105	Introduction to Early Childhood Education . . . . .	5
ECED& 107	Health, Safety, and Nutrition . . . . .	5
ECED& 120	Practicum: Nurturing Relationships . . . . .	2

**TECHNICAL SPECIALTY COURSES – SPECIALIZATION**

ECED& 134	Family Child Care . . . . .	3
EDUC& 115	Child Development . . . . .	5

TOTAL PROGRAM CREDITS	20
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## ECE: State Short Early Childhood Education Certificate – General

### Health & Human Services Division

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training or 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

The State Short Early Childhood Education Certificate – General is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits plus 8 credits in additional required coursework as noted.

#### TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE

Completion of the courses listed below equals the State Initial ECE Certificate

ECED& 105	Introduction to Early Childhood Education . . . .5
ECED& 107	Health, Safety, and Nutrition . . . . .5
ECED& 120	Practicum: Nurturing Relationships . . . . .2

#### TECHNICAL SPECIALTY COURSES – SPECIALIZATION

EDUC& 115	Child Development . . . . .	5
EDUC& 130	Guiding Behavior . . . . .	3
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TOTAL PROGRAM CREDITS		20

## ECE: State Short Early Childhood Education Certificate – Infant Toddler Care

### Health & Human Services Division

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training or 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

The State Short Early Childhood Education Certificate – Infant Toddler Care is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

#### TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE

Completion of the courses listed below equals the State Initial ECE Certificate:

ECED& 105	Introduction to Early Childhood Education . . . .5
ECED& 107	Health, Safety, and Nutrition . . . . .5
ECED& 120	Practicum: Nurturing Relationships . . . . .2

#### TECHNICAL SPECIALTY COURSES – SPECIALIZATION

ECED& 132	Infants and Toddlers . . . . .	3
EDUC& 115	Child Development . . . . .	5
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TOTAL PROGRAM CREDITS		20

## ECE: State Short Early Childhood Education Certificate – School-Age Care

### Health & Human Services Division

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training or 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals

The State Short Early Childhood Education Certificate – School-Age Care is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

#### TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE

Completion of the courses listed below equals the State Initial ECE Certificate:

ECED& 105	Introduction to Early Childhood Education . . . .5
ECED& 107	Health, Safety, and Nutrition . . . . .5
ECED& 120	Practicum: Nurturing Relationships . . . . .2

#### TECHNICAL SPECIALTY COURSES – SPECIALIZATION

EDUC& 115	Child Development . . . . .	5
EDUC& 136	School-Age Care . . . . .	3
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TOTAL PROGRAM CREDITS		20



## HEALTH AND MEDICAL

### Allied Health Associate of Applied Science–Transfer Degree (A.A.S.-T)

#### Health & Human Services Division

This program provides students with the pre-requisite courses required to apply for admission to a nursing program or advanced allied health program. Advanced allied health programs have additional pre-requisites. Please see program information on the website or speak to an advisor. Graduates of the program will be prepared for positions in medical front office, nursing assistant – certified (NAC), or other positions depending on their course of study.

This program prepares students for transfer to the Allied Health BAS degree program at Seattle Central College.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

#### PREREQUISITES

Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior course work. Course work earned at other institutions must be unofficially evaluated or approved by a program advisor before registering.

#### TECHNICAL SPECIALTY COURSES

Up to 40 college credits may be block transferred from the student's 40 Allied Health certificate program(s). Examples of eligible Allied Health course prefixes: AHD, AHL, MAA, SURG, NUR, PHA, AMA, AHE, CMA, and EDT. For nursing students, these credits must include an Nursing Assistant – Certified (NA-C) certificate.

If fewer than 40 college credits are block transferred in, the difference may be made up by credits from allied health courses with the above prefixes and/or a maximum of 10 credits of business (BUS) courses.

#### GENERAL EDUCATION

ENGL& 101	English Composition I	5
MATH& 146	Introduction to Statistics	5
Visual, Literary and Performing Arts		5
Recommended courses:		
HUM 105	– Intercultural Communications (5) or	
CMST& 210	– Interpersonal Communications (5)	
Individual, Cultures and Societies		5
Recommended courses:		
PSYC& 100	– General Psychology (5)	
or SOC& 101	– Intro to Sociology (5)	
Lab Science		5
Recommended courses:		
CHEM& 121	– Intro to Chemistry (5)	
or BIOL& 160	– General Biology w/Lab (5)	

#### RELATED INSTRUCTION

See advising for courses that fulfill Related Instruction/Foundation Science requirement.

TOTAL PROGRAM CREDITS

90

### Emergency Medical Technician Short-Term Certificate

#### Health & Human Services Division

This program teaches students the roles and responsibilities of the Emergency Medical Technician according to state and King county standards and requirements. Students develop skills in patient evaluation and other emergency procedures. Graduates of this program are eligible to take the national registry exam to qualify for state certification after meeting the Washington state requirement of employment.

#### PREREQUISITES

Attend a mandatory information session (see calendar), pass the advanced first aid entrance exam with 70% or higher. Additional requirements once accepted into the program: show proof of being at least 18 years of age at the beginning of the course enrollment (proof required).

Provide a copy of a valid driver's license issued in the United States. Note: Graduates will need a valid Washington State driver's license to work in the state.

Provide a copy of high school diploma or GED equivalency or college transcript showing high School completion.

Provide a copy of a clear Washington State Patrol check.

Provide copies of required immunizations:

1. Hepatitis B series or positive titer,
2. A current Tuberculin skin test or alternative health documentation.

Have the physical strength to carry, lift, extricate and perform similar maneuvers in a manner not detrimental to the patient, fellow emergency technicians or self.

#### TECHNICAL SPECIALTY COURSES

Co-requisite: Completion of AHE192 taken concurrently with AHE 190

AHE	190	Emergency Medical Technician	12
AHE	192	Basic Life Support for Healthcare Providers	1
TOTAL PROGRAM CREDITS			13



## Pharmacy Technician Apprenticeship (Building Trades Apprenticeships)

A certified Pharmacy Technician is a licensed staff person able to perform non-discretionary functions in a retail or medical pharmacy. Apprentices “learn while they earn” working full time while gaining skills taught by experience teachers, coaches, and mentors. Pharmacy Technician apprentices are supervised by the lead pharmacist and work with other pharmacy technicians who are trained as mentors.

The apprenticeship program for Pharmacy Technician involves 264 hours of classroom and lab, and 2,000 hours of work experience and takes about one year to complete. Classrooms and labs are hybrid virtual real-time classrooms and in-person labs.

## Pharmacy Technician Certificate

### Health & Human Services Division

The Pharmacy Technician Associate of Applied Science Transfer degree is designed to prepare students for the diverse pharmacy workplace. The program is approved by the Washington State Board of Pharmacy to train students to work in various pharmacy settings. Students learn basic pharmacy skills (reading prescriptions, order entry, IV medication prep, etc.) The program is accredited by the American Society of Health-System Pharmacists (ASHP).

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

### PREREQUISITES

College transcript showing successful completion of ENGL 098 with final placement into ENGL& 101 or placement into ENGL& 101 within last two years of application date

College transcript showing successful completion of MATH 097 Elementary Algebra or equivalent or placement into MATH 098 Intermediate Algebra within one year of application date

Higher level ENGL or MATH classes must be taken within the last five years of application date.

High School Diploma or GED

Must be 18 years of age

Additional Information/Requirements:

- National Background Check
- Immunizations are required to be placed into externship
- HIV/AIDS education minimum of 4 hours per WA State Pharmacy Quality Assurance
- Commission requirements
- Active WA State Pharmacy Assistant License/Registration

### TECHNICAL SPECIALTY COURSES

AMA	117	Medical Terminology . . . . .	5
PHA	115	Orientation to Pharmacy Practice . . . . .	3
PHA	120	Pharmacy Calculations . . . . .	3
PHA	130	Over the Counter Drugs . . . . .	2
PHA	140	Sterile Products and Aseptic Technique I . . . . .	3
PHA	141	Sterile Products and Aseptic Technique II . . . . .	3
PHA	146	Communications in Pharmacy Practice . . . . .	2
PHA	150	Pharmacology I . . . . .	3
PHA	151	Pharmacology II . . . . .	2
PHA	160	Pharmacy Technology I . . . . .	3
PHA	161	Pharmacy Technology II . . . . .	3
PHA	170	Pharmacy Records Management . . . . .	5
PHA	180	Healthcare Systems, Insurance and Billing . . . . .	3
PHA	185	Pharmacy Law and Ethics . . . . .	3
PHA	190	Pharmacy Technician Externship. . . . .	13
PHA	191	Job Skills and National Exam Preparation . . . . .	1

TOTAL PROGRAM CREDITS 56

## Pharmacy Technician Associate of Applied Science Degree (A.A.S.)

### Health & Human Services Division

Pharmacy technicians support pharmacists, who are legally responsible for all prescription orders and drug dispensing. The program emphasizes knowledge, skills and the varied responsibilities of the pharmacy technician. Students completing program requirements earn a certificate and are eligible to take the national certification exam, and apply to the Washington State Board of Pharmacy for a certificate to practice as a Pharmacy Technician. Graduates are employed in hospitals, home infusion, long-term care, independent and chain community pharmacies, out-patient clinics, insurance carriers and pharmacy software companies. Employment opportunities have remained strong in this health service occupation since its inception in 1975.

Applicants should contact the division office regarding enrollment and current information. The program begins in Fall and Spring.

Completion of Certificate Requirements: 49 credits

### COMMUNICATION COURSES

CMST Any Approved College Level Communication Course . . 5

### TECHNICAL SPECIALTY COURSES

ABD	150	Study Abroad . . . . .	30
AHI	100	Introduction to Medical Vocabulary . . . . .	3
PHA	112	Pharmacy Law . . . . .	2
PHA	115	Orientation to Pharmacy Practice . . . . .	3
PHA	116	HIV/AIDS and Hipaarmacy Practice . . . . .	1
PHA	120	Pharmacy Calculations . . . . .	3
PHA	130	Over the Counter Drugs . . . . .	2
PHA	140	Sterile Products and Aseptic Technique I . . . . .	3

PHA	141	Sterile Products and Aseptic Technique II . . . .	3
PHA	145	Pharmacy Ethics . . . . .	1
PHA	146	Communications in Pharmacy Practice . . . . .	2
PHA	151	Pharmacology II . . . . .	2
PHA	160	Pharmacy Technology I . . . . .	3
PHA	161	Pharmacy Technology II . . . . .	3
PHA	170	Pharmacy Records Management . . . . .	5
PHA	190	Pharmacy Technician Externship . . . . .	13
PHA	191	Job Skills and National Exam Preparation . . . .	1

**ELECTIVES**

Elective . . . . .	16
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Any college electives

See Advising for list of approved courses.

**GENERAL EDUCATION COURSES**

BUS	236	Interpersonal Communications for the Workplace . . . . .	5
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Natural World, the . . . . .	5
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Following can be substituted: other Approved Course (5)

See Advising for list of approved courses.

U.S. Cultures . . . . .	5
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Following can be substituted: Global Studies course (5)

MATH – Any Approved College-level Computation . . . . .	5
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Following can be substituted: Q Course (5)

See Advising for list of approved courses.

TOTAL PROGRAM CREDITS	90
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**Phlebotomist Short-Term Certificate****Health & Human Services Division**

This is an I-BEST Phlebotomy program. I-BEST (Integrated Basic Education and Skills Training) partners basic skills instructors with professional-technical skills instructors in the classroom to provide students with basic education and workforce skills. The two-course sequence of AHE 118 and AHE 119 includes theory of blood collection, supervised blood collection practice, and a 120-hour clinical externship. This program prepares students to work as phlebotomists in a clinical workplace.

**PREREQUISITES**

Instructor Permission Required

CASAS (Comprehensive Adult Student Assessment Systems) Reading and Listening minimum scores of 215 or COMPASS English Placement Test minimum score of 40.

Concurrent enrollment in ABE 049 or ESL 059 required, except with placement into ENGL& 101 or completion thereof

**TECHNICAL SPECIALTY COURSES**

AHE	118	Introduction to Phlebotomy I . . . . .	5
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AHE	119	Introduction to Phlebotomy II . . . . .	7
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TOTAL PROGRAM CREDITS	12
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**Prenursing (A.A.-DTA)**

This transfer program is designed for students who wish to transfer to a Bachelor of Science in Nursing (BSN) program at a four-year college or university by taking their science and general education classes at North to prepare to begin their nursing classes and earn a Bachelor of Science in Nursing (BSN) degree.

Students in this pathway develop skills in applying and communicating fundamental concepts/principles of science to one's daily life, demonstrating the process of scientific inquiry, solving problems analytically, and thinking critically. In addition, students will learn verbal communication, and group communication and collaboration, and awareness of human behavior and thinking. Completion of this AA-DTA degree prepares students to complete a Bachelor of Science in Nursing (BSN) or related degree at a four-year college or university, or a Bachelor of Applied Science (BAS) degree in a healthcare field at one of the Seattle Colleges.

## SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH

### Advanced Design for Manufacturing Short-Term Certificate

#### Business, Engineering & Information Technologies Division

This program has been designed for the student that wants to pursue a career in Mechanical Engineering as a Mechanical Drafter or Commercial/Industrial Designer. The student will use computer programs that relate to CAD (Computer Aided Design) including SolidWorks and CATIA to construct rapid prototypes from basic 3D part creation to advanced surfacing models used in industries such as Aerospace.

#### PREREQUISITES

Many classes have prerequisites. Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior course work. Course work earned at other institutions must be unofficially evaluated or approved by a program advisor before registering. Courses in this degree with pre-requisites are marked with an asterisk (\*). See catalog for more information

#### TECHNICAL SPECIALTY COURSES

Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

TDR	200	Introduction to Solidworks . . . . .	5
TDR	201	Introduction to CATIA. . . . .	5
TDR	202	Intermediate CATIA . . . . .	5
TOTAL PROGRAM CREDITS			15

### Biology (A.S.)

This two-year program is designed for students who wish to complete an Associate of Science degree with an emphasis on Biology. Students in this program develop skills in applying and communicating fundamental concepts/principles of biology to one's daily life, demonstrating the process of scientific inquiry, and solving problems analytically.

Completion of this program opens doors to a variety of careers in sectors including research, healthcare, education, non-profit, technology and government. It also allows you to transfer at the junior level into a Biology program such as Botany, Zoology, Microbiology, Genetics, Marine Biology, Environmental Science, or a related field at a four-year college or university, or to a Bachelor of Applied Science (BAS) at one of the Seattle Colleges.

### Building Information Modeling (BIM) Short-Term Certificate

#### Business, Engineering & Information Technologies Division

Building Information Modeling technology supports the principles of design and engineering and how the industry has made a paradigm shift to sustainability in whole building design. The student will develop skills in building computer generated models that unify architecture, engineering, construction and sustainability. Building Information Modeling/Management offers many solutions to fulfilling the challenge of sustainability and transition to a new medium.

#### TECHNICAL SPECIALTY COURSES

TDR	100	Basic BIM for Design and Construction . . . . .	5
TDR	101	Intermediate BIM for Design and Construction . . . . .	5
TDR	102	Advanced BIM for Design and Construction . . . . .	5
TDR	103	Energy Analysis For Building Information Modeling . . . . .	4
TOTAL PROGRAM CREDITS			19

### Chemistry (A.S.)

This two-year program is designed for students who wish to complete an Associate of Science degree with an emphasis on Chemistry. Students in this program learn about matter and energy down to the molecular level. Courses build a solid foundation in general chemistry and develop students' understanding of the scientific method of experimentation, observation and analysis of results. Students will also gain hands-on experiences in the lab.

Completion of this program opens doors to a variety of academic, industry, and medical careers in research & development, manufacturing, and more across the public and private sectors. It also allows you to transfer into a chemistry or related major at a four-year college or university, or to a Bachelor of Applied Science (BAS) at one of the Seattle Colleges.

## CISCO Certified Network Associate Short-Term Certificate

### Business, Engineering & Information Technologies Division

This Certificate of Completion for CISCO Certified Network Associate training is intended for students not already enrolled in an Information Technology, Network Administration or Telecommunications Technology certificate or degree program. It is intended to be completed in three academic quarters, but students may be able to complete it in fewer quarters depending on experience and preparation.

Graduates of this Certificate of Completion program can expect to pass CISCO's CCENT CISCO Certified Entry Network Technician and CCNA Cisco Certified Network Associate exams. The instruction based on the online curriculum and books provided by CISCO Systems are comprehensive in describing how the Internet/Internets work based on intense practice configuring CISCO routers and switches through a command line interface called IOS (Internet Operating System) and a simulation program called Packet Tracer.

CISCO I (IT 142) concentrates on the theory of packet exchange based on the OSI (Open Systems Interconnect) Model and the reality of packet exchange based on the TCP/IP (Transmission Control Protocol/Internet Protocol) Protocol stack.

CISCO II (IT 144) concentrates on configuring routing using RIP (Routing Information Protocol), EIGRP (Enhanced Interior Gateway Routing Protocol) and OSPF (Open Shortest Path First) routing protocols.

CISCO III (IT 146) combines two Cisco classes; the first class covers switch configuration and Wireless access theory while the second class covers remote access to the Internet, security and network management as a whole.

While configuration labs concentrate on and utilize CISCO equipment, the preparation provided by the Certificate of Completion for CISCO Certified Network Associate training applies to all router and switch vendors equipment based on the fact that most protocols used by CISCO and all other vendors are the same and are based on open standards.

### PREREQUISITES

There are no formal program prerequisites, but students are strongly advised to have skills comparable to EET 131 (IT Essentials I/A+ Certification) and EET 132 (IT Essentials II/Advanced A+ Certification). CISCO 1 must be completed before enrolling in CISCO 2. CISCO 2 must be completed before enrolling in CISCO 3

### TECHNICAL SPECIALTY COURSES

IT	142	Network 2 – Interconnecting CISCO Network Device 2 . . . . .	5
IT	144	Network Management – CISCO II . . . . .	5
IT	146	Network Management – CISCO III . . . . .	5
TOTAL PROGRAM CREDITS			15

## Computer Aided Design (CAD) for Design and Construction Short-Term Certificate

### Business, Engineering & Information Technologies Division

This certificate prepares students for a growing number of entry-level jobs in engineering, construction, and architectural firms. Our laboratory is equipped with industry-standard computer-aided design (CAD) systems to provide state-of-the-art graphics training. Course work includes instruction and hands-on training in basic engineering, architectural, and drafting practices.

### TECHNICAL SPECIALTY COURSES

TDR	111	Basic CAD Drafting for Construction and Design . . . . .	5
TDR	112	Intermediate CAD Drafting/Construction & Design . . . . .	5
TDR	176	Advanced AutoCAD for Arch & Engineering Drafting . . . . .	4
TOTAL PROGRAM CREDITS			14

## Computer Science

North Seattle's Computer Science program is designed for students who wish to transfer to a four-year college or university to complete their degree in Computer Science, Engineering, or a related field. The program focuses on a three-class series covering software development theory and practice. Students use modern programming languages like Python and Java, gaining experience in all stages of the software development life cycle including design, coding, testing, and documentation. Completion of this program can lead to an AS degree from North, transfer to a four-year college or university without a degree, or a supplement to your studies if you are a student elsewhere.

## Environmental Science (A.S.)

This two-year program is designed for students who wish to complete an Associate of Science degree with an emphasis on Environmental Science. Students in this program develop interdisciplinary skills related to the environment and will incorporate fundamental concepts and principles of environmental science to daily life. Students will utilize the process of scientific inquiry, apply awareness of current affairs to environmental issues, and solve problems using critical thinking.

Completion of this program opens doors to a variety of careers in sectors including research, education, health and safety, non-profit, sustainable development, sustainable

business, technology, and government. It also allows students to transfer at the junior level into an Environmental Science program at a four-year college or university or continue on to a Bachelor of Applied Science (BAS) from a Washington state community college.

## Geology (A.S.)

This two-year program is designed for students who wish to complete an Associate of Science degree with an emphasis on Geology. Students in this program study the earth, the materials that make it up and the processes that have shaped it through time, interpreted in terms of plate tectonics. Special attention is given to both deep-earth and surface processes that have shaped the Pacific Northwest. All geology courses have field trips to areas like Mt. Rainier, Mt. St. Helens, Mt. Baker, the San Juan Islands, the Olympics, and the UW Burke Museum of Natural History. A five-day field trip is the capstone of the Pacific NW Geology course.

Completion of this program satisfies AS science degree or career training program requirements and also allows students to transfer at the junior level into a Geology program at a four-year college or university.

## Healthcare Technology Management/ BioMedical Equipment Technology Associate of Applied Science Degree (A.A.S.)

### Business, Engineering & Information Technologies Division

The Healthcare Technology Management/BioMedical Technology (HTM/BMET) degree program provides opportunities for students interested in the operation, maintenance and repair of medical equipment and related IT systems. Knowledge of medical equipment technology increases the marketable skills and areas of knowledge for students that are studying in the field of electronics, and opens up more employment possibilities in the fields of health care and medical device manufacturing.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

### PREREQUISITES

For Placement testing, contact Testing Center (206) 527-3674.

To begin program, students must test into the English and Math courses listed below:

ENGL	098	Integrated Reading and Writing II . . . . .	10
		Following can be substituted: higher ENGL course	
MATH	084	Algebra I . . . . .	5
		Following can be substituted: higher MATH course or have taken equivalent or higher MATH course	

### TECHNICAL SPECIALTY COURSES

AMA	117	Medical Terminology . . . . .	5
CHEM&	110	Chemical Concepts w/Lab. . . . .	5
		Following can be substituted: CHEM& 121 – Intro to Chemistry (5)	
EET	105	Introduction to Technology . . . . .	2
EET	106	Introduction to Soldering . . . . .	1
EET	112	Fundamentals of Fluid Power . . . . .	5
EET	114	Applied Physics . . . . .	5
EET	131	IT Essentials I – A+ Certification . . . . .	5
EET	132	IT Essentials A+ Certification Advanced . . . . .	5
EET	161	Principles of DC Electronics . . . . .	5
EET	162	A.C. Principles of Electronics . . . . .	5
EET	163	Solid State Electronics . . . . .	5
EET	165	Analog Circuits and Devices. . . . .	5
EET	170	Digital Electronics & Plcs I . . . . .	5
EET	286	Biomedical Equipment I. . . . .	5
EET	287	Biomedical Equipment II . . . . .	5
EET	297	Biomedical Technician Externship. . . . .	4
		CWE 101 – Portfolio Job Search Int is a prerequisite for EET 297	

### RELATED INSTRUCTION

BUS	112	Multi-Cultural Issues in the American Workplace . . . . .	5
		Following can be substituted: Global Studies designated course (5) or US Cultures designated course (5)	
BUS	118	Project Management Introduction and Overview . . . . .	5
EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
		Following can be substituted: MATH& 141 – Pre-Calculus (5) or higher MATH course	
ENGL&	101	English Composition I . . . . .	5
Human		Relations course . . . . .	5
		Preferred class is: BUS 236 – Interpersonal Communication (5 credits) or choose from one of the following courses (5 credits): ISP 101 – the Global Society ISP 105 – Intercultural Communication POLS 112 – Contemporary World SOC& 101 – Intro to Sociology	

TOTAL PROGRAM CREDITS 97

## Industrial Automation and Electronic Controls Certificate

### Math /Science Division

The Industrial Automation and Electronic Controls Certificate prepares students for immediate employment, and future advancement, in companies or government organizations that manufacture, service, sell, design or support electrical and electronic systems that control machinery, automation, and/or processes.



**PREREQUISITES**

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

BUS	169	Using Computers in Business . . . . .	5
		Following can be substituted: equivalent computer experience	
ENGL	098	Integrated Reading and Writing II . . . . .	10
		Following can be substituted: higher ENGL course or successful completion of ABE 050	
MATH	084	Algebra I . . . . .	5
		Following can be substituted: successful completion of ABE 031 or equivalent course	

**TECHNICAL SPECIALTY COURSES**

EET	106	Introduction to Soldering . . . . .	1
EET	112	Fundamentals of Fluid Power . . . . .	5
		Following can be substituted: Shoreline Community College course: MFGT 247 – Motive Maintenance	
EET	131	IT Essentials I – A+ Certification . . . . .	5
EET	137	Introduction to Robotics . . . . .	5
EET	138	Industrial Robotics . . . . .	5
		Following can be substituted: Shoreline Community College course: MFGT 280 – Robot Certification	
EET	160	Introduction to Electricity and Electronics . . . . .	5
EET	161	Principles of DC Electronics . . . . .	5
EET	201	Energy Generation and Conversion . . . . .	5
EET	202	Industrial Motor Controls and Drives . . . . .	5
EET	203	Programmable Logic Controllers . . . . .	5

**RELATED INSTRUCTION**

BUS	236	Interpersonal Communications for the Workplace . . . . .	5
		Following can be substituted: Shoreline Community College courses: BUS 104 – Human Relations in Business or BUS 105 – Essentials of Human Relations (2) or approved Human Relations elective (5) Total credits can be from 2-5 based on course option selected.	
EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
		Following can be substituted: MATH& 141 – Pre-Calculus I (5) or higher level MATH course	
ENGL&	101	English Composition I . . . . .	5
		Following can be substituted: ENGL& 235 – Technical Writing (5) or Shoreline Community College course: BTWERT 215 – Composition, Business Communications	

TOTAL PROGRAM CREDITS	58-61
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## Industrial Power and Control Associate of Applied Science Degree (A.A.S.)

**Business, Engineering & Information Technologies Division**

Industrial Power and Control is a two-year program that prepares students for immediate employment and future advancement in companies or government organizations that manufacture, service, sell, design or support electrical and electronic systems that control machinery, automation, and/or processes.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

**PREREQUISITES**

For Placement Testing: contact Testing Center, 527-3674

To begin program, students must test into the English and Math courses listed below:

BUS	169	Using Computers in Business . . . . .	5
		Following can be substituted: equivalent computer experience	
ENGL	097	English 097: Integrated Reading and Writing I . . . . .	10
		or ENGL 098 – College Prep Writing IV (5 credits) or higher ENGL course	
MATH	084	Algebra I . . . . .	5
		or higher MATH course or taken an equivalent or higher MATH course	

**TECHNICAL SPECIALTY COURSES**

EEL	201	Energy Generation, Conversion and Sustainability	5
EEL	202	Industrial Motor Controls and Drives . . . . .	5
EEL	203	Programmable Logic Controllers . . . . .	5
EET	105	Introduction to Technology . . . . .	2
EET	106	Introduction to Soldering . . . . .	1
EET	108	Introduction to Fiber Optics . . . . .	5
EET	112	Fundamentals of Fluid Power . . . . .	5
EET	114	Applied Physics . . . . .	5.0
EET	131	IT Essentials I – A+ Certification . . . . .	5
EET	132	IT Essentials A+ Certification Advanced . . . . .	5
EET	137	Introduction to Robotics . . . . .	5
EET	138	Industrial Robotics . . . . .	5
EET	161	Principles of DC Electronics . . . . .	5
EET	162	A.C. Principles of Electronics . . . . .	5
EET	163	Solid State Electronics . . . . .	5
EET	165	Analog Circuits and Devices . . . . .	5
EET	170	Digital Electronics & Plcs I . . . . .	5
EET	219	Metrology and Measurement Science . . . . .	3

**RELATED INSTRUCTION**

BUS	112	Multi-Cultural Issues in the American Workplace . . . . .	5
		Following can be substituted: Global Studies or US Cultures designated course (5) See Advising Center for approved list.	



EET	109	Mathematical Applications for Circuit Analysis . . . 5
		Following can be substituted:
		MATH 141 – Pre-Calculus (5) or higher MATH course
ENGL&	101	English Composition I . . . . . 5
		While students must test into ENGL 097 to start the degree, they must complete ENGL& 101 to finish.
Human Relations		course . . . . . 5
		Following can be substituted:
		Choose one of the following: BUS 236 – Interpersonal Communications for the Workplace, BUS 237 – Team Skills in the Workplace, CMST 205 – Multicultural Communication, CMST& 210 – Interpersonal Communication, CMST& 230 – Small Group Communication, HUM 105 – Intercultural Communication, POLS 112 – Contemporary World, PSYC 209 – Fundamentals of Psychological Research, PSYC 245/SOC 245 – Social Psychology, PSYC 257/WMN 257 – Psychology of Gender, SOC& 101 – Introduction to Sociology
TOTAL PROGRAM CREDITS		101

## IT – Application Development (A.A.S.)

This degree dually prepares students for both the workplace and to transfer into the Application Development Bachelor of Applied Science (BAS) Degree program. Students will learn to create, debug, and manage software applications, develop and test full stack web applications and share code and function effectively as a member of a team. Students will also develop the abilities to apply scientific or technical knowledge to understand issues, solve problems, and engage in useful and responsible practices in computer programming.

Completion of this program prepares students to get an entry-level IT job, as well as preparing them to pursue their Bachelor of Applied Science degree in Application Development here at North Seattle College.

## IT – Application Development Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Business, Engineering & Information Technologies Division

Take the first step to become an application developer. Graduates of the Application Development Associate of Applied Sciences (AAS-T) degree are dually prepared for both the workplace and to transfer into the Application Development Bachelor of Applied Science (BAS) Degree program. Learn beginning programming, software design, and software engineering skills so you can get an entry-level development job as you pursue your BAS degree.

### PREREQUISITES

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

ENGL&	101	English Composition I . . . . . 5
		placement into ENGL& 101
MATH	098	Intermediate Algebra. . . . . 5

### TECHNICAL SPECIALTY COURSES

CSC	110	Introduction to Computer Programming. . . . . 5
CSC	142	Computer Programming I . . . . . 5
IT	102	Introduction to Programming . . . . . 5
		Following can be substituted: IT 121 – Javascript I
		The substitution course: IT 121 JavaScript I
		is a course is taken at Seattle Central.
IT	111	Internet and Web Authoring Using XHTML . . . . 5
IT	112	Web Programming with Python . . . . . 5
IT	115	Intro to Software Development &
		Version Control. . . . . 5
IT	120	Network Essentials – Comptia Network + . . . . 5
IT	125	Using Structured Query Language and
		SQL Server . . . . . 5
IT	135	Introduction to Linux . . . . . 5
IT	161	Web Authoring 1 . . . . . 5

### RELATED INSTRUCTION

ENGL&	101	English Composition I . . . . . 5
HUM	105	Intercultural Communication . . . . . 5
MATH&	146	Introduction to Statistics . . . . . 5
PSYC&	100	General Psychology. . . . . 5
U.S. Cultures		. . . . . 5
		Following can be substituted: Global Studies course
		Select course from list of approved courses.
		See Advising for assistance.
Natural World – Lab Science		. . . . . 5
		Select course from list of approved Natural World
		Lab Science courses. See Advising for assistance.

### TECHNICAL ELECTIVES

Select 10 credits from the courses listed below:

BUS	169	Using Computers in Business . . . . . 5
CSC	143	Computer Programming II . . . . . 5
EET	131	IT Essentials I – A+ Certification. . . . . 5
IT	100	Introduction to Computer Systems
		and Networks. . . . . 5
IT	162	Web Authoring 2 . . . . . 5
		This course is taken at Seattle Central.
IT	212	Data Structures and Algorithms with Java . . . . 5
		This course is taken at Seattle Central.
IT	216	Android Application Development 1 . . . . . 5
		This course is taken at Seattle Central.
IT	217	Android Application Development 2 . . . . . 5
		This course is taken at Seattle Central.
IT	261	Web App Programming 1 . . . . . 5
		This course is taken at Seattle Central.
IT	262	Web App Programming 2 . . . . . 5
		This course is taken at Seattle Central.

TOTAL PROGRAM CREDITS		90
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## IT – Application Development Bachelor of Applied Science Degree (B.A.S.)

### Math/Science Division

The BAS in Application Development is a degree designed to prepare students for entry-level positions in software development careers by providing industry-relevant applied education in application development. Instruction focuses on current industry trends including web, cloud, data science and mobile applications, as well as industry practices such as Agile and collaborative development. A strong emphasis on industry-based projects throughout the program will prepare graduates to meet current and future industry needs and emerging software trends.

Any General Education Requirements taken as part of the associate degree can be transferred in to satisfy requirements.

Applicants must have an associate's degree (or equivalent credits) from a regionally accredited institution with a minimum cumulative 2.5 GPA and a 2.5 GPA or higher in all IT courses.

### PREREQUISITES

Total of 10 credits in General Education required	
Total of 20 credits in IT Courses required	
Equivalent courses may be substituted	
ENGL& 101 English Composition I . . . . .	5
Quantitative/Symbolic Reasoning . . . . .	5
QSR course in Statistics or Calculus recommended	
Programming Course . . . . .	10
5 credits of Object-Oriented Programming strongly recommended	
See advising for list of approved courses.	
Database Development/Programming in SQL Course . . . . .	5
See advising for list of approved courses.	
Web Programming/Javascript . . . . .	5
See advising for list of approved courses.	

### TECHNICAL SPECIALTY COURSES

AD 300 Component Software . . . . .	5
Following can be substituted:	
CSC 143 – Computer Programming II (5)	
AD 315 Discrete Mathematics in Computer Programming . . . . .	5
AD 320 Web Application Development . . . . .	5
AD 325 Data Structure & Algorithms . . . . .	5
AD 340 Mobile Application Development . . . . .	5
AD 350 Database Technology . . . . .	5
AD 400 Project Management in Software Development . . . . .	5
AD 410 Web Application Practicum. . . . .	5
AD 420 Cloud Computing – Software as Service . . . . .	5
AD 430 Mobile Application Practicum. . . . .	5
AD 440 Cloud Computing Practicum. . . . .	5
AD 450 Datascience Development. . . . .	5
AD 470 Data Science Practicum . . . . .	5
AD 490 Internship/Capstone Project AD-BAS . . . . .	5

### RELATED INSTRUCTION

General Education Prerequisites comprise 10 of 60 credits required.

See Advising Center for list of approved courses.

Typically 15 or more of the following credits must be completed before beginning AD-BAS degree

Visual, Literary and Performing Arts. . . . .	10
Humanities or contact the Advising Center for acceptable Courses	
Individual, Cultures and Societies . . . . .	10
Social sciences or contact the Advising Center for acceptable Courses	
Natural World, the . . . . .	10
Any physical, biological or earth sciences.	
At least one 5 credit lab class required.	
or contact the Advising Center for acceptable Courses	
Communication. . . . .	5
5 credits in a Composition, Writing-intensive, or basic speaking skills courses	
General Education Elective . . . . .	15
Credits may be selected to best suit the needs of the baccalaureate program	

### ELECTIVES

Elective . . . . .	50
See Advising Center for list of courses. Includes any credits taken towards the associate degree and/or technology prerequisites.	

<b>TOTAL PROGRAM CREDITS</b>	<b>180</b>
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## IT-Controlled Electronic Systems Certificate

### Business, Engineering & Information Technologies Division

This certificate is intended for students who already have an Associates or Bachelor's degree, or substantial professional experience, in an information technology related field.

The certificate prepares students for employment as electronic systems application or facilities engineers, security and field technicians, systems and sales consultants, technical support staff. Typical duties include installation, maintenance, and monitoring information technology systems and IT-controlled electronic systems such as security systems, entertainment systems, and HVAC systems.

### PREREQUISITES

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

BUS 169 Using Computers in Business . . . . .	5
Following can be substituted: Instructor permission	

**TECHNICAL SPECIALTY COURSES**

Total Required Technical Specialty Course Credits: 25-30

In addition to courses listed below, select from one of the tracks below:

EET	131	IT Essentials I – A+ Certification . . . . .	5
EET	137	Introduction to Robotics . . . . .	5
EET	161	Principles of DC Electronics . . . . .	5

**MICROSOFT TRACK**

IT	122	Installing and Configuring Windows Server . . .	5
IT	124	Network OS 2 – Windows Server . . . . .	5

**UNIX TRACK**

IT	135	Introduction to Linux . . . . .	5
IT	138	Linux for Network Administration . . . . .	5

**CISCO TRACK**

IT	142	Network 2-Interconnecting CISCO Network Device 2 . . . . .	5
IT	144	Network Management – CISCO II . . . . .	5
IT	146	Network Management – CISCO III . . . . .	5

**RELATED INSTRUCTION**

BUS	118	Project Management Introduction and Overview . . . . .	5
BUS	236	Interpersonal Communications for the Workplace . . . . .	5

TOTAL PROGRAM CREDITS 35-40

## IT-Controlled Electronic Systems Associate of Applied Science Degree (A.A.S.)

**Business, Engineering & Information Technologies Division**

The IT Controlled Electronic Systems Associate of Applied Science degree is a 2-year degree focused on developing skills needed to install, maintain, and monitor information technology systems and IT-controlled electronic systems such as security, entertainment, and HVAC systems. Course work in electronics and computer networking is emphasized along with building the interpersonal skills necessary to work with customers and co-workers.

**PREREQUISITES**

Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

For Placement Testing: contact Testing Center, (206) 527-3674.

To begin program, students must test into the English and Math courses listed below:

BUS	169	Using Computers in Business . . . . .	5
ENGL&	101	English Composition I . . . . .	5
IT	101	Software Applications . . . . .	5
MATH	084	Algebra I . . . . .	5
MATH	097	Elementary Algebra . . . . .	5

**TECHNICAL SPECIALTY COURSES**

EET	131	IT Essentials I – A+ Certification . . . . .	5
EET	132	IT Essentials A+ Certification Advanced . . . . .	5
EET	137	Introduction to Robotics . . . . .	5
EET	161	Principles of DC Electronics . . . . .	5
EET	162	A.C. Principles of Electronics . . . . .	5
EET	163	Solid State Electronics . . . . .	5
EET	165	Analog Circuits and Devices . . . . .	5
IT	122	Installing and Configuring Windows Server . . .	5
IT	124	Network OS 2 – Windows Server . . . . .	5
IT	135	Introduction to Linux . . . . .	5
IT	138	Linux for Network Administration . . . . .	5
IT	142	Network 2-Interconnecting CISCO Network Device 2 . . . . .	5
IT	144	Network Management – CISCO II . . . . .	5
IT	146	Network Management – CISCO III . . . . .	5

**RELATED INSTRUCTION – GENERAL EDUCATION**

BUS	236	Interpersonal Communications for the Workplace . . . . .	5
EET	109	Mathematical Applications for Circuit Analysis	5
ENGL&	101	English Composition I . . . . .	5
U.S. Cultures		Following can be substituted: Global Studies	5

TOTAL PROGRAM CREDITS 90

## IT – Network and Server Administration Specialist Certificate

**Business, Engineering & Information Technologies Division**

The Information Technology program offers both a certificate and an Associate of Applied Science-T degree in Information Technology (A.A.S.-T). Satisfactory completion of the Network Infrastructure & Security Support Specialist program qualifies a student for the A.A.S.-T. The program trains entry-level network and infrastructure support technicians and administrators in specific computer networking skills and general troubleshooting of hardware and software related problems. Please see a college advisor about taking any courses other than those that have been identified.

Graduates of the Network Infrastructure & Security Support program find jobs as network technician, assistant network administrator, PC technician, workstation support technician, technical support technician or computer systems technician.

**PREREQUISITES**

EET	131	IT Essentials I – A+ Certification . . . . .	5
		Following can be substituted: CompTIA A+ Certification for EET 131 & EET 132	

**TECHNICAL SPECIALTY COURSES**

Other courses may be substituted for courses below with permission of Program Coordinator. See advising for list of approved courses.

IT	102	Introduction to Programming . . . . .	5
IT	122	Installing and Configuring Windows Server . . .	5
IT	124	Network OS 2 – Windows Server . . . . .	5

IT	126	Network OS 3 – Windows Network Infrastructure . . . . .	5
IT	135	Introduction to Linux . . . . .	5
Following can be substituted:			
IT 138 – UNIX for Network Administration (5)			
or IT 140 – Network Management UNIX (5)			
IT	142	Network 2 – Interconnecting CISCO Network Device 2 . . . . .	5
IT	144	Network Management – CISCO II . . . . .	5
IT	146	Network Management – CISCO III . . . . .	5
TOTAL PROGRAM CREDITS			40

## IT – Network and Server Administration Specialist Associate of Applied Science Degree (A.A.S.)

### Business, Engineering & Information Technologies Division

This degree program prepares students to enter the IT field as IT Managers, Systems Administrators, or IT Specialists. The curriculum is focused on UNIX/Linux, Microsoft, and Cisco operating system configuration, management, and security. Students in this program will learn to Install & configure software and upgrades; install, configure & test network devices, servers and workstations; and troubleshoot hardware & network problems.

Completion of this program prepares students for a rewarding career as a Computer Network Support Specialist, IT Project Manager, Network and Computer Systems Administrator, and more.

NOTE: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

### PREREQUISITES

English placement into ENGL&101

Math placement into MATH 084 or higher MATH course

### TECHNICAL SPECIALTY COURSES

EET	131	IT Essentials I – A+ Certification . . . . .	5
EET	132	IT Essentials A+ Certification Advanced . . . . .	5
IT	102	Introduction to Programming . . . . .	5
IT	122	Installing and Configuring Windows Server . . . . .	5
IT	124	Network OS 2 – Windows Server . . . . .	5
IT	126	Network OS 3 – Windows Network Infrastructure . . . . .	5
IT	135	Introduction to Linux . . . . .	5
IT	138	Linux for Network Administration . . . . .	5
IT	142	Network 2 – Interconnecting CISCO Network Device 2 . . . . .	5
IT	144	Network Management – CISCO II . . . . .	5
IT	146	Network Management – CISCO III . . . . .	5
IT	150	IT Systems Security + . . . . .	5

### GENERAL EDUCATION COURSES

BUS	236	Interpersonal Communications for the Workplace . . . . .	5
EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
ENGL&	101	English Composition I . . . . .	5
U.S. Cultures		. . . . .	5
Following can be substituted: Global Studies course			
Contact division office for a list of approved courses.			

### ELECTIVES

Technical Electives . . . . .			10
TOTAL PROGRAM CREDITS			90

## Linux Network and Security Certificate

### Business, Engineering & Information Technologies Division

This program prepares students for careers in system administration, network administration, and information security. Students will gain experience managing and securing the Linux operation system. Students will also learn how Linux-based tools apply to network administration and security testing.

### PREREQUISITES

Course work earned at other institutions must be unofficially evaluated or approved by a program advisor before registering.

EET	131	IT Essentials I – A+ Certification . . . . .	5
Following can be substituted: Instructor Permission			

### TECHNICAL SPECIALTY COURSES

IT	135	Introduction to Linux . . . . .	5
IT	138	Linux for Network Administration . . . . .	5
IT	150	IT Systems Security + . . . . .	5
IT	157	Ethical Hacking . . . . .	5
TOTAL PROGRAM CREDITS			20

## Math (A.S.-DTA)

This two-year program is designed for students who wish to complete an Associate of Science Direct Transfer Agreement (AS-DTA) degree with an emphasis on Mathematics. Students in this program will learn how to use mathematical concepts to break down complicated problems into manageable pieces. Students will use creative, exploratory, and lateral thinking in problem-solving as well as strong reasoning and analytical-thinking skills through math courses ranging from basic arithmetic to differential equations.

Completion of this program opens doors to a variety of careers in sectors such as research, finance, accounting, academia and more. It also allows you to transfer at the junior level into a Mathematics program at a four-year college or university, or to a Bachelor of Applied Science (BAS) at one of the Seattle Colleges.

## Mechatronics Associate of Applied Science Degree (A.A.S.)

### Math/Science Division

Mechatronics is a two-year program that prepares students for immediate employment and future advancement in companies or government organizations that manufacture, service, sell, design or support electro-mechanical systems that control machinery, automation, and/or processes.

This degree is offered jointly with Shoreline Community College. Students must take classes at both North Seattle College and Shoreline Community College in order to complete this degree. Prerequisites: Many classes have prerequisites.

Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior course work. Course work earned at other institutions must be unofficially evaluated or approved by a program advisor before registering.

### PREREQUISITES

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

BUS	169	Using Computers in Business . . . . .	5
		Following can be substituted: equivalent computer experience	
ENGL	098	Integrated Reading and Writing II . . . . .	10
		Following can be substituted: higher level ENGL course or successful completion of ABE 050	
MATH	084	Algebra I . . . . .	5
		Following can be substituted: successful completion of ABE 031 or equivalent or higher level MATH class	

### TECHNICAL SPECIALTY COURSES

EET	106	Introduction to Soldering . . . . .	1
EET	112	Fundamentals of Fluid Power . . . . .	5
		Following can be substituted: Shoreline Community College course MFGT 247 – Motive Maintenance (5)	
EET	131	IT Essentials I – A+ Certification . . . . .	5
EET	137	Introduction to Robotics . . . . .	5
EET	138	Industrial Robotics . . . . .	5
		Following can be substituted: Shoreline Community College course: MFGT 280 – Robot Certification (5)	
EET	160	Introduction to Electricity and Electronics . . . . .	5
EET	161	Principles of DC Electronics . . . . .	5
EET	201	Energy Generation and Conversion . . . . .	5
EET	202	Industrial Motor Controls and Drives . . . . .	5
EET	203	Programmable Logic Controllers . . . . .	5

EET	291	Electronics Internship . . . . .	6
		Following can be substituted: Shoreline Community College course: MFGT 196 – Advanced Manufacturing Internship or North Seattle College courses: choose two of the following courses: EET 108 – Intro to Fiber Optics (5) or EET 170 – Digital Electronics & PLCs I (5) or EET 162 – A.C. Principals of Electronics (5) or EET 114 – Applied Physics (5) The internship/externship requirement (EET 291 or MFGT 196) is the preferred selection for this degree. Total credits can be from 4-10 based on course option selected.	
MFGT	105	Basic Manufacturing . . . . .	20
		This course can also be taken at Shoreline Community College.	
MFGT	244	Preventative Maintenance . . . . .	3
		This course can also be taken at Shoreline Community College.	
MFGT	245	10 Hour OSHA . . . . .	1
		This course can also be taken at Shoreline Community College.	
MFGT	246	Mechanical Maintenance . . . . .	5
		This course can also be taken at Shoreline Community College.	
<b>RELATED INSTRUCTION</b>			
BUS	112	Multi-Cultural Issues in the American Workplace . . . . .	5
		Following can be substituted: Shoreline Community College course MCS 105 – Intro to Multiculturalism Studies or approved US Cultures/Global Studies Elective	
BUS	236	Interpersonal Communications for the Workplace . . . . .	5
		Following can be substituted: Shoreline Community College course BUS 104 – Human Relations in Business or BUS 105 – Essentials of Human Relations or approved Human Relations Elective Total credits can be from 2-5 based on course option selected.	
EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
		Following can be substituted: higher level MATH class or MATH& 141 – Pre-Calculus (5) ENGL& . . . . .	101
		English Composition I. . . . .	5
		Following can be substituted: ENGL& 235 – Technical Writing (5) or Shoreline Community College course BTWERT 215 – Composition, Business Communications (5)	
<b>TOTAL PROGRAM CREDITS</b>			<b>96-105</b>



## Network Administration Microsoft Windows Completion Certificate

### Business, Engineering & Information Technologies Division

This Certificate of Completion in Microsoft Windows Network Administration is intended for students not already enrolled in an Information Technology, Network Administration or Telecommunications Technology certificate or degree program.

#### PREREQUISITES

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

EET 131 IT Essentials I – A+ Certification . . . . .5  
Following can be substituted: Instructor permission

#### TECHNICAL SPECIALTY COURSES

IT	122	Installing and Configuring Windows Server . . .	.5
IT	124	Network OS 2 – Windows Server . . . . .	.5
IT	126	Network OS 3 – Windows Network Infrastructure . . . . .	.5
IT	128	Network OS 4 – Windows Active Directory . . .	.5
TOTAL PROGRAM CREDITS			20

## Physics (A.S.)

This two-year program is designed for students who wish to complete an Associate of Science degree with an emphasis in physics. Students in this program develop an understanding of physics and skills in experimental design, teamwork, project management, programming, advanced math, technical writing, applying physics to interdisciplinary problems, and effective communication.

Completion of this program prepares students to transfer at the junior level into a Physics program at a four-year college or university which opens doors to a variety of careers in sectors including engineering, computer science, research in the public and private sector, and education. It also prepares students well for graduate coursework in Engineering, Earth and Space Science, Mathematics or a related field at a four-year college or university.

## Sustainable and Conventional Energy & Control Technology Certificate

### Business, Engineering & Information Technologies Division

The Industrial Power & Control Program offers a one-year certificate in Sustainable and Conventional Energy and Control Technology and a two-year Associate of Applied Science degree in Industrial Power & Control Technology. This program prepares students for entry level employment in companies or government organizations that manufacture, service, sell, design or support electrical and electronic systems that control machinery, automation, and/or processes. Emphasis is placed on the control of large electrical currents and large electromechanical systems through solid state, digital, and microprocessor devices. The program involves in-depth study of industrial controls, fluid power, AC and DC rotating equipment, instrumentation and measurement, and system control principles. Sustainable and Conventional Energy and Control differs from Electronics in the scale and application of electrical, electronic and mechanical systems, and may be considered “Industrial Electronics.”

#### PREREQUISITES

For Placement Testing: contact Testing Center, 206-527-3674

A minimum of 15 credits of this certificate must be taken in residence at North Seattle College.

To begin program, students must test into the English and Math courses listed below:

BUS	169	Using Computers in Business . . . . .	.5
Following can be substituted:			
IT 101 – Software Applications (5)			
or equivalent computer experience			
ENGL	097	English 09 – Integrated Reading and Writing I . . . . .	10
Following can be substituted: higher ENGL course or ENGL 098 – College Prep Writing IV (5)			
MATH	084	Algebra I . . . . .	.5
Following can be substituted: higher MATH course or have taken an equivalent or higher MATH course			

#### TECHNICAL SPECIALTY COURSES

EEL	201	Energy Generation, Conversion and Sustainability . . . . .	.5
EEL	202	Industrial Motor Controls and Drives . . . . .	.5
EEL	203	Programmable Logic Controllers . . . . .	.5
EET	105	Introduction to Technology . . . . .	.2
EET	112	Fundamentals of Fluid Power . . . . .	.5
EET	114	Applied Physics . . . . .	.5
EET	137	Introduction to Robotics . . . . .	.5
EET	161	Principles of DC Electronics . . . . .	.5
EET	162	A.C. Principles of Electronics . . . . .	.5
EET	163	Solid State Electronics . . . . .	.5
EET	165	Analog Circuits and Devices . . . . .	.5
EET	170	Digital Electronics & Plcs I . . . . .	.5



**RELATED INSTRUCTION**

BUS	236	Interpersonal Communications for the Workplace . . . . .	5
		Following can be substituted:	
		HUM 105 – Intercultural Communication (5)	
		or ISP 101 – The Global Society (5)	
		or ISP 110 – Introduction to Global Studies (5)	
		or POLS 112 – Contemporary World (5)	
		or SOC& 101 – Introduction to Sociology (5)	
EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
		Following can be substituted: higher MATH course	
		or MATH& 141 – Precalculus (5)	
ENGL&	101	English Composition I . . . . .	5
TOTAL PROGRAM CREDITS			71-73

**Web Application Technologies Certificate****Business, Engineering & Information Technologies Division**

Web Technologies includes four 100-1level courses enabling students to build and support simple web-based applications. Students completing this certificate will qualify for positions in web application support, quality assurance, usability testing, and help desk.

This certificate is the first in a series of stackable certificates leading to more advanced application development degrees at the associate and the baccalaureate levels.

**TECHNICAL SPECIALTY COURSES**

IT	102	Introduction to Programming . . . . .	5
IT	120	Network Essentials – Comptia Network + . . . .	5
		Must have EET 131 – IT Essentials I A+ CERT (may be taken concurrently) or instruction permission	
IT	125	Using Structured Query Language and SQL Server . . . . .	5
		Recommended: work or class experience using DBMS	
IT	161	Web Authoring 1 . . . . .	5
TOTAL PROGRAM CREDITS			20

## SKILLED TRADES AND TECHNICAL TRAINING

### Aviation Electronics I: Wire Assembly Certificate

#### Business, Engineering & Information Technologies Division

This certificate is designed to provide students with the basic knowledge, skills and abilities to meet minimum requirements for employment as an entry level wire assembly technician in aerospace-related technologies.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

#### PREREQUISITES

For Placement Testing: contact Testing Center, (206) 527-3674.

To begin program, students must test into the English and Math courses listed below:

BUS	169	Using Computers in Business . . . . .	5
		Following can be substituted: equivalent computer experience	
ENGL	097	English 097 – Integrated Reading and Writing I . . . . .	10
		Following can be substituted: higher ENGL course or ENGL 098 – College Prep Writing IV (5)	
MATH	084	Algebra I . . . . .	5
		Following can be substituted: higher MATH course or have taken equivalent or higher MATH course	

#### TECHNICAL SPECIALTY COURSES

EET	107	Introduction to Aviation Electronics . . . . .	5
EET	108	Introduction to Fiber Optics . . . . .	5
EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
		Following can be substituted: MATH& 141 – Precalculus I (5)	
EET	137	Introduction to Robotics . . . . .	5
EET	161	Principles of DC Electronics . . . . .	5
EET	162	A.C. Principles of Electronics . . . . .	5
TOTAL PROGRAM CREDITS			29-30

### Aviation Electronics II: Electronics Technician Certificate

#### Business, Engineering & Information Technologies Division

Electronics and associated technologies at North prepare students for careers in this diverse and expanding field. Ongoing changes in the electronics technology programs reflect changing community and industry needs. Instruction emphasizes a hands-on learning, the use of sophisticated test equipment unique to each discipline, and a solid base of electronics/electrical theory. These programs provide high-skill learning opportunities, including professional certification and Associate of Applied Science degree options. Also see the Sustainable & Conventional Energy & Control Technology program.

This certificate program prepares students for entry-level positions in aerospace-related technologies.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

#### PREREQUISITES

For Placement Testing: contact Testing Center, (206) 527-3674.

To begin program, students must test into the English and Math courses listed below:

BUS	169	Using Computers in Business . . . . .	5
		Following can be substituted: equivalent computer experience	
ENGL	097	English 097 – Integrated Reading and Writing I . . . . .	10
		Following can be substituted: higher ENGL course or ENGL 098 – College Prep Writing IV (5)	
MATH	084	Algebra I . . . . .	5
		Following can be substituted: higher MATH course or have taken equivalent or higher MATH course	

#### TECHNICAL SPECIALTY COURSES

EET	105	Introduction to Technology . . . . .	2
EET	106	Introduction to Soldering . . . . .	1
EET	107	Introduction to Aviation Electronics . . . . .	5
EET	108	Introduction to Fiber Optics . . . . .	5
EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
		Following can be substituted: MATH& 141 – PreCalculus I (5)	
EET	112	Fundamentals of Fluid Power . . . . .	5
EET	131	IT Essentials I – A+ Certification . . . . .	5
EET	137	Introduction to Robotics . . . . .	5
EET	161	Principles of DC Electronics . . . . .	5
EET	162	A.C. Principles of Electronics . . . . .	5
EET	163	Solid State Electronics . . . . .	5
EET	170	Digital Electronics & Plcs I . . . . .	5

**GENERAL EDUCATION COURSES**

BUS	236	Interpersonal Communications for the Workplace . . . . .	5
Following can be substituted:			
HUM 105 – Intercultural Communication (5)			
or ISP 101 – The Global Society (5)			
or ISP 110 – Introduction to Global Studies (5)			
or POLS 112 – Contemporary World (5)			
or SOC& 101 – Introduction to Sociology (5)			
The above course or listed substitutes meets the Human Relations requirement. BUS 236 is the preferred course.			
ENGL&	101	English Composition I . . . . .	5
Following can be substituted:			
ENGL& 230 – Technical Writing (3)			
or ENGL& 235 – Technical Writing (5)			

TOTAL PROGRAM CREDITS	60-63
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Air Washington is an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities. This workforce solution was funded \$20M (100%) by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use, by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.

## Avionics Technician Short-Term Certificate

### Business, Engineering & Information Technologies Division

This certificate is designed to provide students with the basic knowledge, skills and abilities to meet minimum requirements for employment as an entry level avionics technician in aerospace-related technologies. This program is intended as a supplement for Aviation Maintenance Technicians.

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

Many classes have prerequisites. Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior course work. Course work earned at other institutions must be unofficially evaluated or approved by a program advisor before registering.

**PREREQUISITES**

Successful completion of South Seattle College's  
AMT 112 – Basic Electricity for Aviation  
or Approved equivalent  
or FAA Airframe license.

**TECHNICAL SPECIALTY COURSES**

EET	107	Introduction to Aviation Electronics . . . . .	5
EET	108	Introduction to Fiber Optics . . . . .	5
EET	137	Introduction to Robotics . . . . .	5
Following can be substituted:			
EET 170 – Digital Electronics & PLCs I (5)			

TOTAL PROGRAM CREDITS	15
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## Building Trades Apprenticeships: Associate Controls Specialist Apprenticeship

This apprenticeship provides a career pathway into facility operations, engineering and controls contracting occupations. Workers in this occupation must understand the design, installation, and operation of mechanical systems, controls systems, low-voltage electrical circuits, motors, and pumps.

Each apprentice enrolls in related instruction (RSI) classes at a Committee approved school, community college or vocational and technical institute for 144 hours per year during the term of apprenticeship. Acceptance into the apprenticeship program requires employment with a program Training Agent employer. You can contribute to your success by applying yourself to achieving the stated competency objectives, approaching challenges with a positive attitude, progressing towards graduation and being a team player.

## Building Trades Apprenticeships: Ironworkers Local 86 Apprenticeship

The Ironworkers Local 86 apprenticeship program is a special opportunity at North Seattle College for you to get hands-on training in a field that will help you land a well-paid job while you are in training. Ironworkers erect the structural framework for high rise buildings, bridges, power plants and towers. They also place reinforcing steel in concrete forms for roadways, foundations and structures. Welding, ornamental, rigging and machinery moving are also a part of this trade.

Apprenticeship combines classroom studies with OJT (on-the-job training) under the supervision of a journey-level craftsman or trade professional. You can earn a living wage with healthcare, retirement, and other benefits while learning building trades skills. After completing the four years of an apprenticeship, you will earn \$42.35 per hour plus national mobility as a journey-level ironworker.

## Electronics Engineering Technology Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Business, Engineering & Information Technologies Division

This two-year program prepares students for advanced technical training and transfer into B.S. degree programs in electronics engineering technology at selected institutions such as Western Washington University or Central Washington University.

The program focuses on teaching practical engineering applications and skills, and provides a good foundation for those who wish to seek employment after the two-year program.

Because of the complexity of course prerequisites and course sequences, students need advanced planning assistance with an advisor. Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

### PREREQUISITES

For Placement testing, contact Testing Center, (206) 527-3674.

To begin program, students must test into the English and Math courses listed below:

BUS	169	Using Computers in Business	.5
Following can be substituted:			
IT 101 – Software Applications (5) or equivalent computer experience			
ENGL	097	English 097 – Integrated Reading and Writing I	10
or ENGL 098 – College Prep Writing IV (5 credits) or higher ENGL course			
MATH	084	Algebra I	.5
or higher MATH course			
or have taken equivalent or higher MATH course			

### TECHNICAL SPECIALTY COURSES

CSC	142	Computer Programming I	.5
Following can be substituted: any higher CSC course			
EET	105	Introduction to Technology	.2
EET	161	Principles of DC Electronics	.5
EET	162	A.C. Principles of Electronics	.5
EET	163	Solid State Electronics	.5
EET	165	Analog Circuits and Devices	.5
EET	166	Analog Circuits and Devices II	.5
EET	170	Digital Electronics & Plcs I	.5
EET	171	Digital Electronics & Plcs II	.5
EET	251	Microprocessor Fundamentals I	.5
EET	252	Microprocessor Fundamentals II	.5
EET	285	Electronics Tech Project	.3
PHYS&	221	Engineering Physics I	.5
PHYS&	222	Engineering Physics II	.5
PHYS&	223	Engineering Physics III	.5

### RELATED INSTRUCTION

&#8212; See Advising Center for list of designated courses for above requirements.

CMST&	210	Interpersonal Communication	.5
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ENGL&	101	English Composition I	.5
While students must test into ENGL 097 to start the degree, they must complete ENGL& 101 to finish			
MATH&	142	Precalculus II	.5
MATH&	151	Calculus I	.5
MATH&	152	Calculus II	.5
Global Studies			.5

Following can be substituted: US Cultures credits

Human Relations Elective	.5
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### TECHNICAL ELECTIVES

Technical Electives	.5
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Select five credits from approved list.

See Advising Center.

TOTAL PROGRAM CREDITS	110-112
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## Engineering Graphics & Design Technology Certificate

### Business, Engineering & Information Technologies Division

This program prepares students for the growing number of entry-level jobs in engineering, construction, and architectural firms. Our laboratory is equipped with industry standard Computer-Aided Design (CAD) systems to provide state-of-the-art graphics training. Coursework includes instruction and hands-on training in: computer and conventional drafting, construction materials and processes, basic engineering mechanics, and architectural cost estimating.

### PREREQUISITES

- Placement into ENGL 097/ ENGL 098 or higher
- Placement into MATH 084 or higher
- Completion of BUS 169 or IT 101

### TECHNICAL SPECIALTY COURSES

TDR	111	Basic CAD Drafting for Construction and Design	.5
TDR	112	Intermediate CAD Drafting/Construction & Design	.5
TDR	113	Basic Drafting	.5
TDR	124	Materials and Methods of Construction	.5
TDR	134	Systems in Buildings	.5
TDR	144	Design and Construction Environment	.5
TDR	176	Advanced AutoCAD for Arch & Engineering Drafting	.4

### RELATED INSTRUCTION

BUS	236	Interpersonal Communications for the Workplace	.5
EET	109	Mathematical Applications for Circuit Analysis	.5
Following can be substituted:			
MATH& 141 – Pre-Calculus I (5)			
or higher level math course			
ENGL&	101	English Composition I	.5

TOTAL PROGRAM CREDITS	49
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## Electronics Technology Certificate

### Business, Engineering & Information Technologies Division

This program provides opportunities for students interested in the operation, maintenance and repair of a wide array of electronics equipment, creating a broad foundation in electronics training. Instruction emphasizes a hands-on approach, use of sophisticated test equipment, and a solid base of information concerning computer hardware and software for technical applications. This program offers job training directed toward immediate employment and future advancement with companies specializing in manufacturing or servicing all types of electronic equipment.

### PREREQUISITES

For Placement Testing: contact Testing Center, 527-3674

A minimum of 15 credits of this certificate must be taken in residence at North Seattle College

To begin program, students must test into the English and Math courses listed below:

BUS	169	Using Computers in Business . . . . .	5
		equivalent computer experience	
ENGL	097	English 097 – Integrated Reading and Writing I. . . . .	10
		Following can be substituted:	
		ENGL 098 – College Prep Writing IV or higher ENGL course	
MATH	084	Algebra I . . . . .	5
		Following can be substituted: higher MATH course or have taken equivalent or higher MATH course	

### TECHNICAL SPECIALTY COURSES

EET	105	Introduction to Technology . . . . .	2
EET	106	Introduction to Soldering . . . . .	1
EET	107	Introduction to Aviation Electronics. . . . .	5
EET	108	Introduction to Fiber Optics . . . . .	5
EET	131	IT Essentials I – A+ Certification. . . . .	5
EET	132	IT Essentials A+ Certification Advanced . . . . .	5
		Following can be substituted:	
		EET 135 – Intro to Broadband (5)	
EET	137	Introduction to Robotics . . . . .	5
EET	161	Principles of DC Electronics . . . . .	5
EET	162	A.C. Principles of Electronics . . . . .	5
EET	163	Solid State Electronics . . . . .	5
EET	165	Analog Circuits and Devices. . . . .	5
EET	170	Digital Electronics & Plcs I . . . . .	5

### GENERAL EDUCATION COURSES

EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
		Following can be substituted:	
		MATH 141 – Pre-Calculus I (5) or higher MATH course	
ENGL&	101	English Composition I . . . . .	5
		Following can be substituted:	
		ENGL& 230 – Technical Writing (3)	
		or ENGL& 235 – Technical Writing (5)	

### GENERAL EDUCATION COURSES – HUMAN RELATIONS ELECTIVES

Choose from one of the following courses:

BUS	236	Interpersonal Communications for the Workplace . . . . .	5
		BUS 236 – Interpersonal Communications is the preferred course	
HUM	105	Intercultural Communication . . . . .	5
POLS	112	Contemporary World . . . . .	5
SOC&	101	Introduction to Sociology . . . . .	5
TOTAL PROGRAM CREDITS			65-68

## Electronics Technology Associate of Applied Science Degree (A.A.S.)

### Business, Engineering & Information Technologies Division

This program provides opportunities for students interested in the operation, maintenance and repair of a wide array of electronics equipment, creating a broad foundation in electronics training. Instruction emphasizes a hands-on approach, use of sophisticated test equipment, and a solid base of information concerning computer hardware and software for technical applications.

This program offers job training directed toward immediate employment and future advancement with companies specializing in manufacturing or servicing all types of electronic equipment.

### PREREQUISITES

For Placement Testing: contact Testing Center, 527-3674

To begin program, students must test into the English and Math courses listed below:

BUS	169	Using Computers in Business . . . . .	5
		Following can be substituted:	
		equivalent computer experience	
ENGL	097	English 097 – Integrated Reading and Writing I. . . . .	10
		Following can be substituted:	
		ENGL 098 – College Prep Writing IV (5) or higher ENGL course	
MATH	084	Algebra I . . . . .	5
		Following can be substituted:	
		higher MATH course or have taken equivalent or higher MATH course	

### TECHNICAL SPECIALTY COURSES

EET	105	Introduction to Technology . . . . .	2
EET	106	Introduction to Soldering . . . . .	1
EET	107	Introduction to Aviation Electronics. . . . .	5
		Credit Range: 4-5 credits	
EET	108	Introduction to Fiber Optics . . . . .	5
EET	112	Fundamentals of Fluid Power . . . . .	5
EET	114	Applied Physics . . . . .	5
EET	131	IT Essentials I – A+ Certification. . . . .	5
EET	132	IT Essentials A+ Certification Advanced . . . . .	5
EET	137	Introduction to Robotics . . . . .	5



EET	138	Industrial Robotics . . . . .	5
EET	161	Principles of DC Electronics . . . . .	5
EET	162	A.C. Principles of Electronics . . . . .	5
EET	163	Solid State Electronics . . . . .	5
EET	165	Analog Circuits and Devices . . . . .	5
EET	170	Digital Electronics & Plcs I . . . . .	5
EET	171	Digital Electronics & Plcs II . . . . .	5
EET	203	Programmable Logic Controllers . . . . .	5
EET	219	Metrology and Measurement Science . . . . .	3

**RELATED INSTRUCTION**

BUS	112	Multi-Cultural Issues in the American Workplace . . . . .	5
Following can be substituted: US Cultures course (5) or Global Studies course (5) For US Cultures/Global Studies course:			
EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
Following can be substituted: MATH & 141 – Pre-Calculus (5) or higher MATH course			
ENGL&	101	English Composition I . . . . .	5
While students must test into ENGL 097 to start the degree, they must complete ENGL& 101 to finish.			

**RELATED INSTRUCTION – HUMAN RELATIONS ELECTIVES**

Choose from one of the following:

BUS	236	Interpersonal Communications for the Workplace . . . . .	5
This is the preferred course.			
HUM	105	Intercultural Communication . . . . .	5
SOC&	101	Introduction to Sociology . . . . .	5

**RELATED INSTRUCTION – TECHNICAL ELECTIVES**

Any non-required course(s) from the following departments –  
EEL, EET, HVC, CSC, CHEM, ENGR or course listed below:

See Advising Center for assistance.

BUS	210	Business and Economic Statistics . . . . .	5
BUS	229	Project Management Tools Techniques and Control . . . . .	5
IT	111	Internet and Web Authoring Using XHTML . . . . .	5
Following can be substituted: higher IT course			
MATH	116	Applications of Math: Mngmnt, Life and Soc Sci . . . . .	5
Following can be substituted: higher MATH course			

TOTAL PROGRAM CREDITS	108-111
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**Watch Technology Institute Certificate****Business, Engineering & Information Technologies Division**

The Watch Technology Institute (WTI) teaches watch making, watch repair, theory and practical applications. Rolex Watch USA, Inc. partnered with North to create a state-of-the-art facility for North's long-established watchmaking program, the only one on the West Coast. Faculty members have industry experience and are industry certified trainers. After the successful completion of the program, students will qualify to take the American Watchmakers & Clock-makers Institute (AWCI) CW21 exams for certification.

The Swiss American Watchmaking Training Alliance (SAWTA) curriculum is supported by Rolex Watch USA, Inc. to encourage the training of watchmakers in the U.S. The Watch Technology program has limited seats available. Contact the WTI office for more information.

**TECHNICAL SPECIALTY COURSES**

HIN	111	Introduction to Watch Technology . . . . .	6
HIN	112	Watch Technology I: Tools, Equipment & Measurement . . . . .	6
HIN	113	Watch Technology I: Practicum . . . . .	10
HIN	121	Watch Technology II: Professional Knowledge . . . . .	6
HIN	122	Watch Technology II: The Watchmakers Lathe . . . . .	6
HIN	123	Watch Technology II: Practicum . . . . .	10
HIN	131	Watch Technology III: Winding and Setting Mechan . . . . .	6
HIN	132	Watch Technology III: Watch Gear Trains . . . . .	6
HIN	133	Watch Technology III: Practicum . . . . .	10
HIN	141	Watch Technology IV: Escapements . . . . .	4
HIN	142	Watch Technology IV: External Parts . . . . .	4
HIN	143	Watch Technology IV: Practicum . . . . .	8
HIN	211	Watch Tech V: Introduction to Precision Timing . . . . .	6
HIN	212	Watch Tech V: Introduction to Electronic Watches . . . . .	6
HIN	213	Watch Tech V: Practicum . . . . .	10
HIN	221	Watch Technology VI: Precision Timing 2 . . . . .	6
HIN	222	Watch Technology VI: Automatic Watches . . . . .	6
HIN	223	Watch Technology VI: Practicum . . . . .	10
HIN	231	Watch Technology VII: Advanced Precision Timing . . . . .	6
HIN	232	Watch Technology VII: Chronographs . . . . .	6
HIN	233	Watch Technology VII: Practicum . . . . .	10
HIN	241	Watch Technology VIII: After-Sales Service . . . . .	4
HIN	242	Watch Technology VIII: Review of Courses . . . . .	4
HIN	243	Watch Technology VIII: Practicum . . . . .	8

TOTAL PROGRAM CREDITS	164
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## Watch Technology Institute Associate of Applied Science Degree (A.A.S.)

### Business, Engineering & Information Technologies Division

The Watch Technology Institute (WTI) teaches watch making, watch repair, theory and practical applications. Rolex Watch USA, Inc. partnered with North to create a state-of-the-art facility for North's long-established watchmaking program, the only one on the West Coast. Faculty members have industry experience and are industry certified trainers. After the successful completion of the program, students will qualify to take the American Watchmakers & Clock-makers Institute (AWCI) CW21 exams for certification.

The Swiss American Watchmaking Training Alliance (SAWTA) curriculum is supported by Rolex Watch USA, Inc. to encourage the training of watchmakers in the U.S. The Watch Technology program has limited seats available. Contact the WTI office for more information.

### TECHNICAL SPECIALTY COURSES

HIN	111	Introduction to Watch Technology . . . . .	6
HIN	112	Watch Technology I: Tools, Equipment & Measurement . . . . .	6
HIN	113	Watch Technology I: Practicum . . . . .	10
HIN	121	Watch Technology II: Professional Knowledge .	6
HIN	122	Watch Technology II: The Watchmakers Lathe .	6
HIN	123	Watch Technology II: Practicum . . . . .	10
HIN	131	Watch Technology III: Winding and Setting Mechan . . . . .	6
HIN	132	Watch Technology III: Watch Gear Trains . . . .	6
HIN	133	Watch Technology III: Practicum . . . . .	10
HIN	141	Watch Technology IV: Escapements . . . . .	4
HIN	142	Watch Technology IV: External Parts . . . . .	4
HIN	143	Watch Technology IV: Practicum . . . . .	8
HIN	211	Watch Tech V: Introduction to Precision Timing .	6
HIN	212	Watch Tech V: Introduction to Electronic Watches . . . . .	6
HIN	213	Watch Tech V: Practicum . . . . .	10
HIN	221	Watch Technology VI: Precision Timing 2 . . . .	6
HIN	222	Watch Technology VI: Automatic Watches . . .	6
HIN	223	Watch Technology VI: Practicum . . . . .	10
HIN	231	Watch Technology VII: Advanced Precision Timing . . . . .	6
HIN	232	Watch Technology VII: Chronographs. . . . .	6
HIN	233	Watch Technology VII: Practicum. . . . .	10
HIN	241	Watch Technology VIII: After-Sales Service. . .	4
HIN	242	Watch Technology VIII: Review of Courses . . .	4
HIN	243	Watch Technology VIII: Practicum . . . . .	8

### GENERAL EDUCATION COURSES

Total required General Education credits: 20

BUS 236 Interpersonal Communications for the Workplace . . . . .5

Following can be substituted:

Other Approved Human Relations Course

ENGL& 101 English Composition I . . . . .5

MATH& 107 Math in Society . . . . .5

U.S. Cultures . . . . .5

Following can be substituted: Global Studies courses

Select from approved list. See Advising Center.

TOTAL PROGRAM CREDITS 184

## SOCIAL SCIENCES, HUMANITIES, AND LANGUAGE

### Anthropology (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts degree with an emphasis on Anthropology. Students in this program develop skills in data analysis, research design, oral and written communication, group communication and collaboration, and become adept in diversity, equity, and inclusion.

Completion of this program opens doors to a variety of careers in sectors including international relations/law, non-profits, museums/zoos, education, government, health care, tourism, and business. It also allows you to transfer at the junior level into an Anthropology program at a four-year college or university.

### Communication Studies (A.A.–DTA)

This two-year program is designed for students who wish to complete an Associate of Arts – Direct Transfer Agreement degree with an emphasis in Communication Studies. Students in this program develop skills in verbal communication, analysis and research, multicultural awareness, computer and technical literacy, audience analysis, group communication and collaboration, interpersonal communication, leadership and facilitation.

Completion of this program allows students to transfer at the junior level into a Communication Studies, Media & Communications, Journalism, or a related program at a four-year college or university. It also opens doors to a variety of careers in sectors including non-profit, business, government, entertainment, and education.

### English, Literature, and Writing Studies (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts – Direct Transfer Agreement degree with an emphasis in English. Students in this program will develop skills in written communication, information literacy, analysis and research, multicultural awareness, metacognition/critical self-reflection, problem-solving, audience awareness, group communication and collaboration, and interpersonal communication.

Completion of this program allows students to transfer at the junior level into an English, Media & Communications, Journalism or a related field at a four-year college or university. It also opens doors to a variety of careers in sectors including education, media/entertainment, publishing, law, government, non-profit, and business.

### Equity and Social Justice (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts (AA) degree with an emphasis in Equity and Social Justice. Students in this program engage in an interdisciplinary examination of various dimensions of human diversity – including race, class, gender, sexuality, ability, religion, and more – with a focus on social justice and change. Students will develop skills in oral and written communication, critical thinking and problem solving, systems analysis, research design and planning, digital technology, collaboration, leadership, and intercultural fluency.

Completion of this program allows students to transfer into a social sciences or humanities major at a four-year college or university. Completion of this degree also opens doors to a variety of careers in sectors including social services, government, non-profit, education, media, law, and business.

### Gender, Women, and Sexuality Studies (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts (AA) degree with an emphasis in Gender, Women and Sexuality Studies. Students in this pathway develop skills in critical thinking, writing and verbal communication, analysis and research, cultural competency and multicultural awareness, as well as collaboration, interpersonal communication, and leadership.

Completion of this degree allows students to transfer at the junior level into a Gender and Women Studies or related program at a four-year college or university, as well as opening doors to a variety of careers in sectors including non-profit, business, government, entertainment, and education.

### History (A.A.–DTA)

This two-year program is designed for students who wish to complete an Associate of Arts (AA) degree with an emphasis in History. Students in the program learn how to think historically, hone their written and verbal communication skills, acquire research methods and analytical tools, develop information literacy, and better comprehend how events in the past influence our present.

Completion of this degree allows students to transfer at the junior level into several fields of study at a four-year college or university, including History, American Ethnic Studies, Queer Studies, Archeology, Anthropology and more. Completion of this program also opens doors to a variety of careers in museums, government, research, park service, political activism, nonprofits, policy, and education.

## Philosophy (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts (AA) degree with an emphasis in Philosophy. Students in this program develop skills in problem solving, analytical thinking, communication, information management, writing, reading and interpretation of text.

Completion of this degree allows students to transfer at the junior level into a Philosophy program at a four-year college or university, as well as opening doors to a variety of careers in sectors including non-profit, business, government, entertainment, and education.

## Political Science (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts (AA) degree with an emphasis in Political Science. Students in this pathway develop skills in critical analysis, research, multicultural awareness, communication, information literacy, audience analysis, networking, and leadership. Students will build foundational knowledge of political institutions, policy, American systems, globalization, and political theory.

Completion of this degree allows students to transfer at the junior level to a Political Science, Economics, Media & Communications, or a related program at a four-year college or university with core Political Science classes completed. Completion of this degree also opens doors to a variety of careers in fields including public service, government, interest groups, sustainability, businesses, social media, and education.

## Psychology (A.A.–DTA)

This two-year program is designed for students who wish to complete an Associate of Arts-Direct Transfer Agreement (AA-DTA) degree with an emphasis in Psychology. Students in this program develop an awareness of human behavior and thinking that will serve them in both personal and professional capacities. Students will also develop skill in critical thinking, research, interpersonal awareness, group communication and collaboration, problem solving, information-finding, and time management.

Completion of this degree allows students to transfer at the junior level to a Psychology program at a four-year college or university, as well as opening doors to entry level employment in many sectors including non-profit, social work, healthcare, education, business, and government.

## Sociology (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts (AA) degree with an emphasis in Sociology. Students in this program think from a systems perspective, broaden their worldview, and become thoughtful citizens of the world. Students develop skills in analysis and research, multicultural awareness, computer and technical literacy, group communication and collaboration, interpersonal communication, institutional analysis, critical thinking, reading and writing.

Completion of this degree prepares students with foundational courses to transfer to a four-year college to earn a bachelor's degree in sociology or a related field, as well as opening doors to a variety of careers in sectors including non-profit, business, government, marketing, advertising, social justice, and education.

## World Languages (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts-Direct Transfer Agreement (AA-DTA) degree with an emphasis in World Languages/ Linguistics. Students in this program develop skills in verbal communication, analysis and research, multicultural awareness, group communication and collaboration, interpersonal communication and language acquisition. Students will also develop basic computer skills such as typing and using a computer in different languages, Excel, Word, and PowerPoint.

Completion of this degree allows students to transfer at the junior level to a Linguistics or specific World Languages program at a four-year college or university. Completion of this degree also opens doors to a variety of careers in sectors including non-profit, healthcare, international business, government, entertainment, legal and education.

# Seattle Central College

## Welcome

What's the Seattle Central experience like? It's small classes, engaging instructors, challenging programs, and a diverse student body set in a vibrant urban neighborhood in the heart of Seattle. It's about starting your four-year degree, learning marketable skills, and making connections. Most of all, it's about becoming a better, more capable you.

Each year, more than 15,500 students choose Seattle Central College to help them meet their educational goals. We are proud to be one of the most diverse educational institutions in Washington state. We attract people from all walks of life who seek education to better their lives, representing a multitude of ages, races, nationalities, ethnicities, and backgrounds, which creates a rich learning environment.

Our main campus on Capitol Hill is easily reached by public transportation, with light rail connecting the campus to other parts of the city, including the University of Washington. Our urban location offers countless choices for shopping, dining, and entertainment.

We also offer classes at three nearby locations. The Wood Technology Center, in the Central District, has been training woodworkers since 1936. The Seattle Maritime Academy features a new facility on the working waterfront in Ballard and trains students to work in the maritime industry. Our Health Education Center at Pacific Tower in Beacon Hill opened in 2016 and features the latest in medical technology to prepare students to work in the health care industry.

The college offers a range of programs, degrees, and certificates serving the career goals of students and the demands of employers in culinary arts, apparel design, information technology, maritime, health care, and social and human services. All programs provide real-world, hands-on training from instructors who stay current with the latest industry trends.

Whatever your educational goals, Seattle Central can help. Unlike many colleges, we have an open admissions policy. If you want to succeed in college, we have a place for you. Visit [seattlecentral.edu/future](http://seattlecentral.edu/future) or call (206) 934-3898.



## Getting Started at Central

<b>Admissions</b>	<b>(206) 934-5450</b>
<b>International Students</b>	<b>(206) 934-3893</b>
<b>Financial Aid</b>	<b>(206) 934-3844</b>
<b>Information Center</b>	<b>(206) 934-3800</b>
<b>Registration</b>	<b>(206) 934-6918</b>

## Mission

As an open-access learning institution, Seattle Colleges prepares each student for success in life and work, fostering a diverse, engaged, and dynamic community.

## Vision

Seattle Colleges is recognized as an exemplary learning institution that transforms lives, promotes equity, and enriches the community.

## Core Themes

- Responsive Teaching and Learning
- Catalyst for Opportunities and Success
- Diversity in Action
- Communities Engagement

## Facts at a Glance\*

### 2019–2020 ANNUAL PROFILES

Annual attendance 2019–2020 11,175

#### Special Enrollments

Distance Education	5,679
Running Start	865
International Students	1,494
Worker Retraining	468

### FALL 2019 PROFILES

#### Students \*\*

Median age	25
Ethnic diversity	56%
Male/Female	39%/52%
With bachelor or higher degrees	10%
Full-time/Part-time attendance	47%/53%

#### Programs

College Transfer	51%
Career and Technical	34%
Basic Skills, Pre-college, and Other	15%

#### Course Funding Sources

State-funded	66%
Contract-supported	26%
Student-supported	8%

\* Source: State Board for Community and Technical Colleges Data Warehouse and Seattle College District's Database.

\*\* State-funded

## Specialized Training Centers

### Seattle Maritime Academy

4455 Shilshole Ave NW, Seattle, WA 98107

(206) 934-2647

[maritime.seattlecentral.edu](http://maritime.seattlecentral.edu)

Seattle Maritime Academy's focus is as a Professional Technical school helping supply the industry with confident and competent middle-rate mariners to fill the looming gap in the maritime workforce. We support Seattle and the Pacific Northwest in preparing students for family/living-wage jobs to rebuild the middle class. It is located in the heart of Ballard on the working waterfront of the Lake Washington Ship Canal. The academy offers certificate programs in Marine Deck Technology and Marine Engineering Technology as well as community education training in a variety of marine-related subjects. The academy also provides professional development and customized trainings and skill-building classes to private-sector companies, government agencies, military units, and unions.

### Wood Technology Center

2310 South Lane, Seattle, WA 98144

(206) 934-5460

[woodtech.seattlecentral.edu](http://woodtech.seattlecentral.edu)

The state-of-the-art Wood Technology Center has trained Northwest woodworkers since 1936. Programs include core training in safety, skills, tools, and materials, as well as specializations in cabinetmaking, fine woodworking, carpentry, marine technology, boatbuilding, and repair. Students can earn associate degrees or a series of skill-specific certificates.

### Health Education Center

1200 12th Ave S, HEC 202 Seattle, WA 98144

(206) 934-4347

[healthcare.seattlecentral.edu/health-education-center](http://healthcare.seattlecentral.edu/health-education-center)

Seattle Central's Health Education Center offers a variety of intensive, hands-on training programs that prepare students for successful health care careers. Occupying five floors of the historic Pacific Tower on Beacon Hill, the center contains facilities that include modern labs equipped with the latest health care technology, providing a real-world training environment. With day, evening, and hybrid classes, students have the flexibility to enroll in certificate, associate degree and bachelor's degree programs in Dental Hygiene, Respiratory Care, Nursing, Surgical Technology, Health Care Services Management, and more.



# Student Services

## Advising Center

(206) 934-4068

[seattlecentral.edu/advising](http://seattlecentral.edu/advising)

### The Advising and Career Services

Our programs assist students with planning their academic interests and career goals.

### Our Mission Statement

Seattle Central Advising and Career Services support students as they navigate their college experience. We focus on our students' holistic development through an ongoing and intentional educational partnership that fosters pathways that help them become equity-minded citizens.

Additionally, we facilitate the development of academic, professional, and social skills necessary for students to empower themselves and their community.

### Our Vision

Our goal is to serve as agents of support, to guide and connect students with campus and community resources that help them achieve their academic, personal, and professional pursuits.

### Our Programs

- **The Academic Advising Center** - Assists students with pre-program advisement, choosing classes, creating education plans, navigating college resources, and preparing for graduation.
- **College Transfer and Study Abroad Center** - Assists students in making the transition from Seattle Central to four-year universities. This includes school and major of study research, application information and deadlines, and general guidance on the transfer process.
- **Career Exploration Center** - Helps students identify and choose an area of study through class planning, career assessments, and academic resources. Our team also provides career advising, empowering students by building effective job readiness skills.
- **Service-learning** - An opportunity for students to earn credits by combining community involvement with academic instruction. Student Learning is linked to specific classes as either a requirement or an option.
- **Cooperative Education (Co-op)** - Students may earn class credit for their jobs or paid/unpaid internships. This service is offered to students enrolled in college transfer or workforce education programs.
- **Seattle Promise** - Provides the first two years (or up to 90 credits) of tuition, additional financial support for books, transportation, housing, etc. to those with financial need, and personal guidance to succeed in college. All Seattle Public High Schools graduates are eligible regardless of grade point average (GPA), income, ability, or country of birth.

## Class Schedule Quarterly

(206) 934-3800

[mycentral.seattlecolleges.edu](http://mycentral.seattlecolleges.edu)

Seattle Central produces a quarterly class schedule that lists specific courses offered that quarter. It is available online approximately six weeks before the start of each quarter. To view the online class schedule, visit Seattle Central's home page and click on "class schedule."

## Computer Center

(206) 934-4194

[seattlecentral.edu/it-services/computerlabs](http://seattlecentral.edu/it-services/computerlabs)

The Computer Center is open to all Seattle Central students and has PC and Apple computers with student network software and internet connectivity. Printing is available at minimal cost. Current Seattle Central enrollment is required. A student ID number is required for access, and a student ID card is needed for equipment checkout. Visit the Computer Center in Room BE3148 for more information.

## Counseling Services

(206) 934-3295

[seattlecentral.edu/counsel](http://seattlecentral.edu/counsel)

Seattle Central's Counselors work with students enrolled at Seattle Central College to explore and pursue their educational and career goals, as well as achieve personal growth. As faculty professionals with clinical experience and advanced degrees in counseling/guidance, education, psychology, and social work we recognize that pursuing education presents opportunities as well as challenges. Seattle Central Counselors are committed to supporting students to access opportunities, meet challenges, and take best advantage of their personal educational experience.

### Mission

Our mission is to promote a holistic approach to the intellectual and social-emotional development of students towards equity, diversity, and inclusion through counseling and teaching.

### Vision

The Counseling Center emphasizes:

1. Commitment to student success
2. Student resiliency, growth, and healing
3. Cultivating partnerships with the campus community through outreach and consultation services
4. Building a sense of community through culturally responsive counseling

## Values

In support of Seattle Central College's values of equity, diversity, and inclusion, we at the Counseling Center honor the intersecting identities and characteristics that make us unique individuals. We recognize and acknowledge the impact of oppression, power, and privilege on students' social-emotional development. We strive to create a trusting environment and a space where people feel safe. Our commitment to our campus community is to embrace and celebrate diversity in all its richness. We offer the following services to all currently enrolled students:

### Personal Counseling

Personal counseling helps address issues that can make it difficult for students to succeed in college. These may include stress, grief, anxiety, depression, problems with self-esteem or relationships, culture shock, and other life concerns. Referrals may be made for long-term counseling or therapy.

### Career Counseling

Career counseling helps students explore career paths that best fit their skills, needs, personality, and interests. Counselors use career assessment tools to help students gain a better understanding of their strengths and interests.

### Academic Counseling

Academic counseling helps students cope with issues related to classes, adjusting to college culture, understanding college processes and other issues. Referrals may be made to campus support services such as tutoring.

### Crisis Intervention

While at school, students may occasionally encounter extremely challenging situations in their personal lives. Counseling staff are available to address these immediate problems and, if necessary, refer them to additional support services.

## Disability Services

### Accessibility Resource Center

(206) 934-4183

ARC.Central@seattlecolleges.edu

#### Services Offered

Testing accommodations, assistive technology, sign language interpreting, alternate format, and other services as appropriate. During remote operations the ARC office will continue to process intakes for services, arrange testing accommodations, and any other services needed based on request.

#### Operations Update

For assistance regarding accommodations or accessibility during remote operations, contact ARC.Central@seattlecolleges.edu.

#### Current ARC Students

Renewing letters of accommodation for spring: complete the Letter of Accommodation request form on the ARC website.

Requesting interpreters for spring: email SignLangReq.Central@seattlecolleges.edu (include your class schedule).

Appointments can be made by contacting the office at ARC.Central@seattlecolleges.edu.

## New or Prospective Students

For any questions: please contact the ARC office via email at ARC.Central@seattlecolleges.edu or voicemail at (206) 934-4183.

Requesting accommodations: please email ARC.Central@seattlecolleges.edu to request an intake appointment

Accessibility Resource Center (ARC) provides equal access to students with documented disabilities and acts in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act.

*See page 229 for specific details and additional information on eligibility and policies.*

## International Programs, BE1113

(206) 934-3893

Email: IntlCentral@seattlecolleges.edu

intl.seattlecolleges.edu

This office provides comprehensive support for students on non-resident visas studying at Central. Key functions of the office include advising on immigration and instructional programs, housing, medical insurance, or personal concerns that may be impacting student success. Field trips and other student activities that help students adjust to life in Seattle and promote intercultural communication and an enhanced experience of American culture are also provided.

*See page 28 for additional International Programs and Services, including international student admissions. Study Abroad opportunities are outlined at intl.seattlecolleges.edu/go-abroad.*

## Library

seattlecentral.edu/library

library.central@seattlecolleges.edu

Broadway Campus Library, BE2021

Circulation (206) 934-4050

Research Help (206) 934-5421

Health Education Center Library (206) 934-4041

Wood Technology Center Library (206) 934-2972

The Library provides services and information that students need to flourish academically, personally, and in community. We welcome diverse voices, approaches, and perspectives to build the knowledge that will make our communities stronger and wiser.

Our collections include print and online books and periodicals, reserve textbooks, streaming video and music, and research databases. We offer individual and group study space, network computers, printers, photocopiers, scanners, and media equipment.

Library faculty provide classroom instruction as well as individual research help, which students may access in-person, and via email, phone, 24/7 chat, or video meeting.

## Multicultural Services

(206) 934-4085

Multicultural Services is committed to creating an institutional climate and practice that supports Seattle Central's diverse student populations in achieving their academic goals. The office, located in BE 1103, develops innovative services, collaborates with other college departments and divisions on campuswide initiatives, presents professional development activities on multiculturalism and diversity, and disseminates information on diversity resources for students, faculty, and staff. Multicultural Services advances institutional responsiveness to the needs of students of diverse cultural backgrounds through such efforts as the Annual Students of Color Conference, which supports critical thinking, leadership skills, and social justice activism.

## Running Start

(206) 934-3820

[runningstart.central@seattlecolleges.edu](mailto:runningstart.central@seattlecolleges.edu)

Running Start is a program that allows 11th and 12th grade students to take college courses at Washington's 34 community and technical colleges. Students earn both high school and college credits for these courses.

Running Start students and their families do not pay tuition. They are responsible for mandatory fees, books, and transportation. Students receive both high school and college credit for these classes, which accelerates their progress through the education system.

### Mission Statement

The mission of Running Start is to provide student services support to qualified high school students who are registered in college courses at Seattle Central while following all Washington State Running Start laws and college policies and guidelines. We are able to serve our students and the college through:

- Promoting academic success through advising and counseling sessions.
- Promoting a successful transition from high school to college.
- Offering college transfer and career advising and counseling.
- Promoting Running Start through outreach to area high schools.
- Supporting accessibility and equity of the Running Start Program for eligible students.

## Senior Adult Education

Washington state residents 60 years or older may register for up to two courses for audit or credit for a fee of \$5 per class. Seniors register on a space-available basis beginning the second week of the quarter but prior to the 10th day of the quarter. Students should attend class the first week of the quarter with instructor permission while waiting to find out if space is available. If the instructor allows the student to attend, the student should pick up an enrollment form from the registration or information center to obtain instructor's signature to enroll. Students are responsible for any additional charges, such as ID card, lab fees, activity fee, transportation fee, books, or supplies. When seniors enroll for more than two courses, they pay for the additional credits at regular tuition rates. Credits taken using the senior citizen waiver cannot be used toward degree completion.

## STARS Program (Student Transitioning & Reaching Success)

(206) 934-0973 SAC 350

Seattle Central's STARS Program guides students who have been in a foster care program or are/were unaccompanied homeless youth by offering funding, academic guidance, career counseling, and referral resources to ensure students' holistic needs are being met. STARS guides students toward services designed to support them in achieving their academic goals.

## Student Academic Services/Tutoring

### Learning Support Network - Tutoring Services

[seattlecentral.edu/campus-life/student-support-and-services/learning-support-and-tutoring](http://seattlecentral.edu/campus-life/student-support-and-services/learning-support-and-tutoring)

The Learning Support Network provides accessible and quality academic support to Seattle Central students by improving comprehension, increasing competence, instilling confidence and promoting success. The Network is comprised of multiple learning centers and satellite tutoring locations that offer knowledgeable peer and expert tutors to assist students in their academic coursework. Our centers offer appointment and/or drop-in tutoring, online tutoring options, workshops, group study sessions, access to computers and more. The overall goal of the Learning Support Network is to enable students to succeed in their studies and become independent, life-long learners.

**BE Learning Center BE2102****(206) 934-0972**

[seattlecentral.edu/campus-life/student-support-and-services/learning-support-and-tutoring/be-learning-center](http://seattlecentral.edu/campus-life/student-support-and-services/learning-support-and-tutoring/be-learning-center)  
[BElearning.central@seattlecolleges.edu](mailto:BElearning.central@seattlecolleges.edu)

The BE Learning Center provides tutoring in a variety of subjects, including: writing for all subjects, foreign languages and ASL, accounting, economics, statistics, CDS/ECED/SHS/Behavioral Sciences, and pre-college English for international students. The Center also provides quiet spaces and computer stations for studying independently. Satellite locations provide tutoring in Culinary Arts and Apparel Design.

**SAM (Science & Math) Learning Center SAM 100****(206) 934-6919**

[seattlecentral.edu/campus-life/student-support-and-services/learning-support-and-tutoring/sam-learning-center](http://seattlecentral.edu/campus-life/student-support-and-services/learning-support-and-tutoring/sam-learning-center)  
[SAMlearningsupport@seattlecolleges.edu](mailto:SAMlearningsupport@seattlecolleges.edu)

The SAM Learning Center provides tutoring in a variety of STEM subjects, including: biology, chemistry and organic chemistry, computer science (CSC 110, 142, 143), engineering, mathematics (pre-college and college level), and physics.

The Math Path, located next to the Learning Center in a classroom with computers, provides support for students in pre-college level math.

The Biology Learning Center, located on the third floor of the SAM building, is a drop-in center that allows students to use course- and laboratory-specific materials and work with tutors.

**IT & BTM Program Tutoring**

[seattlecentral.edu/campus-life/student-support-and-services/learning-support-and-tutoring/it-btm-tutoring](http://seattlecentral.edu/campus-life/student-support-and-services/learning-support-and-tutoring/it-btm-tutoring)  
[ITtutoring.central@seattlecolleges.edu](mailto:ITtutoring.central@seattlecolleges.edu)

The IT & BTM Program Tutoring provides tutoring in a variety of IT & BTM subjects and program areas, specifically for students in professional-technical programs. These subjects/areas include: Business Technology Management, MS Office, Networking, Adobe Suite, GitHub website/configuration, Database Admin and Development, Programming Languages (Python, Java, JavaScript, HTML, CSS, Linux, Debug, SQL, C#, PHP, ASP.NET), Visual Studio, Web Design and Development.

The IT & BTM Program Tutoring is located on the third floor of the BE building – near the IT & BTM program area. There are also online tutoring options available.

**The Bruce McKenna Writing Center**

[seattlecentral.edu/campus-life/student-support-and-services/learning-support-and-tutoring/bruce-mckenna-writing-center](http://seattlecentral.edu/campus-life/student-support-and-services/learning-support-and-tutoring/bruce-mckenna-writing-center)

The Bruce McKenna Writing Center offers individual and group tutoring sessions for writers of all skill levels:

- Advice on the writing process (revision, planning, outlining, research)
- Feedback on academic writing, including class papers
- Assistance with personal statement and transfer application essays
- Help with resume and cover letter writing

**TRiO Student Academic Assistance****(206) 934-3852**

[seattlecentral.edu/trio](http://seattlecentral.edu/trio)

The mission of Seattle Central College's federally funded TRIO-Student Success Services (SSS) program is to promote retention, graduation, and college transfer of underserved students through the delivery of individualized services to empower personal, academic, and professional growth. Seattle Central has two TRIO-SSS programs: Classic and STEM (Science, Technology, Engineering, Math).

The Seattle Central TRIO-SSS team focuses on academic persistence and provides individualized services to facilitate personal, academic and professional growth. Some of the services provided include:

- Develop an education and transfer plan
- Help with applying for financial aid and scholarships
- Free tutors in English, Math, and other academic subjects
- Help with college admissions and personal statements
- Student success strategy coaching and workshops
- Career exploration
- Community building

**Students We Serve**

- Students who are the first in their family to earn a Bachelor's degree, low-income or have a documented disability.
- Students who are enrolled in an academic transfer degree program (Associate of Science or Associate of Arts) and;
- Students who show a need for academic assistance and are highly motivated to graduate and pursue a bachelor's degree.

## Student Support Programs

**Broadway Campus BE3215**

**StudentSupport@seattlecolleges.edu**

Seattle Central offers a range of programs and services that can provide meaningful support for students.

### Childcare Assistance Program

Childcare Assistance Program offers funding, information, and referral resources to students desiring childcare assistance while attending school.

### Emergency Funding

Emergency Funding provides a funding avenue for students requiring emergency assistance in special circumstances.

### Re-Entry Support Programs

Re-Entry Support Programs provides a welcoming, supportive, and responsive learning environment for all currently and formerly incarcerated students.

### Veterans Services

The Veteran Support Specialist will be your guide and advocate between the college and the department of Veterans Affairs (VA) by assisting you in applying for educational funding, offering guidance on VA policies and benefits, as well providing information about additional available resources. The support specialist serves as the Veterans Representative at Seattle Central College.

### Food and Stability Resources

Seattle Central is in partnership with Jewish Family Services and Operation Sack Lunch, to provide students with access to food and stability resources that includes, children's supplies, and toiletry items. We also host regularly scheduled community meals. Students are encouraged to inquire about resources and income supports they may be eligible for in our area.

## Testing Office

**(206) 934-6344**

**seattlecentral.edu/testing**

Most students seeking a degree or certificate or enrolling in most English or mathematics classes must take placement tests prior to registration. English and Math tests are available only online and help the student and advisor select appropriate classes. This office also offers ASL (American Sign Language) placement tests, ESL placement tests, GED exams, and exam proctoring services for other institutions. Testing schedules and detailed descriptions are available online or by phone.

## Veterans Affairs

**(206) 934-4147**

**seattlecentral.edu/veterans**

For information about using VA benefits to attend Central or how to qualify for a veterans tuition discount, visit the website or contact the veterans coordinator in BE 1104C.

For a complete description of the educational benefits for veterans and their dependents, as well as assistance for students interested in pursuing careers in the military, visit the U.S. Veterans Affairs website at va.gov.

*See page 216 for more details.*

## Workforce Services

**(206) 934-3854**

**seattlecentral.edu/workforce**

Workforce Services assists students in identifying and achieving their educational and career goals, with a special emphasis on support for low-income students, students on TANF or Basic Food and students receiving unemployment benefits.

Basic Food Employment and Training (BFET), Opportunity Grant, WorkFirst and Worker Retraining provide financial assistance for tuition, books, and supplies for eligible students. Visit [startnextquarter.org](http://startnextquarter.org) to help determine preliminary eligibility.

Educational planning with professional staff helps students access education and success through individual plans and campus and community resources.

Both current students and those wanting information and assistance in attending Seattle Central can contact Workforce Services.



# Campus Life

## Art Gallery

**M. Rosetta Hunter Art Gallery**  
(206) 934-4379

9:30 a.m. to 3:30 p.m., Monday through Friday  
5 to 7 p.m., Tuesday and Wednesday

The Art Gallery, located in the Atrium, is an educational exhibition space that enhances Seattle Central's academic goals and contributes to the cultural enrichment of the institution. It hosts exhibits and activities that reflect and serve our multicultural population. The gallery presents approximately nine exhibits throughout the academic year and one show during the summer. Many feature the work of Seattle Central students and graduates.

## Bookstore

(206) 934-4148  
[seattlecentral.bnccollege.com](http://seattlecentral.bnccollege.com)

The Bookstore, located in SAC 250 across the street from the main college building on Broadway, carries required and recommended textbooks for courses. Textbooks and supplies can also be ordered online at [seattlecentral.bnccollege.com](http://seattlecentral.bnccollege.com). The Bookstore offers a wide array of rental and digital titles as well as new and used textbooks. Rentals can save you up to 50 percent of the cost, and e-textbooks can be as much as 80 percent less than a new textbook. The Bookstore offers a textbook buyback service year-round, with a special buyback for students with proper ID during final exam week each quarter. It also carries school supplies, clothing, gifts, and snacks. For hours of operation and current information, visit the website or [facebook.com/seattlecentralbooks](https://facebook.com/seattlecentralbooks).

## Copy Center

(206) 934-5419  
Online ordering: [seattlecentral.edu/copycenter/index.php](http://seattlecentral.edu/copycenter/index.php)

The Copy Center in BE 3105A provides copying service for students, faculty, and staff. In addition to copying services, self-service copiers are available. Supplies such as blue books, scantrons, envelopes, transparencies, and course packets are for sale here. Fax service available within the U.S.

## Erickson Theatre

1524 Harvard Ave, (between Pike & Pine on Capitol Hill)

The Erickson Theatre is the home of the SCC Drama Department, teaching drama and technical theatre classes as well as being used for campus and community special events.

## Food Services

(206) 934-4319  
All are open to the public.

The **Atrium** cafeteria is open from 7:30 a.m. to 6 p.m. Monday through Thursday and until 2:30 p.m. Friday. The Atrium features a variety of cafeteria-style food, including a breakfast menu, burgers, pizza, beverages, healthy salads, sandwiches, Grab 'n Go items, and prepackaged snacks.

The **Buzz** by the Broadway entrance offers a wide variety of espresso, coffee, and smoothies, as well as pastries and other sweets created by the Culinary Arts students. It is open from 7:30 a.m. to 6 p.m. Monday through Thursday and until 2:30 p.m. Friday.

The **Buzz Pastry Case** offers both savory and sweet baked goods and pastries made by students of the Specialty Desserts & Breads program. Selections include a variety of breakfast pastries, European pastries, cakes, cookies, many desserts, chocolates, and a large selection of rustic artisan breads. During Fall, Winter, and Spring Quarters, students from the Culinary Arts program prepare and serve a variety of specialty meals in the **Square One Bistro** and **One World Dining Room**. Guests who dine at our student-run restaurants give students the opportunity to acquire the necessary experience to be successful out in industry. These restaurants are open to the public Tuesday through Friday from 11:15 a.m. to 12:45 p.m.

**Square One Bistro** features contemporary, casual dining with fresh market salads, soups, entrees, and baked goods, as well as pastas and artisanal pizzas from the woodstone oven.

**One World Restaurant** offers seasonally focused ever-changing menus with global influences, featuring quality local and sustainably produced ingredients.

For current menus, visit [seattleculinary.com](http://seattleculinary.com).

Reservations for restaurants: (206) 934-4330

Summer Quarter students prepare "small-plate" cuisine of sample salads, sandwiches, canapés, entrées, pâtés, international street food, and tantalizing desserts, including house-made ice cream and gelato. Most of the ingredients are sourced from student-grown produce on Skagit Valley farmlands. The menu changes daily. The small-plates buffet is open Tuesday through Thursday from 11:15 a.m. to 1 p.m. Restaurants close for several weeks during the year when students are in finals or on break. Check the website for current status and hours.

## Public Safety

**(206) 934-5442 Public Safety Department  
BE 1108**

Seattle Central College Public Safety Department is committed to providing a safe environment for the college community, including students, staff, faculty, and visitors. The department takes a community approach to campus security and safety prevention. It is important that everyone speaks up. If you see something suspicious, tell someone.

- For all on-campus emergencies, call 911. When calling 911 for assistance, clearly state the type of emergency: police, fire, or medical. Clearly state your name, location, telephone number, building, and room number. Describe the emergency and follow the dispatcher's instructions. Do not hang up until told to do so by the 911 dispatcher. When safe, please call Public Safety at (206) 934-5442.
- For on-campus security and safety concerns, call Public Safety at (206) 934-5442 or stop by Room BE 1108.  
*See page 226 for more information on personal safety.*

## Recreation & Fitness

**Charles H. Mitchell Student Activity Center (MAC)  
(206) 934-6315**

[seattlecentral.edu/wp/mac](http://seattlecentral.edu/wp/mac)

**Please check website for updated hours of operation**

The Mitchell Activity Center offers a wide range of recreational and fitness activities. The facility includes a basketball gym, a running track, indoor squash and racquetball courts, a well-equipped game room, a weight room, pool and ping-pong tables, and cardiovascular workout equipment. Drop-in fitness classes, recreational tournaments, and events for students are also offered. Membership for faculty/staff and alumni is available.

## Student Leadership Division

**(206) 934-6924 SAC 350 (above the bookstore)  
[seattlecentral.edu/student-leadership](http://seattlecentral.edu/student-leadership)**

Student Leadership supports student learning and success through leadership development and involvement opportunities on campus. Students can develop and practice organizational and leadership skills in a nurturing learning environment, enhancing personal, social, and professional development.

### Committee Involvement

Students serve the college and gain experience through participation on committees that address specific campus issues, mobilize energy toward organizing events and activities, or provide policy recommendations to the administration. Information is available at the Student Leadership Office.

## Leadership Institute

Drop-in training sessions every Thursday at 2 p.m. in MAC 210 are open to all students. Facilitated by various Central staff and Seattle community members, sessions cover essential leadership topics, such as time management, individual core values, and listening skills.

## Student Development Transcript

The Student Development Transcript (SDT) provides an official record of students' involvement in clubs, boards, committees, and other extracurricular activities and accomplishments at Central, which can enhance applications for transfer to four-year institutions, for scholarships, and for employment.

## Associated Student Council (ASC)

**(206) 934-4057 SAC 356**

The ASC, the official student government of Central, is responsible for representing student interests to the college administration. ASC organizes a broad range of student committees, addresses issues, and promotes services that support student interests. The ASC includes six student executives, chosen each spring by a student vote, and six associates who work on specific projects.

## College Activities Board

**(206) 934-6335 SAC 355**

The College Activities Board (CAB) enriches campus life through multicultural events and activities that celebrate diversity, involvement, and collaboration, ranging from parties, dances, and fairs to comedy shows, poetry nights, speakers on cutting-edge social issues. CAB members learn all aspects of event planning.

## Organizations, Clubs, and Student Organization Resource Council (SORC)

**(206) 934-4028 SAC 357**

Clubs empower students to create community, explore learning outside the classroom, and put ideas into action. Contact the office for a list of student organizations on campus. The Student Organizations Resource Council (SORC) facilitates the organization and orientation of campus clubs, reviews student organization funding requests, and presents a Student Involvement Fair every quarter.

## Tournaments & Games Team

**(206) 934-6315 MAC 151**

Tournaments and Games Team (TAG) organizes and facilitates recreational and sports activities and tournaments that promote student involvement, fair play, and physical activity.

## Website & Publications Team

(206) 934-0943 BE 4108

The Student Website and Publications (SWAP) Team is responsible for presenting the voice of students on campus through online and print publications that feature the creative, artistic, and intellectual work of Seattle Central students, including fair, accurate, and inclusive reporting and analysis of activities and events on campus.

## Phi Theta Kappa

(206) 934-2928

Phi Theta Kappa is the International Academic Honor Society of the two-year college. The members of Seattle Central chapter, Alpha Chi Zeta, promote Phi Theta Kappa's mission to recognize and encourage the academic achievement of two-year college students and to provide opportunities for individual growth and development.

## Transportation & Parking

Seattle Central Transportation Services  
BE 1143

(206) 934-6932 (Parking)

[seattlecentral.edu/transportation](http://seattlecentral.edu/transportation)

## Alternative Transportation

Seattle Central encourages alternate forms of transportation, like mass transit, biking, carpooling, and walking. Bike racks/lockers are available on campus. Central's main campus is well served by Metro. Students registered for 10 or more credits are eligible to purchase a discounted ORCA transit pass issued by the college. The ORCA pass may be used to ride Sound Transit and Community, Everett, Kitsap, Metro, and Pierce transit systems. For additional information, contact our office or visit our website.

## Public Parking

A very limited supply of parking permits for Central's parking garage is available for purchase by students who live more than five miles away. Thirty days before the quarter starts, individual permits may be purchased online at [seattlecolleges.edu/parkingpermits](http://seattlecolleges.edu/parkingpermits).

# Learning Outcomes

## General Education

### Learning Outcomes

Seattle Central students will achieve personal and professional goals in diverse and multicultural settings because they are able to:

#### **THINK: Analyze, create, and reflect to address and appreciate challenges and opportunities**

- Gather, interpret, and evaluate information
- Identify problems and issues
- Formulate hypotheses
- Generate and implement creative strategies
- Create and appreciate aesthetic work
- Evaluate their thinking process

#### **COLLABORATE: Work effectively with others to learn, complete tasks, and pursue common goals**

- Identify problems and create action plans
- Apply understanding and knowledge of group process
- Pursue and critically evaluate different social and cultural perspectives
- Manage conflict productively
- Engage in community and civic life

#### **COMMUNICATE: Exchange ideas and information through intentional listening, speaking, signing, reading, writing, or presenting**

- Determine the purpose and context for communicating
- Organize and present information purposefully
- Seek feedback and revise to enhance effectiveness
- Attend to conventions of communication to minimize barriers
- Consider perspectives, experiences, and cultural differences to develop understanding

#### **CONNECT: Apply knowledge and skills to solve problems**

- Select and use theoretical models, quantitative and qualitative techniques, information sources, and technology tools
- Identify and solve problems using logical strategies and evaluate results
- Gather data from various reliable sources and assess the validity and relevancy
- Critically evaluate solutions using research-based evidence
- Use technology and apply to a wide range of practices, fields, and industries

**CONTINUE LEARNING: Self-evaluate and act to improve knowledge and skills**

- Analyze own performance and revise to improve
- Transfer learning by applying it in other contexts
- Increase knowledge by identifying gaps and acting to fill them
- Seek mentors and share knowledge with others
- Provide and receive feedback

**Associate of Arts Degree****Learning Outcomes**

- Communication (Reading, Oral or Signed, Written, Other Forms of Expression)
- Explain meaning of written work, presentations, arts, and media in different contexts and present oral, signed, written, or other forms of expression to increase knowledge, foster understanding, or promote change in an audience.
- Critical Thinking, Inquiry and Analysis, and Problem-Solving
- Explore issues, ideas, phenomena, and artifacts to define and articulate problems or to formulate hypotheses. Analyze evidence to formulate an opinion, identify strategies, develop and implement solutions, evaluate outcomes, and/or draw conclusions.
- Global Learning and Intercultural Knowledge and Competence
- Critically analyze complex, interdependent national and global systems, and their legacies and implications, regarding the distribution of power. Reflect on how one's position in these systems affects both local and global communities. Apply a set of cognitive, affective, and behavioral skills that support effective and appropriate interaction in a variety of cultural contexts.
- Quantitative Literacy
- Reason and solve quantitative problems in a wide array of contexts and use quantitative evidence to develop and communicate sound arguments.
- Creative Thinking
- Synthesize existing ideas, images, or expertise in original ways.
- Information Literacy
- Identify, locate, and evaluate needed information in a complex and changing environment. Effectively and responsibly use that information to develop ideas, address issues, and solve problems.
- Technology Literacy

- Effectively and critically evaluate, navigate, and use a range of digital technologies.
- Integrative Learning
- Connect disciplinary and divergent ideas across contexts by synthesizing and transferring integrative learning principles to complex situations within and/or beyond the classroom.
- Collaboration
- Work effectively with others to learn, complete tasks, and pursue common goals that shape, influence, and benefit the individual and/or society.
- Ethical Reasoning
- Examine, assess, and articulate core beliefs and values, and apply that knowledge to analyze and evaluate complex ethical situations from various perspectives.
- Civic Engagement
- Promote the quality of life in the civic community through actions that enrich individual life and benefit the community.
- Foundations and Skills for Lifelong Learning

**Associate of Science Degree****Learning Outcomes**

Seattle Central College students completing the A.S. degree should:

- Have college-level knowledge and skills in critical thinking, quantitative analysis, and written composition
- Have college-level mastery of information literacy and be technologically literate
- Demonstrate effective oral and written communication, teamwork, and collaboration in scientific, mathematical, and other settings
- Have the ability to design and conduct experiments as well as to analyze and interpret data
- Understand methods of inquiry specific to traditional and contemporary areas of knowledge in mathematics and the natural and physical sciences
- Understand the interdisciplinary and multicultural nature of knowledge
- Demonstrate academic honesty and ethical behavior
- Be able to appreciate and apply their knowledge of science in the outside world

# College Transfer

## Academic Programs

(206) 934-5469

[seattlecentral.edu/transfer-degrees](http://seattlecentral.edu/transfer-degrees)

Seattle Central College offers a wide spectrum of college transfer courses that apply toward a four-year program of study. Students are encouraged to earn their Associate of Arts or Associate of Science degree at Seattle Central College for greater ease of transfer to a four-year institution; they may also take individual classes for transfer. It is recommended that students confer with an academic advisor to ensure course transferability.

Students planning to earn an A.A. or A.S. degree must meet minimum standards of preparation. Those whose records and test scores indicate a need for additional preparation may be required to complete preliminary work in the college preparatory program.

These fields of study are grouped among three areas of knowledge and are included throughout the A.A. degree curriculum.

*See page 11 for more information on A.A. and A.S. degree requirements.*

## Associate of Arts Degree (A.A.)

The Associate of Arts (A.A.) degree is a 90-credit transfer degree that fulfills the general education requirements for most four-year degrees in arts and sciences. To earn the A.A. degree, students must achieve a cumulative GPA of 2.0 or better in courses numbered 100 and above, complete at least 15 credits at one of the colleges (North, Central, or South) awarding the degree, and meet all degree requirements. Students should contact an advisor to develop their programs of study.

## Special Emphasis Areas in Academic Programs

Students planning to transfer to a four-year institution and pursue a specific field of study should work closely with their advisor to plan their Associate of Arts (A.A.), Associate of Science (A.S.), or Associate of Business (A.B.) degree. Students can earn an emphasis in conjunction with a transfer degree without taking additional credits. Students can also earn an emphasis while earning a dual degree for an A.A. and A.A.S.-T in Allied Health: Generalist. No additional credits are required for the dual degree or emphasis. The dual degree can be used as a pathway to the Community Health & Education and Health Care Services Management Bachelor of Applied Science (B.A.S.) in Allied Health programs. Advising worksheets are available as planning tools for students to earn an emphasis in their degree. Please see Advising for more information.

## Emphasis in Equity and Social Justice

The Equity and Social Justice emphasis can be completed with either the A.A. or A.S. transfer degree and focuses on understanding social movements in society while helping build critical reasoning and analytical skills. It prepares students to work or study in a variety of local or international fields dedicated to diversity, equity, and social change.

## Emphasis in Global Health

The Global Health emphasis can be completed within either the A.A. or A.S. transfer degree and places a priority on improving health and achieving health equity. The focus is on worldwide health access and improvement, reduction of disparities, and protection against global health challenges. It prepares students to work with diverse populations, provide international service, and understand the nuances of global health care.

## Emphasis in Global Studies

This emphasis can be completed within either the A.A. or A.S. transfer degree and integrates the study of politics, economics, and the arts with the analysis of cultural practices, beliefs, and social systems. Students learn to appreciate and understand world cultures, focus on themes of global significance, and develop an interdisciplinary approach to international issues.

## Emphasis in Sustainable Agriculture

This innovative emphasis offers interdisciplinary courses and hands-on service learning and internship opportunities in the emerging field of urban agriculture. The emphasis provides a foundation of knowledge and skills for students interested in pursuing related education at four-year institutions or entering the green workforce. For details, contact Central Advising Office or visit [seattlecentral.edu/learn/sage](http://seattlecentral.edu/learn/sage).

## Dual Degree Pathways

Seattle Central College offers dual degree pathways so that students can earn two degrees at the same time without taking extra credits. Students can earn an Associate of Arts (A.A.-DTA) and Associate of Applied Science (A.A.S.-T) in Allied Health at the same time by earning 90 credits. Pathways can also include a degree emphasis in Global Health or Equity and Social Justice.

These degree pathways can lead to the Community Health & Education and Health Care Services Management Bachelor of Applied Science (B.A.S.) in Allied Health programs. Contact [AlliedHealthBAS@seattlecolleges.edu](mailto:AlliedHealthBAS@seattlecolleges.edu) for more information about the B.A.S. program.

- **A.A.-DTA & A.A.S.-T in Allied Health: Generalist**  
[seattlecentral.edu/pdf-library/dual-degrees/AA-DTA-allied-health-dual-degree-pathway.pdf](http://seattlecentral.edu/pdf-library/dual-degrees/AA-DTA-allied-health-dual-degree-pathway.pdf)



- **A.A.-DTA: Global Health Emphasis and A.A.S.-T in Allied Health: Generalist**  
[seattlecentral.edu/pdf-library/dual-degrees/global-health-dual-degree.pdf](http://seattlecentral.edu/pdf-library/dual-degrees/global-health-dual-degree.pdf)
- **A.A.-DTA: Equity and Social Justice Emphasis and A.A.S.-T in Allied Health: Generalist**  
[seattlecentral.edu/pdf-library/dual-degrees/equity-and-social-justice-dual-degree.pdf](http://seattlecentral.edu/pdf-library/dual-degrees/equity-and-social-justice-dual-degree.pdf)
- **A.A.-DTA & A.A.S.-T in Allied Health Pre-Physician Assistant Preparation Pathway**  
[seattlecentral.edu/pdf-library/dual-degrees/prepa-prep-pathway-dual-degree.pdf](http://seattlecentral.edu/pdf-library/dual-degrees/prepa-prep-pathway-dual-degree.pdf)

#### Student Steps to Complete a Dual Degree:

1. Complete the standard procedure for admission to the college and declare your intent to the college to be an A.A.-DTA student.
2. Advisors are available to help you register and plan classes.
3. Earn the Care Navigation and Coordination certificate for A.A.-DTA and A.A.S.-T in Allied Health: Generalist dual degrees OR Earn the Nursing Assistant – Certified certificate for the A.A.-DTA and A.A.S.-T in Allied Health Pre-Physician Assistant Preparation Pathway.
4. Apply to the A.A.S.-T in Allied Health: Generalist program.  
[healthcare.seattlecentral.edu/programs/allied-health/getstarted](http://healthcare.seattlecentral.edu/programs/allied-health/getstarted)
5. Submit the A.A.-DTA Application for Graduation and the A.A.S.-T in Allied Health: Generalist Application for Graduation (available in Registration) one quarter prior to anticipated graduation date.  
[seattlecentral.edu/enrollment-and-funding/enrollment-and-admissions/registration/graduation/forms](http://seattlecentral.edu/enrollment-and-funding/enrollment-and-admissions/registration/graduation/forms)

## Associate of Science Transfer (A.S.) Degree

The Associate of Science (A.S.) is designed to transfer to a four-year college or university in the state of Washington. A.S. degree requirements include satisfactory completion of at least 90 approved credits with a 2.0 cumulative GPA. At least 15 college-level credits must be earned at the college awarding the degree.

Two different study options are offered:

1. biological sciences, environmental/resources sciences, chemistry, geology, and earth sciences
2. engineering, computer science, physics, and atmospheric science.

*Please contact an advisor more information on this degree program.*

## Associate of Science (A.S.) Degree

The Associate of Science (A.S.) is intended to be a transfer degree. However, there are certain major areas of study in which the student may not be able to take all the courses necessary to transfer with junior standing. Please contact an advisor for more information on this degree program.

A.S. degree requirements include satisfactory completion of at least 90 approved credits with a 2.0 cumulative GPA. At least 15 college-level credits must be earned at the college awarding the degree.

## Associate in Business – Direct Transfer Agreement (A.B.-DTA)

The Associate in Business (A.B.) is a transfer degree for students planning to transfer to a four-year college or university and major in Accounting, Business Administration, Marketing, or a related major.

The A.B. transfer degree is 90 college-level credits, and students will complete their prerequisite courses as part of this transfer degree. Students are strongly encouraged to meet with an advisor to discuss specific career goals and recommended coursework.

## Associate in Business Requirements

This degree shall be granted only to students who have completed 90 college-level credits with a minimum cumulative 2.0 GPA.

Note: While many Washington state universities accept transfer of this degree, each has individual requirements and/or acceptable course substitutions needed for its specific programs. Also, admission to many business schools is competitive, and higher grades are often required. It is essential to learn the requirements of your transfer school and to consult Advising.

### BASIC REQUIREMENTS

ENGL& 101	English Composition . . . . .	5
ENGL& 102	Composition II . . . . .	5
MATH 116	Applications of Math: Management, Life & Social Sciences. . . . .	5

The following MATH courses are taken together.

Minimum 10 credits in MATH is required.

MATH 116 and MATH&148

-OR- MATH&141, MATH&142, and MATH&151

This course meets the quantitative/symbolic reasoning requirement.

MATH& 141	Precalculus I . . . . .	5
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The following MATH courses are taken together.

Minimum 10 credits in MATH is required.

MATH 116 and MATH&148

-OR- MATH&141, MATH&142, and MATH&151

This course meets the quantitative/symbolic reasoning requirement.

**MATH& 142 Precalculus II . . . . .5**

The following MATH courses are taken together.  
Minimum 10 credits in MATH is required.

MATH 116 and MATH&148

-OR- MATH&141, MATH&142, and MATH&151

This course meets the quantitative/symbolic reasoning requirement.

**MATH& 148 Business Calculus . . . . .5**

The following MATH courses are taken together.  
Minimum 10 credits in MATH is required.

MATH 116 and MATH&148

-OR- MATH&141, MATH&142, and MATH&151

This course meets the quantitative/symbolic reasoning requirement.

**MATH& 151 Calculus I. . . . .5**

The following MATH courses are taken together.  
Minimum 10 credits in MATH is required.

MATH 116 and MATH&148

-OR- MATH&141, MATH&142, and MATH&151

This course meets the quantitative/symbolic reasoning requirement.

**BUSINESS REQUIREMENTS**

ACCT& 201 Principles of Accounting I. . . . .5

ACCT& 202 Principles of Accounting II . . . . .5

ACCT& 203 Principles of Accounting III. . . . .5

BUS& 201 Business Law. . . . .5

**AREAS OF KNOWLEDGE DISTRIBUTION REQUIREMENTS**

Total of 15 credits for each of the three areas of knowledge is required.

- Visual, Literary, and Performing Arts
- Individuals, Cultures, and Societies
- Natural World

One course taken should also be able to fulfill the U.S. Cultures special requirement.

ECON& 201 Micro Economics. . . . .5

Credits from this class applied toward the 15 credits required for Individuals, Cultures, and Societies.

ECON& 202 Macro Economics . . . . .5

Credits from this class applied toward the 15 credits required for Individuals, Cultures, and Societies.

MATH& 146 Introduction to Statistics . . . . .5

Following can be substituted:

BUS 210 – Bus & Econ Statistic . . . . .5

Credits from this class applied toward the 15 credits required for Natural World

Visual, Literary, and Performing Arts . . . . .15

Minimum of two different subjects.

Individual, Cultures, and Societies. . . . .5

Select course with a non-ECON prefix from the list from approved courses.

The Natural World . . . . .5

Minimum of two different subjects.

Natural World – Lab Science . . . . .5

Minimum of two different subjects.

**ELECTIVES**

Elective . . . . .5

Only necessary to meet the 90 credit minimum.

Course taken should also be able to fulfill the

U.S. Cultures special requirement if it is not met

by course taken under areas of knowledge.

*Note: While many Washington state universities accept transfer of this degree, each has individual requirements and/or acceptable course substitutions needed for its specific programs. Also, admission to many business schools is competitive, and higher grades are often required. It is essential to learn the requirements of your transfer school and to consult Advising Services.*

**Engineering****Science, Technology, Engineering, and Math (STEM) Division**

The Associate of Science degree: Option 2 is intended for students planning to transfer to a four-year college or university and major in engineering, computer science, physics, or atmospheric science.

Students complete 90 credits, including many of the laboratory and prerequisite courses for their major prior to transferring. Students are strongly encouraged to meet with an advisor to discuss specific career goals and recommended coursework.

**Associate of Science (A.S.) Degree****BASIC REQUIREMENTS – ENGLISH**

ENGL& 101 English Composition . . . . .5

ENGL& 102 Composition II . . . . .5

**BASIC REQUIREMENTS – MATHEMATICS**

Choose 5 credits from the following courses:

MATH 116 Applications of Math: Management, Life & Social Sciences . . . . .5

MATH& 141 Precalculus I . . . . .5

MATH& 142 Precalculus II . . . . .5

MATH& 148 Business Calculus . . . . .5

MATH& 151 Calculus I. . . . .5

MATH& 152 Calculus II . . . . .5

MATH 220 Q – Linear Algebra. . . . .5

MATH 224 Q – Vector Calculus. . . . .5

**BASIC REQUIREMENTS – COMPUTER SCIENCE**

Choose 5 credits from the following courses:

CSC 110 Introduction to Computer Programming. . . . .5

CSC 111 Computers for Math and Science . . . . .5

CSC 142 Computer Programming I. . . . .5

CSC 143 Computer Programming II . . . . .5

ENGR 142 Computer Programming. . . . .5

**AREAS OF KNOWLEDGE DISTRIBUTION REQUIREMENTS**

See advisor for list of approved courses or use links below.

Visual, Literary, and Performing Arts . . . . .5

Courses in this area include languages, literature, art, music, drama, and communication. Choices must include a minimum of two different course prefixes, and no more than 5 credits each of a world language at the 100 level and a studio/performance class may be applied to the distribution requirements.

Individual, Cultures, and Societies. . . . .5

Courses in this area include social sciences, such as anthropology, psychology, and sociology, as well as areas of study like history, philosophy, and ethnic and gender studies. Choices must include a minimum of two different course prefixes.

**PRE-MAJOR REQUIREMENTS**

Course selection should be in compliance with major requirements as indicated by the four-year institution to which the student is planning to transfer. See an advisor or counselor prior to beginning your program of study.

The Natural World . . . . .5

Courses in this area include physical and life sciences and certain mathematics, computer science, and social science courses. Choices must include a minimum of two different prefixes; 9 credits must be in a lab science.

**ELECTIVES**

See advisor for list of approved courses.

Elective . . . . .5

# Areas of Study

## ARTS, DESIGN, AND GRAPHICS

### 2D Fine Arts (A.A.-DTA)

This two-year pathway is designed to give students a solid foundation in 2D visual art with a focus on craft, concept, and critical analysis in one or more of several areas of study including drawing, painting, digital art, photography and more. While in the program, students have many opportunities to gain professional experience as working artists including showcasing and selling art, installing, exhibiting, and documenting work, and submitting to literary and arts publications.

This AA-DTA program prepares students to complete their education at a four-year college or university with a Bachelor of Art (BA) with Studio Art or Art History concentration, a Bachelor of Fine Art (BFA) or Master of Fine Art (MFA) in Visual Art, and/or entering the creative economy with a dynamic portfolio of finished works.

### Apparel Design & Development Associate of Applied Science Degree (A.A.S.)

#### Business, Information Technologies & Creative Arts Division

The School of Apparel Design & Development at Central is the most technically oriented design program in the region, with a track record for training the region's best fashion design talent. The comprehensive curriculum is aligned to current apparel industry trends to offer relevant technical and creative skills to prepare students to succeed in a competitive industry. Students earn an Associate of Applied Science degree upon completion of 93 credits of course work over six quarters.

#### PREREQUISITES

APPRL 096	AD&D Skill Development 1	2
APPRL 098	AD&D Skill Development 2	2
APPRL 100	AD&D Skill Development 3	2

#### TECHNICAL SPECIALTY COURSES

APPRL 101	Construction 1 – Professional Techniques	4
APPRL 102	Construction 2 – Professional Techniques	4
APPRL 103	Construction 3 – Professional Techniques	4
APPRL 104	Alterations and Fitting	2
APPRL 111	Patternmaking 1 – Flat Pattern and Drafting	4
APPRL 112	Patternmaking 2 – Draping	4
APPRL 113	Patternmaking 3 – Design by Flat Patternmaking	4
APPRL 114	Patternmaking 4 – Pattern Alteration for Fit	2
APPRL 130	Apparel Manufacturing	2
APPRL 131	Business Practices in Fashion	3
APPRL 141	Design 1 – Principles of Design	2

APPRL 142	Design 2 – Fabric Science and Textiles	2
APPRL 143	Design 3 – Color and Palettes	2
APPRL 151	Computer Applications for Apparel Design 1	3
APPRL 152	Computer Applications for Apparel Design 2	3
APPRL 197	Work Experience in Apparel Design	5

Credit range: 1-8/Total required credits: 5

Classes which meet the 'Related Instruction' requirement.

APPRL 201	Ready-To-Wear Construction	4
APPRL 202	Active Sportswear Construction	4
APPRL 211	Pattern Design for Ready-To-Wear	4
APPRL 212	Pattern Design for Active Sportswear	4
APPRL 221	Pattern Grading	4
APPRL 222	Computerized Pattern Grading	4
APPRL 230	Portfolio and Resume Development	4

Classes which meet the 'Related Instruction' requirement.

APPRL 241	Design 4 – Print and Pattern	4
APPRL 242	Design 5 – Line Design	4
APPRL 260	Fashion History	3
APPRL 270	Final Line Design and Development	8

#### RELATED INSTRUCTION

APPRL 298	Apparel Design Special Topics	5
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Credit Range: 1-5 credits

TOTAL PROGRAM CREDITS	95
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### Architecture (A.A.-DTA)

This two-year pathway is designed for students who wish to obtain an Associate of Arts - Direct Transfer Agreement degree with a concentration in Architecture. Students in this pathway will leave with a broad understanding of art and design, as well as completion of their general education requirements. Additional prerequisite courses will need to be taken at a prospective university.

Completion of this program is designed to prepare students for transferring into an Architecture major at a four-year college or university and satisfy most Architecture requirements for students entering an Architecture major.

### Art History (A.A.-DTA)

This two-year pathway is designed for students who wish to obtain an Associate of Arts - Direct Transfer Agreement degree with a concentration in Art History. Completion of this pathway provides a visual and historical analysis of objects made throughout time. In lectures, discussions, and online content, students discover the broader context that surround works of art, design, and architecture, providing an understanding of why these objects were made, what they represent, and how they can tell us stories of humanity.

Completion of this program is designed to prepare students for transferring into an Art History major at a four-year college or university and satisfy Art History requirements for students entering a Studio Art major.

## Digital Art and Photography (A.A.-DTA)

This two-year pathway is designed for students who wish to obtain an Associate of Arts - Direct Transfer Agreement degree with a concentration in Digital Art and Photography. Students in this pathway will leave with fluency in Adobe software such as Photoshop, Illustrator, InDesign, Premier, and After Effects. Students will gain skills in photo editing, compositional strategies, and formal design elements. Students will also demonstrate collaborative attitude, skills, and knowledge in Digital Art and Digital Photography, and will learn how to effectively critique and document work through a contemporary lens.

Completion of this program is designed to prepare students for further education at a four-year college or university in the visual arts such as a Bachelor of Arts degree in Studio Art or Art History, Bachelor of Fine Arts degree, or Master of Fine Arts in Visual Art.

## Drama (A.A.-DTA)

This two-year pathway is designed for students that wish to obtain an Associate of Arts - Direct Transfer Agreement degree with a concentration in drama. The courses in this pathway focus on the general study of dramatic works and their performance. Students will study major works of dramatic literature, dramatic styles and types, musical theater, schools of dance, and the principles of organizing and producing full live or filmed productions.

Completion of this program is designed to prepare students for further education in Drama at a four-year college or university.

## Graphic Design Associate of Applied Science Degree (A.A.S.)

### Business, Information Technologies & Creative Arts Division

Graduates of the Graphic Design program get to work when they leave us. We concentrate on skills for immediate entry into the job market. Our curriculum is strong on graphic design fundamentals, yet explores and adapts to emerging communication technologies. We pride ourselves in keeping our curriculum current with changes and developments on an annual basis.

Conceptual design and technical skill combine to produce a competitive portfolio. Instructors with industry experience lead students in consecutive integrated tracks of print design and interaction design, which includes but is not limited to, Web Design, UI/UX, Mobile Apps, and Motion. Problem solving, strategy development, and powerful use of typography and visuals achieve our communication solutions. Classes are organized in collegial work groups mirroring a professional studio environment. Design theory and practice, along with production using current computer software, prepare students for a graphic design career in print and interactive media.

### TECHNICAL SPECIALTY COURSES

DES	110	History of Graphic Design . . . . .	3.5
DES	121	Typography I . . . . .	3.5
DES	122	Typography II . . . . .	3.5
DES	131	Graphic Design I . . . . .	3.5
DES	132	Graphic Design II . . . . .	3.5
DES	133	Graphic Design III . . . . .	3.5
DES	145	Graphic Production I . . . . .	3.5
DES	146	Graphic Production II . . . . .	3.5
DES	147	Graphic Production III . . . . .	3.5
DES	151	Interactive I . . . . .	3.5
DES	152	Interactive II . . . . .	3.5
DES	153	Interactive III . . . . .	3.5
DES	197	Work Experience-Graphic Design . . . . .	3

Credit range: 2-5

Total required work experience credits for DES 197: 3

DES	223	Typography III . . . . .	4
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Following can be substituted:

DES 232 – Graphic Design V (4) (DES 223 is a book design class, while DES 232 is a magazine design class)

DES	231	Graphic Design IV . . . . .	4
DES	233	Graphic Design VI . . . . .	4
DES	234	Graphic Design VII . . . . .	4
DES	235	Graphic Design VIII . . . . .	4
DES	236	Graphic Design IX . . . . .	4
DES	249	Graphic Production IV . . . . .	4
DES	251	Interactive IV . . . . .	4
DES	252	Interactive V . . . . .	4
DES	253	Interactive VI . . . . .	4
DES	260	Portfolio PREP . . . . .	4
DES	270	Environmental Graphics I . . . . .	5
DES	280	Special Projects I . . . . .	4
DES	281	Special Projects II . . . . .	4
DES	282	Special Projects III . . . . .	4

### RELATED INSTRUCTION

NME	110	New Media I . . . . .	6
NME	120	New Media II . . . . .	6
NME	130	New Media III . . . . .	6

TOTAL PROGRAM CREDITS			117
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## Music (A.A.-DTA)

This two-year pathway is designed for students who wish to obtain an Associate of Arts - Direct Transfer Agreement degree with a concentration in Music. In this pathway, students complete the general education requirements for the degree while studying music theory, history, and performance. Students will grow as musicians through private instruction and many vocal and instrumental performance opportunities, including large and small ensembles, solo recitals, workshops with professional artists, and regional and national competitions.

This program prepares students to pursue further studies in music or a related field at a four-year college or university, as well as teaching valuable skills that are desirable to employers in a variety of music-related fields, including sound design, composing, recording production and more.

## Visual Media Associate of Applied Science Degree (A.A.S.)

### Business, Information Technologies & Creative Arts Division

Examine concepts, ask questions, solve creative problems and push the boundaries of traditional media using the power of still and motion imagery. Expand your knowledge both individually and in small teams to craft creative solutions from aesthetic conception to final application. The Visual Media program is a rigorous two-year curriculum providing the framework for a strong portfolio and guidance for career preparation, whether as an entrepreneur or as a visual communications professional.

The Visual Media program immerses you in the foundations of digital storytelling using modern photography and video technology. Nurture your development of essential skills in lighting and composition for digital capture, both in studio and on location; post-production editing; and through developed critical thinking and professional communication skills.

As part of the Seattle Central Creative Academy, the Visual Media program provides an unmatched environment in your pursuit of visual media competency, with modern cooperative learning spaces and supportive faculty. Explore a range of disciplines, while connecting with industry professionals through portfolio reviews, guest lectures and work-based opportunities.

### TECHNICAL SPECIALTY COURSES

PHO	197	Work Experience-Photography	3
VME	110	Professional Practices I	3.5
VME	111	Professional Practices II	3.5
VME	120	Lighting Techniques I	3.5
VME	121	Lighting Techniques II	3.5
VME	131	Conceptual Solutions I	3.5
VME	145	Digital Imaging I	3.5
VME	146	Digital Imaging II	3.5
VME	147	Digital Imaging III	3.5
VME	150	Visual Media I	3.5
VME	151	Visual Media II	3.5
VME	160	Studio Techniques I	3.5
VME	232	Conceptual Solutions II	4
VME	250	Visual Media IV	4
VME	251	Visual Media V	4
VME	252	Visual Media VI	4
VME	261	Studio Techniques II	4
VME	262	Studio Techniques III	4
VME	270	Professional Business Practices: Visual Media	4
VME	276	Portfolio Show	4
VME	280	Special Projects I	4
VME	281	Special Projects II	4
VME	282	Special Projects III	4
VME	286	Portfolio	4

### RELATED INSTRUCTION

NME	110	New Media I	6
NME	120	New Media II	6
NME	130	New Media III	6
NME	220	New Media V	4
VME	230	New Media VI	4

TOTAL PROGRAM CREDITS

123

## BUSINESS AND ACCOUNTING

### Business (A.B.-DTA)

The Associate in Business - Direct Transfer Agreement (A.B.-DTA) is designed to satisfy lower division general education and business requirements at Washington's public four-year colleges and universities. Students will take specific coursework in Economics, Accounting, Business Law, Statistics, and Mathematics as part of the Associate in Business degree.

Students also develop skills in business plan development, feasibility analysis, critical thinking, oral and written communication, teamwork and collaboration, leadership, risk taking, troubleshooting and problem solving with technology, professionalism, intercultural competence, and career exploration. The Associate in Business degree includes all the pre-requisite courses for transfer in a Business or Accounting major.

### Business Technology Management Certificate: Four Quarters

#### Business, Information Technologies & Creative Arts Division

The Business Technology Management program prepares students for employment in a wide range of industry specialties requiring information technologies, effective communications, customer relations, and organizational management. The integrated, cross-disciplinary curriculum emphasizes business project-based learning, information literacy, diversity, and professionalism.

#### TECHNICAL SPECIALTY COURSES

BTM	100	Orientation and Career Exploration . . . . .	2
BTM	109	Business Communications I . . . . .	5
BTM	111	Business Applications I . . . . .	5
BTM	112	Business Applications II – Data Analysis w/Excel . . . . .	5
BTM	113	Business Applications III . . . . .	5
BTM	118	Applied Business Math II . . . . .	5
BTM	119	Business Communications II . . . . .	5
BTM	120	Customer Relations Management . . . . .	5
BTM	122	Professional Development . . . . .	5
BTM	250	Records Information Management . . . . .	5
BUS	197	Work Experience-Business Occupations . . . . .	4
TOTAL PROGRAM CREDITS			51

### Business Technology Management Certificate

#### Business, Information Technologies & Creative Arts Division

This program prepares students for employment in a wide range of industry specialties requiring information technologies, effective communications, customer relations, and organizational management. The integrated, cross-disciplinary curriculum emphasizes business project-based learning, information literacy, diversity, and professionalism.

#### PREREQUISITES

MATH 081, ENGL 096 or test out may substitute for prerequisite courses listed.

Students who enroll in all 11 credits, will be advised to take a specific HDC course to support learning.

BTM	098	Computing Essentials . . . . .	3
BTM	108	Applied Business Math I . . . . .	3
BTM	109	Business Communications I . . . . .	5

#### TECHNICAL SPECIALTY COURSES

All courses require BTM 098 or test out

BTM	100	Orientation and Career Exploration . . . . .	2
BTM	111	Business Applications I . . . . .	5
BTM	112	Business Applications II – Data Analysis w/Excel . . . . .	5
BTM	113	Business Applications III . . . . .	5
BTM	118	Applied Business Math II . . . . .	5
Following can be substituted:			
BTM 108 – Applied Business Math I (5) or MATH 081 – Basic Math Skills (5) or test out required only			
BTM	119	Business Communications II . . . . .	5
Following can be substituted:			
BTM 109 – Business Communications I (5) or ENGL 096 – College Prep Writing III (5) or test out required only			
BTM	120	Customer Relations Management . . . . .	5
BTM	122	Professional Development . . . . .	5
BTM	197	Work Experience: Business Technology Management . . . . .	5

TOTAL REQUIRED CREDITS	3-5
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TOTAL PROGRAM CREDITS	37-40
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### Business Technology Management Associate of Applied Science Degree (A.A.S.)

#### Business, Information Technologies & Creative Arts Division

This program prepares students for employment in a wide range of industry specialties requiring information technologies, effective communications, customer relations, and organizational management. The integrated, cross-disciplinary curriculum emphasizes business project-based learning, information literacy, diversity, and professionalism.

Completion of Business Technology Management Four-Quarter Certificate: 51 credits

### TECHNICAL SPECIALTY COURSES

Course(s) listed here are those comprising the Business Technology Management – Four-Quarter Certificate

BTM	100	Orientation and Career Exploration . . . . .	2
BTM	109	Business Communications I . . . . .	5
BTM	111	Business Applications I . . . . .	5
BTM	112	Business Applications II – Data Analysis w/Excel . . . . .	5
BTM	113	Business Applications III . . . . .	5
BTM	118	Applied Business Math II . . . . .	5
BTM	119	Business Communications II . . . . .	5
BTM	120	Customer Relations Management . . . . .	5
BTM	122	Professional Development . . . . .	5
BTM	250	Records Information Management . . . . .	5
BUS	197	Work Experience – Business Occupations . . . .	4

### TECHNICAL SPECIALTY COURSES – AAS

BTM	225	Marketing Fundamentals . . . . .	5
Following can be substituted:			
BTM 228 – Small Business Management (5)			
BTM	231	Applied Accounting I . . . . .	5
BTM	236	Supervision Management . . . . .	5
Following can be substituted:			
BTM 237 – HR Management (5)			
BTM	245	Business Process Management . . . . .	5
BTM	260	Project Management . . . . .	5
Following can be substituted:			
BTM 265 – Operations Management (5)			
BTM	278	Organizational Behavior . . . . .	5

### ELECTIVES

Elective . . . . .	10
See Advising for list of approved courses.	

TOTAL PROGRAM CREDITS 91

## Business Technology Management Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Business, Information Technologies & Creative Arts Division

This program prepares students for employment in a wide range of industry specialties requiring information technologies, effective communications, customer relations, and organizational management. The integrated, cross-disciplinary curriculum emphasizes business project-based learning, information literacy, diversity, and professionalism.

Completion of Business Technology Management Four-Quarter Certificate: 51 credits

### TECHNICAL SPECIALTY COURSES

Course(s) listed here are those comprising the Business Technology Management – Four-Quarter Certificate

BTM	100	Orientation and Career Exploration . . . . .	2
BTM	109	Business Communications I . . . . .	5
BTM	111	Business Applications I . . . . .	5
BTM	112	Business Applications II – Data Analysis w/Excel . . . . .	5
BTM	113	Business Applications III . . . . .	5
BTM	118	Applied Business Math II . . . . .	5
BTM	119	Business Communications II . . . . .	5
BTM	120	Customer Relations Management . . . . .	5
BTM	122	Professional Development . . . . .	5
BTM	250	Records Information Management . . . . .	5
BUS	197	Work Experience-Business Occupations . . . .	4

### ELECTIVES (RESTRICTIVE)

Select fifteen credits from the courses listed below:

ACCT&	202	Principles of Accounting II . . . . .	5
ACCT&	203	Principles of Accounting III . . . . .	5
BTM	225	Marketing Fundamentals . . . . .	5
BTM	226	Small Business Startup . . . . .	3
BTM	227	the Entrepreneur Toolkit . . . . .	3
BTM	228	Small Business Management . . . . .	5
BTM	236	Supervision Management . . . . .	5
BTM	237	Human Resource Management . . . . .	5
BTM	245	Business Process Management . . . . .	5
BTM	250	Records Information Management . . . . .	5
BTM	260	Project Management . . . . .	5
BTM	265	Operations Management . . . . .	5
BTM	278	Organizational Behavior . . . . .	5
BUS&	201	Business Law . . . . .	5
BUS	210	Business and Economic Statistics . . . . .	5

### GENERAL EDUCATION COURSES

ACCT&	201	Principles of Accounting I . . . . .	5
ECON&	201	Micro Economics . . . . .	5
ENGL&	101	English Composition I . . . . .	5
HUM	105	Intercultural Communication . . . . .	5
Following can be substituted:			
CMST 205 – Multicultural Communications (5)			
MATH&	146	Introduction to Statistics . . . . .	5
Following can be substituted:			
BUS 210 – Business Statistics (5)			
Area of Knowledge Course . . . . .			10
Total of 10 credits (2 courses – 5 credits each ) is required			

TOTAL PROGRAM CREDITS 91

## Economics (A.B.-DTA)

The Associate in Business - Direct Transfer Agreement (A.B.-DTA) is designed to satisfy lower division general education and business requirements at Washington's public four-year colleges and universities. Students will take courses in math, economics, and statistics to prepare them for entry into competitive economics programs. Students who complete the degree with a focus on Economics can eventually pursue careers as financial analysts, consultants, economists, researchers, teachers, and lawyers.

Completion of this program is designed to prepare students for further education at a four-year college or university in Economics or Business.

## Entrepreneurship Short-Term Certificate

### Business, Information Technologies & Creative Arts Division

The Entrepreneurship Certificate targets students who are interested in applying the ideas and fundamentals (skill sets) of successful entrepreneurs to a variety of organization structures. These include starting a new business, working for an early stage start-up, or implementing a new initiative in an existing organization (e.g. corporate, government, non-profit).

#### TECHNICAL SPECIALTY COURSES

BUS	122	the Entrepreneur Toolkit	3
BUS	129	Small Business Accounting	5
BUS	134	Small Business Start-Up	3
BUS	155	Small Business Marketing	3
BUS	185	Small Business Management	5
TOTAL PROGRAM CREDITS			19

## Information Technology: Microsoft Specialist I Certificate

### Information Technology Programs

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

### PREREQUISITES

Entrance requirements: Compass test and writing samples and eligibility for MATH 081 and ENGL 101

Courses listed below must be completed with a 2.0 GPA or better:

ENGL&	101	English Composition I	5
ITC	102	Information Systems Concepts	5
MATH	084	Algebra I	5
MIC	101	Introduction to Microcomputer Applications	4

### TECHNICAL SPECIALTY COURSES

HDC	106	Interviewing, Resumes, Job hunting, Employer/Employee Inte	2
Following can be substituted:			
ITC 205 – IT Career Strategies (2)			
MIC	175	Computer User Support	4
NET	122	Network Operating Systems 1 – Client	5
NET	124	Network Operating Systems 2 – Win2k Server	5

### ELECTIVE

Total IT Elective: 5 credits

Choose one of the following:

(ITC 110 is recommended course)

ITC	110	Programming Fundamentals	5
ITC	220	Database Development	5

TOTAL PROGRAM CREDITS			21
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## Microsoft Office System Short-Term Certificate

### Communications and Design Division

This certificate is designed to provide essential technical support skills to end users of essential Microsoft applications in both technical and non-technical departments and positions. Students will receive preparation to take the Microsoft Office Systems (MOS) certification exam at the proficient level.

### TECHNICAL SPECIALTY COURSES

MIC	101	Introduction to Microcomputer Applications	4
Following can be substituted:			
MIC 160 P (Supporting Microsoft Application for PowerPoint) (Students can take MIC 101 or MIC 160 P as an alternate for the third course)			
MIC	160	Supporting Microsoft Application W Certification	4
Following can be substituted:			
MIC 160 W (Supporting Microsoft Application for Word)			
TOTAL PROGRAM CREDITS			12

## Microsoft Specialist II Short-Term Certificate

### Information Technology Programs

A short term, intensive Microsoft Specialist II certificate delves deeper into Microsoft Windows Server 2008 for implementing and administering a networked environment utilizing tools, applications and processes to manage a secure client/server environment.

### PREREQUISITES

Must meet all college requirements and Eligibility for ENG 101; ITC 102 and MIC 101; must also have completed Microsoft Specialist I Certificate of Completion or have related MSITP certification tests completed.

### TECHNICAL SPECIALTY COURSES

NET	126	Network Operating Systems 3 – Sysop Applications . . . . .	5
NET	134	Network Iac (Infrastructure as Code) & Design . . . . .	5

### ELECTIVES

Total Required Elective Credits: 5

Any IT course – Recommended Electives listed below:

ITC	110	Programming Fundamentals . . . . .	5
		Following can be substituted: (Recommend ITC 110 or ITC 220)	
ITC	220	Database Development. . . . .	5
		Following can be substituted: (Recommend ITC 110 or ITC 220)	

TOTAL PROGRAM CREDITS 15

## Microsoft Specialist III Short-Term Certificate

### Information Technology Programs

A short term, intensive Microsoft Specialist III certificate explores case studies to analyze requirements, discuss needs and implement solutions to solve enterprise network technology and application integration issues.

### PREREQUISITES

Must meet all college requirements and Eligibility for ENG 101; ITC 102 and MIC 101; must also have completed Microsoft Specialist II Certificate of Achievement or have passed related MS Cert tests leading to MSITP

Visual, Literary and Performing Arts. . . . . 5

### TECHNICAL SPECIALTY COURSES

ITC	197	Work Experience Computer Information Technology. . . . .	5
NET	200	Enterprise Applications . . . . .	10
TOTAL PROGRAM CREDITS			15

## Office Assistant Short-Term Certificate

### Business, Information Technologies & Creative Arts Division

The Office Assistant Certificate is the first in a series of short term training certificates within the Business Information Technology department. This certificate prepares students for entry-level jobs as member services representatives, customer relations associates, office assistants and front desk agents.

### TECHNICAL SPECIALTY COURSES

BUS	113	Diversity Issues in Business . . . . .	3
BUS	131	Integrated Communications I . . . . .	5
BUS	140	Customer Relations . . . . .	5
BUS	170	Information Technology I . . . . .	4
TOTAL PROGRAM CREDITS			17

## Office Professional Short-Term Certificate

### Business, Information Technologies & Creative Arts Division

A short term, intensive BIT office skills certificate for entry level workers or established workers seeking updated skills

### TECHNICAL SPECIALTY COURSES

BUS	103	Personnel/Human Resource Management . . .	3
BUS	172	Information Technology III . . . . .	5
BUS	182	Information and Database Management . . . .	5
BUS	216	Professional Development. . . . .	5
TOTAL PROGRAM CREDITS			17

## Office Support Short-Term Certificate

### Business, Information Technologies & Creative Arts Division

A short-term, intensive BIT office skills certificate for workers with some employment experience who wish to update skills and advance along their career track

### TECHNICAL SPECIALTY COURSES

BUS	100	Fundamentals of Supervision. . . . .	5
BUS	116	Business Math/Spreadsheets . . . . .	5
BUS	132	Integrated Communications II . . . . .	5
BUS	171	Information Technology II. . . . .	4
TOTAL PROGRAM CREDITS			17



## CULINARY, HOSPITALITY, AND WINE

### Culinary Arts Certificate

#### Seattle Culinary Academy Hospitality & Culinary Arts Division

The Culinary Arts program is a six-quarter (certificate) or seven-quarter (A.A.S. degree) course of study. The curriculum builds on classical techniques by integrating the modern cooking styles and methods of a variety of international cuisines, as well as seasonal Northwest cooking. Our focus is on sustainable principles and practices in order to teach our students about their impact on and responsibility for the environment and society. This education is enhanced by our campus greenhouse and Skagit Valley farm curricula.

Students learn to prepare appetizers, soups, sauces, salads, entrées, vegetables and starches, breads, pastries and desserts. They also learn to identify and fabricate meat, poultry and fish. In addition to cooking and pastry techniques, the program covers sanitation, nutrition, management, purchasing, costing, menu development, as well as food and wine pairing.

Seattle Central's Culinary Arts program meets the needs of those new to food preparation as well as those who have industry experience and wish to develop a broader range of skills. Many of our students have a degree in another field and wish to make a career change.

Students may enter the program Fall, Winter or Spring Quarters. The Associate of Applied Science (A.A.S.) degree may be granted with the completion of 16 additional elective credits. A cumulative GPA of 2.0 or higher in all core and related instructional courses is required to attain a Culinary Arts Certificate and/or A.A.S. degree.

The Seattle Culinary Academy's certificate programs are accredited by the American Culinary Federation Education Foundation's Accrediting Commission and have received exemplary status.

#### PREREQUISITES

ENGL	105	Applied Composition . . . . .	3
Following can be substituted:			
ENGL& 101 – English Composition (5)			
MATH	110	Applied Math for Technicians . . . . .	3
Following can be substituted: college level math			

#### TECHNICAL SPECIALTY COURSES

BAK	105	Restaurant Baking: Theory. . . . .	1.5
BAK	115	Restaurant Baking: Practicum . . . . .	1
BAK	116	Fine Dining Baking: Practicum . . . . .	1
CUL	101	Food Theory I . . . . .	6
CUL	102	Food Theory II. . . . .	5
CUL	103	Food Theory III . . . . .	4
CUL	104	Food Theory IV . . . . .	6
CUL	111	Introduction to Professional Cooking: Practicum . . . . .	6

CUL	112	Quantity Cooking: Practicum . . . . .	8
CUL	113	Restaurant Cooking: Practicum . . . . .	8
CUL	114	International Cooking: Practicum . . . . .	8
CUL	120	Introduction to Wine . . . . .	1
CUL	151	Sustainable Food Systems Practices I . . . . .	1
CUL	152	Sustainable Food Systems Practices II . . . . .	1
CUL	153	Sustainable Food Systems Practices III. . . . .	1
CUL	205	Advanced Culinary Theory . . . . .	1
CUL	215	Advanced Culinary Practices . . . . .	4.5
CUL	251	Buffet Catering & Garde Manger: Theory. . . . .	4
CUL	255	Buffet Cater/Garde Manger: Practicum. . . . .	8
HOS	101	Customer Service Practicum I . . . . .	1
HOS	102	Customer Service Practicum II . . . . .	1
HOS	103	Customer Service Practicum III . . . . .	1
HOS	104	Customer Service Practicum IV . . . . .	1
HOS	108	Dining Room and Kitchen Management. . . . .	4
HOS	110	Principles of Sanitation . . . . .	3
HOS	111	Introduction to Customer Service: Theory . . . . .	1
HOS	112	Spreadsheet for Hospitality . . . . .	1
HOS	122	Purchasing and Inventory: Theory. . . . .	1
HOS	123	Food Costing Principles and Application . . . . .	1
HOS	124	Computerized Menu Planning. . . . .	2
HOS	201	Functions of Management . . . . .	2

#### RELATED INSTRUCTION

BIOL	103	Nutrition for Food Service Professionals . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3

TOTAL PROGRAM CREDITS 101

NOTE: Certain courses require concurrent enrollment.  
Please check under culinary course descriptions for specifics.

### Culinary Arts Associate of Applied Science Degree (A.A.S.)

#### Seattle Culinary Academy Hospitality & Culinary Arts Division

The Culinary Arts program is a six-quarter (certificate) or seven-quarter (A.A.S. degree) course of study. The curriculum builds on classical techniques by integrating the modern cooking styles and methods of a variety of international cuisines, as well as seasonal Northwest cooking. Our focus is on sustainable principles and practices in order to teach our students about their impact on and responsibility for the environment and society. This education is enhanced by our campus greenhouse and Skagit Valley farm curricula.

Students learn to prepare appetizers, soups, sauces, salads, entrées, vegetables and starches, breads, pastries and desserts. They also learn to identify and fabricate meat, poultry and fish. In addition to cooking and pastry techniques, the program covers sanitation, nutrition, management, purchasing, costing, menu development, as well as food and wine pairing.

Seattle Central's Culinary Arts program meets the needs of those new to food preparation as well as those who have industry experience and wish to develop a broader range of skills. Many of our students have a degree in another field and wish to make a career change.

Students may enter the program Fall, Winter or Spring Quarters. The Associate of Applied Science (A.A.S.) degree may be granted with the completion of 16 additional elective credits. A cumulative GPA of 2.0 or higher in all core and related instructional courses is required to attain a Culinary Arts Certificate and/or A.A.S. degree.

The Seattle Culinary Academy's certificate programs are accredited by the American Culinary Federation Education Foundation's Accrediting Commission and have received exemplary status.

Completion of Certificate: 101 credits

#### PREREQUISITES

ENGL	105	Applied Composition . . . . .	3
		Following can be substituted:	
		ENGL& 101 – English Composition (5)	
MATH	110	Applied Math for Technicians . . . . .	3
		Following can be substituted: college level math	

#### TECHNICAL SPECIALTY COURSES

BAK	105	Restaurant Baking: Theory. . . . .	1.5
BAK	115	Restaurant Baking: Practicum . . . . .	1
BAK	116	Fine Dining Baking: Practicum . . . . .	1
CUL	101	Food Theory I . . . . .	6
CUL	102	Food Theory II. . . . .	5
CUL	103	Food Theory III . . . . .	4
CUL	104	Food Theory IV . . . . .	6
CUL	111	Introduction to Professional Cooking: Practicum . . . . .	6
CUL	112	Quantity Cooking: Practicum . . . . .	8
CUL	113	Restaurant Cooking: Practicum . . . . .	8
CUL	114	International Cooking: Practicum . . . . .	8
CUL	120	Introduction to Wine . . . . .	1
CUL	151	Sustainable Food Systems Practices I . . . . .	1
CUL	152	Sustainable Food Systems Practices II . . . . .	1
CUL	153	Sustainable Food Systems Practices III. . . . .	1
CUL	205	Advanced Culinary Theory . . . . .	1
CUL	215	Advanced Culinary Practices . . . . .	4.5
CUL	251	Buffet Catering & Garde Manger: Theory. . . . .	4
CUL	255	Buffet Cater/Garde Manger: Practicum. . . . .	8
HOS	101	Customer Service Practicum I . . . . .	1
HOS	102	Customer Service Practicum II . . . . .	1
HOS	103	Customer Service Practicum III . . . . .	1
HOS	104	Customer Service Practicum IV . . . . .	1
HOS	108	Dining Room and Kitchen Management. . . . .	4
HOS	110	Principles of Sanitation . . . . .	3
HOS	111	Introduction to Customer Service: Theory . . . . .	1
HOS	112	Spreadsheet for Hospitality . . . . .	1
HOS	122	Purchasing and Inventory: Theory. . . . .	1
HOS	123	Food Costing Principles and Application . . . . .	1
HOS	124	Computerized Menu Planning. . . . .	2
HOS	201	Functions of Management. . . . .	2

#### RELATED INSTRUCTION

BIOL	103	Nutrition for Food Service Professionals . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3

#### GENERAL EDUCATION ELECTIVES

CSC course . . . . .	4
Any humanities, social sciences, natural science of CSC class	

#### ALLIED SUPPORT ELECTIVES

Select 12 credits from any of the following:

CUL 299	Independent Projects/Culinary Arts	5
BUS course		5
CSC course		5
MIC course		5
College Transfer course		5
TOTAL PROGRAM CREDITS		117

## Culinary Arts Associate of Applied Science–Transfer Degree (A.A.S.-T)

#### Seattle Culinary Academy Hospitality & Culinary Arts Division

The Culinary Arts program is a six-quarter (certificate) or seven-quarter (A.A.S. degree) course of study. The curriculum builds on classical techniques by integrating the modern cooking styles and methods of a variety of international cuisines, as well as seasonal Northwest cooking. Our focus is on sustainable principles and practices in order to teach our students about their impact on and responsibility for the environment and society. This education is enhanced by our campus greenhouse and Skagit Valley farm curricula.

Students learn to prepare appetizers, soups, sauces, salads, entrées, vegetables and starches, breads, pastries and desserts. They also learn to identify and fabricate meat, poultry and fish. In addition to cooking and pastry techniques, the program covers sanitation, nutrition, management, purchasing, costing, menu development, as well as food and wine pairing.

Seattle Central's Culinary Arts program meets the needs of those new to food preparation as well as those who have industry experience and wish to develop a broader range of skills. Many of our students have a degree in another field and wish to make a career change.

The Seattle Culinary Academy's certificate programs are accredited by the American Culinary Federation Education Foundation's Accrediting Commission and have received exemplary status.

#### TECHNICAL SPECIALTY COURSES

BAK	105	Restaurant Baking: Theory. . . . .	1.5
BAK	115	Restaurant Baking: Practicum . . . . .	1
BAK	116	Fine Dining Baking: Practicum . . . . .	1
BAK	117	Introduction to Cheese Making. . . . .	1
BIOL	103	Nutrition for Food Service Professionals . . . . .	3
CUL	101	Food Theory I . . . . .	6

CUL	102	Food Theory II. . . . .	5
CUL	103	Food Theory III . . . . .	4
CUL	104	Food Theory IV . . . . .	6
CUL	111	Introduction to Professional Cooking: Practicum . . . . .	6
CUL	112	Quantity Cooking: Practicum . . . . .	8
CUL	113	Restaurant Cooking: Practicum . . . . .	8
CUL	114	International Cooking: Practicum . . . . .	8
CUL	120	Introduction to Wine . . . . .	1
CUL	151	Sustainable Food Systems Practices I . . . . .	1
CUL	152	Sustainable Food Systems Practices II . . . . .	1
CUL	153	Sustainable Food Systems Practices III. . . . .	1
CUL	205	Advanced Culinary Theory . . . . .	1
CUL	215	Advanced Culinary Practices . . . . .	4.5
CUL	251	Buffet Catering & Garde Manger: Theory. . . . .	4
CUL	255	Buffet Cater/Garde Manager: Practicum . . . . .	8
HOS	101	Customer Service Practicum I . . . . .	1
HOS	102	Customer Service Practicum II . . . . .	1
HOS	103	Customer Service Practicum III . . . . .	1
HOS	104	Customer Service Practicum IV . . . . .	1
HOS	108	Dining Room and Kitchen Management. . . . .	4
HOS	110	Principles of Sanitation . . . . .	3
HOS	111	Introduction to Customer Service: Theory . . . . .	1
HOS	122	Purchasing and Inventory: Theory. . . . .	1
HOS	123	Food Costing Principles and Application . . . . .	1
HOS	124	Computerized Menu Planning. . . . .	2
HOS	201	Functions of Management . . . . .	2
MIC	102	Using Computers I . . . . .	1

**RELATED INSTRUCTION**

Total of 20 credits is derived from all three Related Instruction areas.

ENGL&	101	English Composition I . . . . .	5
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**RELATED INSTRUCTION – QUANTITATIVE SKILLS**

College-level Math with MATH 098 prereq.

Choose 5 credits (1 course) from the following:

MATH&	107	Math in Society . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5

**RELATED INSTRUCTION – SCIENCE, SOCIAL OR HUMAN**

Choose 10 credits (2 courses) from the following:

ANTH&	206	Cultural Anthropology . . . . .	5
ANTH	275	Medical Anthropology . . . . .	5
BIOL&	160	General Biology w/Lab . . . . .	5
CHEM&	121	Introduction to Chemistry . . . . .	5
CMST&	101	Introduction to Communication . . . . .	5
HUM	105	Intercultural Communication . . . . .	5
NTR	150	Human Nutrition . . . . .	5
PSYC&	100	General Psychology. . . . .	5

TOTAL PROGRAM CREDITS	119
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## Culinary Arts: Specialty Desserts & Breads Certificate

### Seattle Culinary Academy Hospitality & Culinary Arts Division

Specialty Desserts & Breads program features comprehensive “hands on” and step-by-step training to prepare students to be professional bakers or pastry chefs.

Learn to create rustic artisan breads and doughs, plated desserts, decorative cakes, and mouthwatering pastries. Explore European specialties such as tarts, mousses, truffles, and petit fours. Discover the fine art of wedding cakes and cake decorating. Learn chocolate work with demonstrations on pulled and blown sugar, intricate decoration, and showpieces. Classroom theory instruction includes “hands-on” experience in how to serve breads and desserts for two on-campus restaurants and in our pastry shop. Sustainable practices are integrated throughout the program, especially in food preservation and cheese production courses. Learn the value of buying seasonally and locally storing the bounties of the summer harvest and purchasing milk from local dairies.

The Specialty Desserts & Breads certificate is accredited by the American Culinary Federation Education Foundation's Accrediting Commission and received exemplary status.

Specialty Desserts & Breads is a five-quarter certificate program. Students may enter the program Fall, Winter or Spring Quarters. The Associate of Applied Science (A.A.S.) degree can be earned with the completion of 16 additional elective credits. A cumulative GPA of 2.0 or higher in all core and related instructional courses is required to attain a Culinary Arts Certificate and/or A.A.S. degree.

**PREREQUISITES**

ENGL	105	Applied Composition . . . . .	3
Following can be substituted:			
ENGL&	101	English Composition (5)	
MATH	110	Applied Math for Technicians . . . . .	3
Following can be substituted: college-level math			

**TECHNICAL SPECIALTY COURSES**

BAK	101	Intro to Desserts & Breads: Theory . . . . .	4
BAK	102	Bread and Food Preservation . . . . .	3
BAK	103	Science and Practice of Baking with Chocolate . . . . .	4
BAK	111	Introduction to Desserts & Breads: Practicum	6
BAK	112	Beginning Desserts and Breads: Practicum . . .	8
BAK	113	Intermediate Desserts and Breads: Practicum	8
BAK	117	Introduction to Cheese Making. . . . .	1
BAK	123	Adv Buff. Desserts/Wed Cakes/ Preservation-Theory . . . . .	2
BAK	124	Adv. Buffet Desserts/Wedding Cakes/ Preservation . . . . .	8
BAK	125	Advanced Desserts and Breads: Practicum . . .	8
BAK	126	Advanced Whole Grain Baking Theory . . . . .	3
CUL	106	Introduction to Culinary Arts: Theory. . . . .	1.5
CUL	116	Introduction to Culinary Arts: Practicum . . . . .	1

CUL	120	Introduction to Wine . . . . .	1
CUL	151	Sustainable Food Systems Practices I . . . . .	1
CUL	152	Sustainable Food Systems Practices II . . . . .	1
CUL	153	Sustainable Food Systems Practices III. . . . .	1
HOS	101	Customer Service Practicum I . . . . .	1
HOS	102	Customer Service Practicum II . . . . .	1
HOS	105	Customer Service for Specialty Desserts Breads . . . . .	1
HOS	110	Principles of Sanitation . . . . .	3
HOS	112	Spreadsheet for Hospitality . . . . .	1
HOS	122	Purchasing and Inventory: Theory. . . . .	1
HOS	123	Food Costing Principles and Application . . . . .	1
HOS	201	Functions of Management . . . . .	2

**RELATED INSTRUCTION**

BIOL	103	Nutrition for Food Service Professionals . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3
<b>TOTAL PROGRAM CREDITS</b>			<b>78.5</b>

## Culinary Arts: Specialty Desserts & Breads Associate of Applied Science Degree (A.A.S.)

**Seattle Culinary Academy Hospitality & Culinary Arts Division**

Specialty Desserts & Breads program features comprehensive “hands on” and step-by-step training to prepare students to be professional bakers or pastry chefs.

Learn to create rustic artisan breads and doughs, plated desserts, decorative cakes, and mouthwatering pastries. Explore European specialties such as tarts, mousses, truffles, and petit fours. Discover the fine art of wedding cakes and cake decorating. Learn chocolate work with demonstrations on pulled and blown sugar, intricate decoration, and showpieces. Classroom theory instruction includes “hands-on” experience in how to serve breads and desserts for two on-campus restaurants and in our pastry shop.

Sustainable practices are integrated throughout the program, especially in food preservation and cheese production courses. Learn the value of buying seasonally and locally storing the bounties of the summer harvest and purchasing milk from local dairies.

The Specialty Desserts & Breads certificate is accredited by the American Culinary Federation Education Foundation's Accrediting Commission and received exemplary status.

Specialty Desserts & Breads is a five-quarter certificate program. Students may enter the program Fall, Winter or Spring Quarters. The Associate of Applied Science (A.A.S.) degree can be earned with the completion of 16 additional elective credits. A cumulative GPA of 2.0 or higher in all core and related instructional courses is required to attain a Culinary Arts Certificate and/or A.A.S. degree.

Completion of Certificate Requirements: 78.5 credits

**PREREQUISITES**

ENGL	105	Applied Composition . . . . .	3
Following can be substituted:			
ENGL& 101 – English Composition (5)			
MATH	110	Applied Math for Technicians . . . . .	3
Following can be substituted: college level math			

**TECHNICAL SPECIALTY COURSES**

BAK	101	Intro to Desserts & Breads: Theory . . . . .	4
BAK	102	Bread and Food Preservation . . . . .	3
BAK	103	Science and Practice of Baking with Chocolate 4	
BAK	111	Introduction to Desserts & Breads: Practicum. . . . .	6
BAK	112	Beginning Desserts and Breads: Practicum. . . . .	8
BAK	113	Intermediate Desserts and Breads: Practicum 8	
BAK	117	Introduction to Cheese Making. . . . .	1
BAK	123	Adv Buff. Desserts/Wed Cakes/ Preservation-Theory . . . . .	2
BAK	124	Adv. Buffet Desserts/Wedding Cakes/ Preservation . . . . .	8
BAK	125	Advanced Desserts and Breads: Practicum . . . . .	8
BAK	126	Advanced Whole Grain Baking Theory . . . . .	3
CUL	106	Introduction to Culinary Arts: Theory. . . . .	1.5
CUL	116	Introduction to Culinary Arts: Practicum . . . . .	1
CUL	120	Introduction to Wine . . . . .	1
CUL	151	Sustainable Food Systems Practices I . . . . .	1
CUL	152	Sustainable Food Systems Practices II . . . . .	1
CUL	153	Sustainable Food Systems Practices III. . . . .	1
HOS	101	Customer Service Practicum I . . . . .	1
HOS	102	Customer Service Practicum II . . . . .	1
HOS	105	Customer Service for Specialty Desserts Breads . . . . .	1
HOS	110	Principles of Sanitation . . . . .	3
HOS	112	Spreadsheet for Hospitality . . . . .	1
HOS	122	Purchasing and Inventory: Theory. . . . .	1
HOS	123	Food Costing Principles and Application . . . . .	1
HOS	201	Functions of Management . . . . .	2

**RELATED INSTRUCTION**

BIOL	103	Nutrition for Food Service Professionals . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3

**GENERAL ELECTIVES**

Choose 4 credits from any of the following:

Social Science Elective . . . . .	5
Humanities Electives . . . . .	5
CSC course . . . . .	5
Natural Science of CSC class	

**ALLIED SUPPORT ELECTIVES**

Choose 12 credits from any of the following:

CUL	299	Independent Projects/Culinary Arts . . . . .	5
BUS	course	. . . . .	5
CSC	course	. . . . .	5
MIC	course	. . . . .	5
College Transfer	course	. . . . .	5

<b>TOTAL PROGRAM CREDITS</b>			<b>94.5</b>
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## Culinary Arts: Specialty Desserts & Breads Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Seattle Culinary Academy Hospitality & Culinary Arts Division

Specialty Desserts & Breads program features comprehensive “hands on” and step-by-step training to prepare students to be professional bakers or pastry chefs.

Learn to create rustic artisan breads and doughs, plated desserts, decorative cakes, and mouthwatering pastries. Explore European specialties such as tarts, mousses, truffles, and petit fours. Discover the fine art of wedding cakes and cake decorating. Learn chocolate work with demonstrations on pulled and blown sugar, intricate decoration, and showpieces. Classroom theory instruction includes “hands-on” experience in how to serve breads and desserts for two on-campus restaurants and in our pastry shop.

Sustainable practices are integrated throughout the program, especially in food preservation and cheese production courses. Learn the value of buying seasonally and locally storing the bounties of the summer harvest and purchasing milk from local dairies.

The Specialty Desserts & Breads certificate is accredited by the American Culinary Federation Education Foundation's Accrediting Commission and received exemplary status.

Specialty Desserts & Breads is a five-quarter certificate program. Students may enter the program Fall, Winter or Spring Quarters. The Associate of Applied Science (A.A.S.) degree or Associate of Applied Science-T Degree (A.A.S.-T) can also be earned.

### TECHNICAL SPECIALTY COURSES

BAK	101	Intro to Desserts & Breads: Theory . . . . .	.4
BAK	102	Bread and Food Preservation . . . . .	.3
BAK	103	Science and Practice of Baking with Chocolate .4	
BAK	111	Introduction to Desserts & Breads: Practicum .6	
BAK	112	Beginning Desserts and Breads: Practicum . . .8	
BAK	113	Intermediate Desserts and Breads: Practicum .8	
BAK	124	Adv. Buffet Desserts/Wedding Cakes/ Preservation . . . . .	.8
BAK	125	Advanced Desserts and Breads: Practicum . . .8	
BAK	126	Advanced Whole Grain Baking Theory . . . . .	.3
BIOL	103	Nutrition for Food Service Professionals . . . . .	.3
CUL	106	Introduction to Culinary Arts: Theory . . . . .	1.5
CUL	116	Introduction to Culinary Arts: Practicum . . . . .	.1
CUL	120	Introduction to Wine . . . . .	.1

CUL	151	Sustainable Food Systems Practices I . . . . .	.1
CUL	152	Sustainable Food Systems Practices II . . . . .	.1
CUL	153	Sustainable Food Systems Practices III. . . . .	.1
HOS	101	Customer Service Practicum I . . . . .	.1
HOS	102	Customer Service Practicum II . . . . .	.1
HOS	110	Principles of Sanitation . . . . .	.3
HOS	122	Purchasing and Inventory: Theory . . . . .	.1
HOS	123	Food Costing Principles and Application . . . . .	.1
HOS	201	Functions of Management . . . . .	.2
MIC	102	Using Computers I . . . . .	.1

### RELATED INSTRUCTION

Total of 20 credits from all three related instruction areas

ENGL&	101	English Composition I . . . . .	.5
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### RELATED INSTRUCTION – QUANTITATIVE SKILLS

College-level Math with MATH 098 prereq.

Choose 1 course listed below:

MATH&	107	Math in Society . . . . .	.5
MATH&	146	Introduction to Statistics . . . . .	.5

### RELATED INSTRUCTION – SCIENCE, SOCIAL OR HUMAN

Choose 2 from the following:

ANTH&	206	Cultural Anthropology . . . . .	.5
BIOL&	160	General Biology w/Lab . . . . .	.5
CHEM&	121	Introduction to Chemistry . . . . .	.5
CMST&	101	Introduction to Communication . . . . .	.5
HUM	105	Intercultural Communication . . . . .	.5
NTR	150	Human Nutrition . . . . .	.5
PSYC&	100	General Psychology . . . . .	.5

TOTAL PROGRAM CREDITS			94.5
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## EDUCATION AND HUMAN SERVICES

### Applied Behavioral Science Bachelor of Applied Science Degree (B.A.S.)

#### Applied Behavioral Science Department

The Bachelor degree in Applied Behavioral Science creates a continuing educational and professional pathway for students with the Associate of Applied Science degree. It is designed specifically for people in the human services professions such as:

- Social services
- Early childhood education/child welfare
- Chemical dependency counseling
- Family support services
- Public/community health
- Prevention and early intervention
- Interpreting/translation services

With the baccalaureate option, students are able to move from short-term certificates and related degrees to further foundational and specialized coursework, creating access to multiple high demand jobs within many areas of applied behavioral sciences.

#### PREREQUISITES

Meet a minimum GPA requirement of 2.5.

Have completed a two year degree (such as an AAS, AAS-T, ATA, AAA) in Social and Human Services, Child and Family Studies, Interpreter Training, or a related human services degree.

Be eligible for Math 098 (Intermediate Algebra).

#### TECHNICAL SPECIALTY COURSES

ABS	310	Professionalism and Ethical Practice	.5
ABS	320	Applied Social Psychology	.5
ABS	330	Information Literacy and Program Assessment	.5
ABS	340	Applied Environmental Science	.5
ABS	350	Quantitative Principles in Research & Assessment	.5
ABS	360	Public Policy Analysis	.5
ABS	410	Economic-Political Systems: Public Implications	.5
ABS	415	Cross-Cultural Competency in Human Services	.5
ABS	430	Sociology of Families	.5
ABS	495	Senior Capstone Project	.5
ABS	497	Advanced Field Placement I	.5
ABS	498	Advanced Field Placement II	.5

#### GENERAL EDUCATION

Minimum GPA requirement of 2.0

CMST& 101	Introduction to Communication	.5
ENGL& 101	English Composition I	.5
ENGL& 102	Composition II	.5
PSYC& 100	General Psychology	.5
SOC& 101	Introduction to Sociology	.5
Lab Science		.5
Humanities & Arts course		.5
Following can be substituted: Social Science course (5)		
College Level MATH course.		.5
(e.g, MATH& 107, MATH 136 )		

#### HUMAN SERVICES CORE

Minimum GPA requirement of 2.0

Choose required 30 credits from one of the three options below:

##### HUMAN SERVICES CORE – OPTION 1: SOCIAL/HUMAN SERVICES

SHS	100	Introduction to Human Services	.5
SHS	103	Social Welfare Policy	.5
SHS	106	Principles of Interviewing and Counseling	.5
SHS	108	Group Dynamics & Counseling	.5
SHS	197	Field Placement: Social and Human Services	.3
SHS	198	Field Placement: Social and Human Services	.3
SHS	199	Field Placement: Social and Human Services	.4

##### HUMAN SERVICES CORE – OPTION 2: CHILD/FAMILY

CFS	110	Developmentally Appropriate Activities Environment	.3
CFS	120	Physical & Intellectual Development	.3
CFS	130	Social/Emotional Development	.3
CFS	245	Partnerships with Diverse Families	.3
CFS	263	Children with Disabilities	.3
CFS	270	Child and Family Health	.3
CFS	284	Literacy Development for Children & Families	.3
		Field Placement	.10

TOTAL REQUIRED CREDITS: 8-10

##### HUMAN SERVICES CORE – OPTION 3: INTERPRETING/TRANSLATION

Ethics		.5
Cultural Studies		.5
(e.g. ASL 125 or ANTH& 206)		
World Language		.10
(e.g. ASL, Spanish, Arabic, Japanese)		
Field Placement		.10
Following can be substituted:		
350 hours of documented translation/interpreting experience		

#### ELECTIVES

An additional 50 credits of electives is required.

These credits will be a combination of courses from the AAS degree, additional courses taken during the ABS degree program including the following ABS elective course options below:

ABS	335	Human Services Practice	.5
ABS	420	Multicultural and Artistic Expression	.5

TOTAL PROGRAM CREDITS 180

## Chemical Dependency Specialist Certificate

### Social & Human Services & Child & Family Studies

The Chemical Dependency Specialist Program provides training for students interested in working with those affected by addiction to alcohol and other drugs. The program meets Washington State educational requirements for Chemical Dependency Professional certification. State requirements include a minimum A.A.S. degree and 45 credits of chemical dependency specific curriculum (WAC 246-811-030). Additional Washington State Department of Health requirements must be satisfied to obtain certification. Consult the division counselor and/or the Washington State Department of Health before enrolling.

Students with a higher level of formal education may also obtain the 45 credits of chemical dependency curriculum through the Chemical Dependency Specialist Program. A Washington State background check may be required for Field Practicum. A 2.0 is required in all Chemical Dependency certificate courses.

### PREREQUISITES

Additional courses may be needed to meet state certification requirements. Consult the division counselor before enrolling.

Eligibility for the following classes:

ENGL& 101	English Composition I	5
MATH 084	Algebra I	5

### CORE COURSES

SHS 106	Principles of Interviewing and Counseling	5
SHS 108	Group Dynamics & Counseling	5

### TECHNICAL SPECIALTY COURSES

SHS 150	HIV/AIDS Brief Risk Intervention	1
SHS 210	Intro to Diversity in Human Services Practice	3
	SHS 210 Multicultural Counseling and SHS 215 Adolescent Assessment & Relapse Prevention can be taken as a SHS 296 Human Services workshop.	
SHS 215	Adolescent Development and Treatment	3
	SHS 210 Multicultural Counseling and SHS 215 Adolescent Assessment & Relapse Prevention can be taken as a SHS 296 Human Services workshop.	
SHS 231	Pharmacology of Addictions	5
SHS 232	Addiction, Adolescents and Family Systems	5
SHS 233	Chemical Dependency Counseling	5
SHS 235	Drug Addiction and Society	5
SHS 270	Ethics in Human Services and Chemical Dependency	3
SHS 280	Chemical Dependency Case Management	3
SHS 296	Special Topics	1

TOTAL REQUIRED HUMAN SERVICES WORKSHOP CREDITS: 1-3

### FIELD PLACEMENT COURSES

CDS 197	Field Practicum: Chemical Dependency	3
CDS 198	Field Practicum: Chemical Dependency	3
CDS 199	Field Practicum: Chemical Dependency	4

### GENERAL EDUCATION COURSES

ENGL& 101	English Composition I	5
PSYC& 100	General Psychology	5
PSYC& 200	Lifespan Psychology	5

Following can be substituted:

PSYC 207 – Developmental Psychology [Adolescent] (5)

TOTAL PROGRAM CREDITS 67-69

NOTE: Eligibility for graduation requires a minimum 2.0 GPA in all required technical specialty and related instruction courses.

Certification as a Chemical Dependency Professional with Washington State also requires an associate's degree or its academic equivalent in any area, and 2,500 clock hours of supervised clinical work.

## Child & Family Studies Certificate

### Social & Human Services & Child & Family Studies

The Child & Family Studies option provides academic preparation for students interested in working with children and their families in a wide range of employment opportunities.

### PREREQUISITES

Eligibility for the following:

ENGL& 101	English Composition I	5
MATH 084	Algebra I	5

### SPECIALIZATION CERTIFICATE COURSES

SHS 103	Social Welfare Policy	5
SHS 106	Principles of Interviewing and Counseling	5

Following can be substituted:

SHS 108 – Group Dynamics & Counseling (5)

SHS 197	Field Placement: Social and Human Services	3
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Credit range: 2-5

TOTAL REQUIRED FIELD PLACEMENT CREDITS: 3

### RELATED INSTRUCTION COURSES

ENGL& 101	English Composition I	5
HUM 105	Intercultural Communication	5
PSYC& 200	Lifespan Psychology	5
SOC& 101	Introduction to Sociology	5

Following can be substituted:

SOC 250 – Marriage, Family & Intimate Relationships (5)

### CFS SPECIALIZATION AREA

NOTE: Students may take a total of 12 credits from the specialization areas listed below:

CFS 110	Developmentally Appropriate Activities Environment	3
CFS 120	Physical & Intellectual Development	3
CFS 130	Social/Emotional Development	3
CFS 145	Activities to Foster Development School Age Year3	

CFS	155	Development During the Adolescent Years . . .	3
CFS	180	Guiding Behavior & Social Dev School Age and Ad. . . . .	3
CFS	208	Planning & Space Design for School-Age & Youth . . . . .	3
CFS	215	Math and Science with Young Children . . . . .	3
CFS	223	Physical Development in School Age/ Youth Program . . . . .	2
CFS	225	Assessment & Programming . . . . .	3
CFS	228	Childhood/Adolescent Sexuality & Education .	3
CFS	245	Partnerships with Diverse Families . . . . .	3
CFS	252	Violence Prevention . . . . .	3
CFS	263	Children with Disabilities . . . . .	3
CFS	270	Child and Family Health . . . . .	3
CFS	280	Methods Cultural Relv/Anti-Bias:Child & Families . . . . .	3
CFS	284	Literacy Development for Children & Families .	3
CFS	290	Budget and Finance . . . . .	4
Credit range: 1-4			
Total required credits for CFS 290: 1-4			
CFS	296	Personnel and Supervision . . . . .	4
Credit range: 1-4			
Total required credits for CFS 296: 1-4			
CFS	299	M.E.R.I.T. . . . .	2
TOTAL REQUIRED CREDITS FOR CFS 299:			1-5
Maximum of 3 credits may be applied toward certificate or degree			
TOTAL PROGRAM CREDITS			45
Eligibility for graduation requires a minimum 2.0 GPA in all required technical specialty and related instruction courses.			

## ECE: State Early Childhood Education Certificate

### Social & Human Services & Child & Family Studies

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training or 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

The State Early Childhood Education certificate is awarded following completion of the one of the specialized Early Childhood Short Certificates (total of 20 credits, which includes completion of the State Initial Early Childhood Education Certificate [12 credits] ) plus 27 credits in additional required coursework as noted.

### TECHNICAL SPECIALTY COURSES

ECED& 160	Curriculum Development . . . . .	5
ECED& 170	Environments – Young Child . . . . .	3
Following can be substituted:		
ECED& 130 – Guiding Behavior (3)		
ECED& 180	Language and Literacy Development. . . . .	3
ECED& 190	Observing and Assessment . . . . .	3
EDUC& 150	Child Family and Community . . . . .	3

### TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE

Completion of the courses listed below equals the State Initial ECE Certificate:

ECED& 105	Introduction to Early Childhood Education . . .	5
ECED& 107	Health, Safety, and Nutrition . . . . .	5
ECED& 120	Practicum: Nurturing Relationships . . . . .	2

### TECHNICAL SPECIALTY COURSES – SPECIALIZATION

Completion of EDUC& 115 – Child Development and one of the other courses listed below:

ECED& 132	Infants and Toddlers . . . . .	3
Completion this course, EDUC& 115 – Child Development (5), and the State Initial ECE Certificate courses (12) equals the State Short ECE Certificate – Infant/Toddler Care		
ECED& 134	Family Child Care . . . . .	3
Completion this course, EDUC& 115 – Child Development (5), and the State Initial ECE Certificate courses (12) equals the State Short ECE Certificate – Family Child Care		
ECED& 139	Administration . . . . .	3
Completion this course, EDUC& 115 – Child Development (5), and the State Initial ECE Certificate courses (12) equals the State Short ECE Certificate – Administration		
EDUC& 115	Child Development . . . . .	5
EDUC& 130	Guiding Behavior . . . . .	3
Completion this course, EDUC& 115 – Child Development (5), and the State Initial ECE Certificate courses (12) equals the State Short ECE Certificate – General		
EDUC& 136	School-Age Care . . . . .	3
Completion this course, EDUC& 115 – Child Development (5), and the State Initial ECE Certificate courses (12) equals the State Short ECE Certificate – School-Age Care		

### RELATED INSTRUCTION

ENGL& 101	English Composition I . . . . .	5
Following can be substituted:		
English course higher than ENGL& 101		
College Level MATH course. . . . .		5
Quantitative or Computational Math above 100 or designated Q/SR		

TOTAL PROGRAM CREDITS	47
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## ECE: State Initial Early Childhood Education Certificate

### Social & Human Services & Child & Family Studies

The initial Certificate is a point of entry or a continuation of professional development based on Level 1 on the Washington State Career Lattice (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) The initial Certificate (level 2 Step 5) is the first "Stackable certificate" providing a foundation for the ECS Sate Credential and association degree.

#### TECHNICAL SPECIALTY COURSES

ECED& 105	Introduction to Early Childhood Education . . . .	5
ECED& 107	Health, Safety, and Nutrition . . . . .	5
ECED& 120	Practicum: Nurturing Relationships . . . . .	2
TOTAL PROGRAM CREDITS		12

## ECE: State Short Early Childhood Education Certificate – Administration

### Social & Human Services & Child & Family Studies

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

The State Short Early Childhood Education Certificate – Administration is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

#### TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE

Completion of the courses listed below equals the State Initial ECE Certificate

ECED& 105	Introduction to Early Childhood Education . . . .5
ECED& 107	Health, Safety, and Nutrition . . . . .5
ECED& 120	Practicum: Nurturing Relationships . . . . .2

#### TECHNICAL SPECIALTY COURSES – SPECIALIZATION

ECED& 139	Administration . . . . .	3
EDUC& 115	Child Development . . . . .	5
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TOTAL PROGRAM CREDITS		20

## ECE: State Short Early Childhood Education Certificate – Family Child Care

### Social & Human Services & Child & Family Studies

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

The State Short Early Childhood Education Certificate – Family Child Care is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

#### TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE

Completion of the courses listed below equals the State Initial ECE Certificate:

ECED& 105	Introduction to Early Childhood Education . . . .5
ECED& 107	Health, Safety, and Nutrition . . . . .5
ECED& 120	Practicum: Nurturing Relationships . . . . .2

#### TECHNICAL SPECIALTY COURSES – SPECIALIZATION

ECED& 134	Family Child Care	3
EDUC& 115	Child Development	5
TOTAL PROGRAM CREDITS		20

## ECE: State Short Early Childhood Education Certificate – General

### Social & Human Services & Child & Family Studies

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

The State Short Early Childhood Education Certificate – General is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

#### TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE

Completion of the courses listed below equals the State Initial ECE Certificate

ECED& 105	Introduction to Early Childhood Education . . . .5
ECED& 107	Health, Safety, and Nutrition . . . . .5
ECED& 120	Practicum: Nurturing Relationships . . . . .2

#### TECHNICAL SPECIALTY COURSES – SPECIALIZATION

EDUC& 115	Child Development . . . . .	5
EDUC& 130	Guiding Behavior . . . . .	3
TOTAL PROGRAM CREDITS		20

## ECE: State Short Early Childhood Education Certificate – Infant Toddler Care

### Social & Human Services & Child & Family Studies

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

The State Short Early Childhood Education Certificate – Infant Toddler Care is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

### TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE

Completion of the courses listed below equals the State Initial ECE Certificate:

ECED& 105	Introduction to Early Childhood Education . . . .5
ECED& 107	Health, Safety, and Nutrition . . . . .5
ECED& 120	Practicum: Nurturing Relationships . . . . .2

### TECHNICAL SPECIALTY COURSES – SPECIALIZATION

ECED& 132	Infants and Toddlers . . . . .3
EDUC& 115	Child Development . . . . .5
TOTAL PROGRAM CREDITS . . . . .20	

## ECE: State Short Early Childhood Education Certificate – School-Age Care

### Social & Human Services & Child & Family Studies

This program is part of the Washington State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

The State Short Early Childhood Education Certificate – School-Age Care is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

### TECHNICAL SPECIALTY COURSES – INITIAL CERTIFICATE

Completion of the courses listed below equals the State Initial ECE Certificate:

ECED& 105	Introduction to Early Childhood Education . . . .5
ECED& 107	Health, Safety, and Nutrition . . . . .5
ECED& 120	Practicum: Nurturing Relationships . . . . .2

### TECHNICAL SPECIALTY COURSES – SPECIALIZATION

EDUC& 115	Child Development . . . . .5
EDUC& 136	School-Age Care . . . . .3
TOTAL PROGRAM CREDITS . . . . .20	

## Education Associate of Applied Science – Transfer Degree (A.A.S.-T)

### Health and Human Services Division

Graduates of the AAS-T in Education will be prepared to enter the education field as a para-educator, while also have the credentials to enroll in a baccalaureate program aimed at teacher certification. Graduates will be culturally responsive, while practicing relationship-centered pedagogy and promoting critical community discourse, system functions and integration points to provide actionable data.

### GENERAL EDUCATION COURSES

ENGL& 101	English Composition I . . . . .5
ENGL& 102	Composition II . . . . .5
MATH& 107	Math in Society . . . . .5
Following can be substituted: college-level transferable MATH	

### VISUAL, LITERARY AND PERFORMING ARTS (LPA)

ART 101	Design. . . . .5
Following can be substituted: other VLPA course	
CMST& 220	Public Speaking . . . . .5
HUM 105	Intercultural Communication . . . . .5

### INDIVIDUALS, CULTURES AND SOCIETY (ICS)

AME 201	Diversity and Social Justice . . . . .5
PSYC& 100	General Psychology. . . . .5
SOC 245	Social Psychology . . . . .5

### NATURAL WORD (NW)

ANTH 275	Medical Anthropology . . . . .5
BIOL& 100	Survey of Biology . . . . .5
ENVS& 101	Intro to Environmental Science w/Lab. . . . .5

### ELECTIVES

EDUC& 202	Introduction to Education. . . . .5
EDUC& 205	Introduction to Education with Field Experience . . . . .5
EDUC& 230	The Democratic Classroom . . . . .5

### ELECTIVES (RESTRICTIVE)

ECED& 160	Curriculum Development . . . . .5
EDUC& 115	Child Development . . . . .5
EDUC& 130	Guiding Behavior . . . . .3
HDC 101	Orientation to College Success . . . . .3

TOTAL PROGRAM CREDITS . . . . .90	
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## Elementary Education (AA-DTA)

This pathway is designed for students who wish to complete an Associate of Arts – Direct Transfer Agreement degree with a concentration in Elementary Education. Students in this pathway will take courses to prepare them for a transfer into an Elementary Education program at a four-year university. This program pathway provides students with a foundation of Math, English, Science, Humanities, and Social Science courses.

Completion of this program prepares students to transfer at the junior level to Elementary Education or a related field of study at a four-year college or university, as well as opening doors to employment in public and private institutions.

## Housing & Social Services Provider I Short-Term Certificate

### Social & Human Services & Child & Family Studies

This two part, 25 credit stackable certificate program provides basic and foundational concepts and skills to current providers in the housing and social service sector.

#### TECHNICAL SPECIALTY COURSES

BTM	098	Computing Essentials . . . . .	3
HDC	101	Orientation to College Success . . . . .	2
Credit range: 1-3/Total required credits: 1-2			
SHS	100	Introduction to Human Services . . . . .	5
SHS	101	SHS, Chemical Dependency, and Academics . .	2
TOTAL PROGRAM CREDITS			12-13

Can be applied toward an AAS-T in Social and Human Services

## Housing & Social Services Provider II Short-Term Certificate

### Social & Human Services & Child & Family Studies

This two part, 25 credit stackable certificate program provides basic and foundational concepts and skills to current providers in the housing and social service sector.

#### TECHNICAL SPECIALTY COURSES

SHS	103	Social Welfare Policy . . . . .	5
SHS	106	Principles of Interviewing and Counseling . . .	5
SHS	210	Intro to Diversity in Human Services Practice .	3
TOTAL PROGRAM CREDITS			13

Can be applied toward an AAS-T in Social and Human Services

## Social & Human Services Associate of Applied Science Degree (A.A.S.)

### Social & Human Services & Child & Family Studies

This program is for students interested in careers in the helping professions. The interdisciplinary program focuses on a strengths-based approach to prevention and intervention. The curriculum includes theoretical knowledge and targeted, skills-based education. Students practice their skills in a community based setting through a required internship in the student's selected specialization area. The program covers many facets of the human services profession from the history of the field to social policy to interviewing skills.

Graduates may find employment in non-profit and for-profit agencies in the fields of child welfare, chemical dependency, family support, case management, early childhood education, delivery of basic needs, aging, and other service provision areas.

Specialization options within the A.A.S. degree are Generalist, Chemical Dependency Specialist Certificate (details below) or the Child and Family Studies concentration.

A 2.0 GPA in all required technical specialty and related instruction courses is required for graduation. For information on entrance requirements and additional coursework, contact the division office.

#### PREREQUISITES

Eligibility for the following:

ENGL&	101	English Composition I . . . . .	5
MATH	084	Algebra I . . . . .	5

#### HUMAN SERVICES CORE

SHS	100	Introduction to Human Services . . . . .	5
SHS	103	Social Welfare Policy . . . . .	5
SHS	106	Principles of Interviewing and Counseling . . .	5
SHS	108	Group Dynamics & Counseling . . . . .	5
SHS	197	Field Placement: Social and Human Services .	3

Credit range: 2-5

Total required credits for SHS 197: 3

SHS	198	Field Placement: Social and Human Services .	3
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Credit range: 2-5

Total required credits for SHS 198:3

SHS	199	Field Placement: Social and Human Services .	4
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Credit range: 2-5

Total required credits for SHS 199: 4

SHS	210	Intro to Diversity in Human Services Practice .	3
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#### HUMAN SERVICES SPECIALIZATIONS

Select 22 credits from the following classes:

SHS	120	Introduction to Disabilities Study and Practice .	3
SHS	121	Introduction to Care Navigation . . . . .	5
SHS	122	Care Navigation: Systems of Care . . . . .	5
SHS	123	Advanced Care Coordination and Navigation . .	5
SHS	124	Navigating Behavioral Health Systems . . . . .	3
SHS	125	Care Navigation for Older Adults . . . . .	3
SHS	150	HIV/AIDS Brief Risk Intervention . . . . .	1
SHS	205	Crisis Intervention and Management . . . . .	3
SHS	209	Grief and Loss in Social and Human Services .	5

SHS	215	Adolescent Development and Treatment . . . . .	3
SHS	222	Conflict Management . . . . .	3
SHS	223	Human Service Practice with LGBTQ Populations	3
SHS	225	Relapse Prevention . . . . .	1
SHS	230	Suicide Risk Assessment . . . . .	3
SHS	231	Pharmacology of Addictions . . . . .	5
SHS	232	Addiction, Adolescents and Family Systems . .	5
SHS	233	Chemical Dependency Counseling . . . . .	5
SHS	235	Drug Addiction and Society . . . . .	5
SHS	245	Mental Health Overview . . . . .	3
SHS	250	Client and Community Advocacy . . . . .	4
SHS	255	Mental Health and Co-Occurring Disorders . . .	5
SHS	270	Ethics in Human Services and Chemical Dependency . . . . .	3
SHS	280	Chemical Dependency Case Management . . .	3
SHS	296	Special Topics . . . . .	1
		Maximum of 8 credits may be applied towards degree	
SHS	297	Special Topics . . . . .	2
		Maximum of 8 credits may be applied towards degree	
SHS	298	Special Topics . . . . .	5
		Maximum of 8 credits may be applied towards degree	
SHS	299	Independent Study or Research . . . . .	5
		Maximum of 8 Credits may be applied towards degree	
		Credit range: 1-5 credits	
		Total required Independent /Research credits for SHS 299: 1-5	

**RELATED INSTRUCTION**

BTM	111	Business Applications I . . . . .	5
CMST&	101	Introduction to Communication . . . . .	5
ENGL&	101	English Composition I . . . . .	5
ENGL&	102	Composition II . . . . .	5
MATH	087	Foundations of Algebra . . . . .	5
		Following can be substituted:	
		MATH 091 – Descriptive Statistics Algebra I	
PSYC&	100	General Psychology . . . . .	5
SOC&	101	Introduction to Sociology . . . . .	5
<b>TOTAL PROGRAM CREDITS</b>			<b>90</b>

Specific chemical dependency classes required for Washington State Chemical Dependency Counselor qualifications are listed in the Chemical Dependency Specialist brochure.

Eligibility for graduation requires a minimum 2.0 GPA in all required technical specialty and related instruction courses.

## Social & Human Services Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Social & Human Services & Child & Family Studies

The six-quarter Social and Human Services AAS-T Degree Program provides education for students who want to enter the helping professions. Students may choose a generalist or chemical dependency track. Students acquire knowledge and skills through an outcomes-based curriculum that supports critical analysis, problem solving, professional development, and experiential learning. In the last third of the program, students enroll in a community-based field practicum completing 330 hours of supervised learning.

**HUMAN SERVICES CORE**

SHS	100	Introduction to Human Services . . . . .	5
SHS	101	SHS, Chemical Dependency, and Academics . .	2
SHS	103	Social Welfare Policy . . . . .	5
SHS	106	Principles of Interviewing and Counseling . . .	5
SHS	108	Group Dynamics & Counseling . . . . .	5
SHS	130	Foundations of Gerontology . . . . .	5
SHS	198	Field Placement: Social and Human Services .	3
		Following can be substituted:	
		CDS 198 – Chemical Dependency (3)	
SHS	199	Field Placement: Social and Human Services . .	4
		Following can be substituted:	
		CDS 199 – Chemical Dependency (4)	
SHS	210	Intro to Diversity in Human Services Practice .	3
SHS	230	Suicide Risk Assessment . . . . .	3
SHS	235	Drug Addiction and Society . . . . .	5
SHS	270	Ethics in Human Services and Chemical Dependency . . . . .	3
SHS	280	Chemical Dependency Case Management . . .	3

**HUMAN SERVICES SPECIALIZATIONS**

Choose 13 credits from the following courses:

ABS	206	Writing in the Human Services . . . . .	3
SHS	121	Introduction to Care Navigation . . . . .	5
SHS	122	Care Navigation: Systems of Care . . . . .	5
SHS	126	Family Violence . . . . .	3
SHS	205	Crisis Intervention and Management . . . . .	3
SHS	209	Grief and Loss in Social and Human Services .	5

**RELATED INSTRUCTION**

ENGL&	101	English Composition I . . . . .	5
ENGL&	102	Composition II . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5
		Following can be substituted:	
		MATH 091 – Descriptive Statistics with Algebra I (5) or	
		MATH 092 – Descriptive Statistics with Algebra II (5) or	
		MATH 136 – Inferential Statistics (5)	
PSYC&	100	General Psychology . . . . .	5
PSYC&	200	Lifespan Psychology . . . . .	5
<b>TOTAL PROGRAM CREDITS</b>			<b>90</b>

## Social Work (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts – Direct Transfer degree with an emphasis in Social Work. Students in this pathway will focus on a mix of sociology and psychology courses. This is a flexible major that will allow students to tailor their course work to their interests.

Completion of this program is designed to prepare students for transferring into a Social Work major at a four-year college or university and satisfy prerequisite requirements for students entering a Social Work major.

## HEALTH AND MEDICAL

### Allied Health Associate of Applied Science–Transfer Degree (A.A.S.-T)

#### Allied Health, Business, Languages & Cultures Division

The Associate of Applied Science degree in Allied Health was conceived as a bridge between a transfer degree and vocational certificates. The degree is designed to prepare students to enter the workplace in an Allied Health career with advanced college level skills in math, science and humanities. Graduates are also eligible to transfer into one of Central's B.A.S. degrees or to another college or university. The goal of this degree is to provide vertical career mobility for students with an Allied Health vocational training certificate or to provide technical skills to those who have general education credits. Those with this degree can enter other Allied Health associate level programs. It provides a link between vocational education and higher education at the baccalaureate level.

Certificate Students (e.g. dental assisting, nursing assistant, medical assistant, and similar programs) will typically have from 30 to 45 credits in a specialty or certificate major. They must have completed Math 107 or 146, Psychology 201, English 101, basic computer skills, and a competency assessment prior to being accepted into the Allied Health associates program. To complete their associate degree in Allied Health, they must complete college distribution requirements and additional credits. Some of these courses may have prerequisites, so check with an advisor.

Students who do not come from a certificate program, must complete college distribution requirements and choose 30 credits from Allied Health/Global Health electives plus other electives to make up 90 credits. Check with you advisor for appropriate electives from Allied Health, Global Health or B.A.S. courses. A student who chooses a career path in public health may alter the curriculum to suit entrance requirements into the UW School of Public Health.

Note: Degree requires the completion of at least 90 applicable credits, including transferred-in credits, with a minimum cumulative CPA of 2.0.

All courses applied must be numbered 100 or above. Students must have earned a certificate of at least 10 credits from a regionally accredited institution in an allied health field or be enrolled in the respiratory care or dental hygiene programs. At least 15 credits must be earned from Seattle Central College.

#### ALLIED HEALTH COURSES

Up to 60 college credits total may be block transferred from the student's certificate in one or more of the CIP code programs from the approved list. If more than 30 credits are transferred in, the remainder will be used to fulfill the "Related Electives" requirement.

At least 10 college credits in this section must be from a certificate in an allied health field from a regionally accredited institution or the student must be currently enrolled in the dental hygiene or respiratory care programs.

If fewer than 30 college credits are block transferred in, the difference may be made up with credits from the following related courses:

AHE	126	Essential Skills in Healthcare. . . . .	2
AHE	128	Introduction to Healthcare Practice. . . . .	4
AHE	129	Introduction to Healthcare Applied Practice . . .	1
AHE	150	HIV/AIDS Education . . . . .	0.5
AHE	151	Standard Precautions/ First Aid . . . . .	1
AHE	152	Health Care Provider CPR . . . . .	1
AHE	165	Medical Terminology I . . . . .	3
AHE	168	Medical Terminology . . . . .	5
AHE	209	Introduction to Respiratory Care. . . . .	2
ANTH	135	Introduction to Environmental Anthropology. . .	5
ANTH	275	Medical Anthropology . . . . .	5
BIOL	128	Survey of Human Anatomy & Physiology . . . .	5
BIOL&	241	Human Anatomy and Physiology 1 . . . . .	5
BIOL&	242	Human Anatomy and Physiology 2 . . . . .	5
CMST	240	Introduction to Health Communication . . . .	5
HEA	125	Health and Wellness . . . . .	5
HEA	150	Health and Human Sexuality . . . . .	5
HEA	160	Human Wellness and Fitness. . . . .	5
HEA	225	Global Health . . . . .	5
HEA	226	Advanced Global Health Seminar . . . . .	2
HEA	228	Water Gender and Global Health . . . . .	5
PEC	181	Wellness Management . . . . .	3
SHS	150	HIV/AIDS Brief Risk Intervention . . . . .	1
Respiratory Care (RCP) course . . . . .			5
This option is only for those students currently enrolled in the Respiratory Care program.			
Dental Hygiene (DHY) course . . . . .			5
This option is only for those students currently enrolled in the Dental Hygiene program.			

#### GENERAL EDUCATION COURSES

20 credits of specific required courses, plus 10 additional credits chosen from the courses tagged as fulfilling the AA degree "Areas of Knowledge" requirements (VLPA, ICS, or NW) in the online course schedule

ENGL&	101	English Composition I . . . . .	5
HUM	105	Intercultural Communication . . . . .	5
Following can be substituted:			
CMST 205 – Multicultural Communication (5)			
MATH&	146	Introduction to Statistics . . . . .	5
Following can be substituted:			
MATH 136 – Inferential Statistics (5)			

Visual, Literary and Performing Arts . . . . .	5
Following can be substituted:	
Individuals, Cultures and Societies course (5)	
or Natural World course (5)	
Individual, Cultures and Societies . . . . .	5
Following can be substituted:	
Natural World course (5) or Visual, Literary	
and Performance Arts course (5)	
Lab Science . . . . .	5
Lab science course is taken from either Biology (BIOL) or	
Chemistry (CHEM) courses.	

**RELATED INSTRUCTION**

This section can be fulfilled by any combination of the following:

- Allied Health certificate credits if more than 30 credits were transferred in from the student's certificate
- up to 15 credits of the following courses listed below with prefix of ACCT or BTM

ACCT& 201 Principles of Accounting I . . . . .	5
ACCT& 202 Principles of Accounting II . . . . .	5
ACCT& 203 Principles of Accounting III . . . . .	5
BTM 108 Applied Business Math I . . . . .	3
BTM 109 Business Communications I . . . . .	5
BTM 118 Applied Business Math II . . . . .	5
BTM 119 Business Communications II . . . . .	5
BTM 120 Customer Relations Management . . . . .	5
BTM 231 Applied Accounting I . . . . .	5
BTM 232 Applied Accounting II . . . . .	5
BTM 233 Applied Accounting III . . . . .	5
BTM 236 Supervision Management . . . . .	5
BTM 237 Human Resource Management . . . . .	5
BTM 245 Business Process Management . . . . .	5
BTM 260 Project Management . . . . .	5
BTM 278 Organizational Behavior . . . . .	5
Respiratory Care (RCP) course . . . . .	5
This option is only for those students currently	
enrolled in the Respiratory Care program.	
Dental Hygiene (DHY) course . . . . .	5
This option is only for those students currently	
enrolled in the Dental Hygiene program.	
AA degree – Area of Knowledge requirement course . . . . .	30
Select from any Area of Knowledge; Visual, Literary,	
and Performing Arts; Individuals, Cultures, and	
Societies; The Natural World	
Note: No more than 10 credits of studio/performing arts	
VLPAs classes will count toward AAS-T degree	

TOTAL PROGRAM CREDITS 90

## Allied Health: Community Health and Education Bachelor of Applied Science Degree (B.A.S.)

**Allied Health Division**

Developed for healthcare professionals with associate degrees, this program can be a great next step. This degree helps to provide a path for a medical assistant, dental assistant, pharmacy technician, dispensing optician, surgical technician, or other allied health professional to advance in his or her career and educational opportunities.

This bachelor degree track opens the door for you to work as a Health Educator or Community Health Professional in a variety of settings, including:

- Nonprofit health organizations
- Government agencies
- Hospitals
- Medical clinics
- Colleges

**PREREQUISITES**

An allied health background, demonstrated in one of the following ways:

- A certificate of at least 10 credits in an allied health field from a regionally accredited institution, or
- An AAS-T/AAS degree in an allied health field from a regionally accredited institution, or
- A state-issued credential in an allied health field (valid within the past 5 years), or
- At least 1 year of full-time healthcare work experience (or the equivalent) within the past 5 years
- An associate's degree from a regionally accredited college or university with at least a 2.5 overall GPA
- Acceptable degrees include the following: AAS-T or AAS degree in an allied health field, AA, AS, AR, BA, or BS degree

Completion of ENGL& 101 with at least a 2.0

Math eligibility demonstrated in one of the following ways:

- Completion of MATH& 146 or another approved statistics class with a grade of at least 2.0 in the past 5 years, or
- Current eligibility for MATH& 146 or MATH 136

**TECHNICAL SPECIALTY COURSES**

The following courses must be completed with a grade of at least 2.0:

AHE 330 Information Literacy for Health Sciences . . . . .	5
AHE 401 Principles of Research . . . . .	5
CHED 301 Principles of Community Health . . . . .	5
CHED 310 Health Communication . . . . .	5
CHED 311 Social Determinants of Health . . . . .	5
CHED 312 Health Behavioral Change Theoretical	
Foundations . . . . .	5



CHED	322	Program Planning and Evaluation . . . . .	5
CHED	341	Community Health Needs Assessment & Improvement . . . . .	5
CHEM	476	Community Health and Education Capstone I . . .	1
CHEM	477	Community Health and Education Capstone II . .	1
CHEM	478	Community Health and Education Capstone III .	3

**GENERAL EDUCATION COURSES**

The following courses must be completed with a grade of at least 2.0:

ENGL&	101	English Composition I . . . . .	5
ENGL&	102	Composition II . . . . .	5
HUM	105	Intercultural Communication . . . . .	5
Following can be substituted:			
CMST 205 – Multicultural Communication (5)			
MATH&	146	Introduction to Statistics . . . . .	5
Following can be substituted:			
MATH 136 – Inferential Statistics (5) or PSYC 217 – Intro to Probability & Statistics for Psychology (5) or BUS 210 – Business & Economic Statistics (5) or equivalent statistics course			
Lab Science		. . . . .	5
Taken from any BIOL or CHEM courses			
Humanities course		. . . . .	5
Visual, Literary, and Performing Arts requirement			
Natural Science course		. . . . .	5
The Natural World requirement			
Social Science course		. . . . .	10
Individuals, Cultures, and Societies requirement			
Humanities, Social Science or Natural Science course		. . . . .	15
Including Math or Computer Science course			

**ELECTIVES**

The following courses must all be at the 100-level or above and be completed with a grade of at least 2.0.

Total required elective credits (75) can be a combination of the following:

- Allied Health credits (block if transferred) (0-75 credits)
- Associate degree block transfer credits (if applicable) (0-75 credits)
- Other approved academic electives (0-75 credits)
- No more than 15 credits of studio/performance VLPA credits will count toward the BAS degree
- Other upper-division AHE, CHEM, HSM, or ABS classes (0-75 credits)

TOTAL PROGRAM CREDITS 180

The Community Health and Education BAS degree track can help you meet the requirements to apply to UW School of Medicine's MEDEX Northwest Physicians Assistant training program. For more information, please email [AlliedHealthBAS.Central@seattlecolleges.edu](mailto:AlliedHealthBAS.Central@seattlecolleges.edu).

## Allied Health: Dental Hygiene Bachelor of Applied Science Degree (B.A.S.)

**Allied Health Division**

Dental hygienists are an integral part of the dental team in providing patient care. They perform a variety of tasks including cleaning teeth, taking x-rays, administering local anesthetics, placing and contouring dental fillings and educating patients about oral hygiene. Note: The educational environment contains multiple latex products and exposure to potential blood borne pathogens. Current infection control standards are taught in the program.

The Dental Hygiene track is approved by the American Dental Association Commission on Dental Accreditation. Upon graduation, students will qualify to take all national and regional examinations required to be licensed as a Registered Dental Hygienist (RDH) in Washington State. Graduates are eligible to take the Dental Hygiene National Board and all Western Regional Examining Board (WREB) components and apply for a license as a registered dental hygienist.

Students will earn a total of 195 credits during the full-time program, which includes working in the school's dental clinic.

**PREREQUISITES**

Prerequisite credits (65 total) are included in the total credits required for degree.

BIOL&	241	Human Anatomy and Physiology 1 . . . . .	5
BIOL&	242	Human Anatomy and Physiology 2 . . . . .	5
BIOL&	260	Microbiology. . . . .	5
CHEM&	121	Introduction to Chemistry . . . . .	5
CHEM&	122	Introduction to Organic Chemistry . . . . .	5
ENGL&	101	English Composition I . . . . .	5
ENGL&	102	Composition II . . . . .	5
HUM	105	Intercultural Communication . . . . .	5
MATH	136	Inferential Statistics . . . . .	5
Following can be substituted:			
MATH& 146 – Introduction to Stats (5)			
NTR	150	Human Nutrition . . . . .	5
PSYC&	100	General Psychology. . . . .	5
SOC&	101	Introduction to Sociology . . . . .	5
Following can be substituted:			
ANTH& 206 – Cultural Anthropology (5)			
Humanities Electives . . . . .			

**TECHNICAL SPECIALTY COURSES**

Upon completion of the courses listed below and prerequisites courses (95 credits total), Allied Health Associate of Applied Science-T Degree (A.A.S.-T) can be awarded

AHE	128	Introduction to Healthcare Practice. . . . .	4
AHE	129	Introduction to Healthcare Applied Practice . . .	1
DHY	250	Oral Biology . . . . .	2
DHY	251	Human Pathophysiology . . . . .	3
DHY	252	Fundamentals of Dental Hygiene I . . . . .	3
DHY	253	Clinical Dental Hygiene I . . . . .	3
DHY	254	Health Promotion . . . . .	2



DHY	255	Dental Radiology I . . . . .	2
DHY	256	Dental Radiology I Practice . . . . .	2
DHY	257	Head and Neck Anatomy . . . . .	2
DHY	258	Dental Anatomy & Morphology (Didactic) . . . . .	2
DHY	259	Dental Anatomy & Morphology (Lab) . . . . .	1
DHY	260	Emergency Management . . . . .	1
DHY	261	Preventive Dentistry . . . . .	2

**TECHNICAL SPECIALTY COURSES**

The following courses required for Bachelor of Applied Science Degree (B.A.S.):

AHE	401	Principles of Research . . . . .	5
DHY	110	Head and Neck Anatomy . . . . .	2
DHY	300	Clinical Dental Hygiene II . . . . .	4
DHY	301	Clinical Dental Hygiene III . . . . .	4
DHY	302	Clinical Dental Hygiene IV . . . . .	8
DHY	303	Fundamentals of Dental Hygiene II . . . . .	3
DHY	304	Fundamentals of Dental Hygiene III . . . . .	2
DHY	305	Fundamentals of Dental Hygiene IV . . . . .	2
DHY	306	Restorative Practice & Materials I (Didactic) . . . . .	2
DHY	307	Restorative Practice & Materials I (Lab) . . . . .	1
DHY	308	Restorative Practice & Materials Theory II . . . . .	2
DHY	309	Restorative Practice & Materials II . . . . .	1
DHY	311	Pain Control Anesthesia . . . . .	2
DHY	312	Pain Control Anesthesia Practice . . . . .	2
DHY	313	Periodontology I . . . . .	3
DHY	314	Dental Radiology II . . . . .	2
DHY	315	Dental Radiology II Practice . . . . .	1
DHY	318	Oral Pathology . . . . .	2
DHY	323	Pharmacology . . . . .	3
DHY	391	Community Dental Health I . . . . .	1
DHY	400	Advanced Practicum in Dental Hygiene I . . . . .	8
DHY	401	Advanced Practicum in Dental Hygiene II . . . . .	8
DHY	402	Advanced Practicum in Dental Hygiene III . . . . .	8
DHY	404	Principles of Dental Hygiene Practice I . . . . .	3
DHY	405	Principles of Dental Hygiene Practice II . . . . .	2
DHY	406	Principles of Dental Hygiene Practice III . . . . .	1
DHY	407	Strategies of Capstone Project . . . . .	1
DHY	408	Capstone . . . . .	1
DHY	409	Ethics and Jurisprudence . . . . .	2
DHY	410	Advanced Restorative Practice II . . . . .	2
DHY	411	Advanced Restorative Practice III . . . . .	2
DHY	412	Advanced Restorative Practice IV . . . . .	2
DHY	413	Periodontology II . . . . .	2
DHY	414	Selective Populations . . . . .	1
DHY	415	Selective Populations Practice . . . . .	1
DHY	416	Professional Issues . . . . .	1
DHY	419	Community Dental Health II . . . . .	2
DHY	420	Community Dental Health III . . . . .	1

TOTAL PROGRAM CREDITS 195

Total required credits for BAS degree (195 credits) includes prerequisite credits (65 credits total).

Allied Health AAS-T degree awarded at completion of 95 credits (total includes prerequisite credits)

NOTE: Eligibility for graduation requires a 2.5 GPA in Related Instruction courses and Technical Specialty courses.

## Allied Health: Healthcare Service Management Bachelor of Applied Science Degree (B.A.S.)

### Allied Health Division

Are you an experienced healthcare professional with an associate's degree interested in healthcare administration? Seattle Central's Bachelor of Applied Science (BAS) in Allied Health – Healthcare Services Management program will help you develop the knowledge and skills needed to advance in this in-demand profession.

With this degree, you will be qualified for positions such as healthcare services manager and healthcare administrator. Additionally, this program will prepare you to play critical roles in planning, coordinating and supervising service delivery in a variety of healthcare settings, including:

- Hospitals
- Medical care facilities
- Nursing homes
- Healthcare organizations
- and other health facilities

### PREREQUISITES

A minimum of one (1) year full-time healthcare work experience (or the equivalent) within the last five (5) years

An associate's degree from a regionally accredited college or university with at least a 2.5 overall GPA

- Acceptable degrees include the following: AAS-T or AAS degree in an allied health field or an approved business field, AA, AS, AB, BA, or BS degree

Completion of ENGL& 101 with at least a 2.0

Math eligibility demonstrated in one of the following ways:

- Completion of MATH& 146 or another approved statistics class with a grade of at least 2.0 in the past 5 years, or
- Current eligibility for MATH& 146 or MATH 136

### TECHNICAL SPECIALTY COURSES

The following courses must be completed with a grade of at least 2.0:

ACCT	303	Accounting for Healthcare Management . . . . .	5
AHE	301	Principles of Healthcare Delivery . . . . .	5
AHE	330	Information Literacy for Health Sciences . . . . .	5
AHE	401	Principles of Research . . . . .	5
AHE	426	Leadership and Team Building/ Organizational . . . . .	5
HSM	322	Human Resources . . . . .	5
HSM	325	Financial Management in Healthcare . . . . .	5
HSM	451	Healthcare Outcomes and Quality Management . . . . .	5
HSM	476	Healthcare Services Management Capstone I . . . . .	1
HSM	477	Healthcare Services Management Capstone II . . . . .	1
HSM	478	Healthcare Services Management Capstone III . . . . .	3

**GENERAL EDUCATION**

The following courses must be completed with a grade of at least 2.0:

ENGL& 101	English Composition I . . . . .	5
ENGL& 102	Composition II . . . . .	5
HUM 105	Intercultural Communication . . . . .	5
	Following can be substituted:	
	CMST 205 – Multicultural Communication (5)	
MATH& 146	Introduction to Statistics . . . . .	5
	Following can be substituted:	
	MATH 136 – Inferential Statistics (5) or PSYC 217	
	– Intro to Probability & Statistics for Psychology (5)	
	or BUS 210 – Business & Economic Statistics (5) or	
	equivalent statistics course	
Lab Science	. . . . .	5
	Taken from any BIOL or CHEM courses	
Humanities course	. . . . .	5
	Visual, Literary, and Performing Arts requirement	
Natural Science course	. . . . .	5
	The Natural World requirement	
Social Science course	. . . . .	10
	Individuals, Cultures, and Societies requirement	
Humanities, Social Science or Natural Science course	. . . .	15
	Including Math or Computer Science course	

**ELECTIVES**

The following courses must all be at the 100-level or above and be completed with a grade of at least 2.0.

Total required elective credits (75) can be a combination of the following:

- Allied Health credits (block if transferred) (0-75 credits)
- Approved business credits (block if transferred) (0-75 credits)
- Associate degree block transfer credits (if applicable) (0-75 credits)
- Other approved academic electives (0-75 credits)
- No more than 15 credits of studio/performance VLPA credits will count toward the BAS degree
- Other upper-division CHED, AHE, HSM, or ABS classes (0-75 credits)

**TOTAL PROGRAM CREDITS** 180

## Allied Health: Respiratory Care Bachelor of Applied Science Degree (B.A.S.)

**Allied Health Division**

Respiratory Care is an allied health specialty in the treatment and management of patients with cardiopulmonary disorders. The seven-quarter program includes the study of the therapeutic use of medical gases, medications, aerosols, lung drainage, ventilatory support, cardiopulmonary resuscitation, airway management, respiratory disease management and diagnostic testing. Under the direction of the physician, the respiratory care practitioner works with other health professionals to deliver effective health care. The program offers an Associate of Applied Science (A.A.S.) degree and is fully accredited by the Committee on Accreditation for Respiratory Care.

NOTE: Because the A.A.S. degree may not transfer, students wishing to transfer to a four-year institution should take college transfer English and science courses and see an advisor.

Graduates are eligible for licensure as Respiratory Care Practitioners in Washington state, and are also eligible and prepared for the National Board Registered Therapist credentialing exams. The required seven hours of HIV/AIDS education is included. New classes begin Fall Quarter only. For advanced placement consideration, contact the division office for specific requirements.

NOTE: Program courses are under frequent review to maintain industry relevancy. Please check with division for current program guidelines.

**PREREQUISITES**

Prerequisite credits (60 total) are included in the total credits required for degree

BIOL& 241	Human Anatomy and Physiology 1 . . . . .	5
CHEM&121	Introduction to Chemistry . . . . .	5
CHEM&122	Introduction to Organic Chemistry . . . . .	5
	Following can be substituted:	
	CHEM 131 – Intro to Organic Chemistry	
	and Biochemistry (5)	
ENGL& 101	English Composition I . . . . .	5
ENGL& 102	Composition II . . . . .	5
HUM 105	Intercultural Communication . . . . .	5
	Following can be substituted:	
	CMST 205 Multicultural Communication (5)	
MATH& 146	Introduction to Statistics . . . . .	5
	Following can be substituted:	
	MATH 136 – Inferential Statistics (5)	
PSYC& 100	General Psychology . . . . .	5
	Following can be substituted:	
	PSYC&200 – Lifespan Psychology (5)	
Social Science Elective	. . . . .	5
	See Advising Center for approved courses.	
Humanities Electives	. . . . .	5
	See Advising Center for approved courses.	

**TECHNICAL SPECIALTY COURSES**

Upon completion of the courses listed below and prerequisites courses (90 credits total), Allied Health Associate of Applied Science-T Degree (A.A.S.-T) can be awarded

AHE	128	Introduction to Healthcare Practice. . . . .	4
AHE	129	Introduction to Healthcare Applied Practice . . .	1
AHE	168	Medical Terminology . . . . .	5
AHE	202	Respiratory Care Orientation . . . . .	1
AHE	209	Introduction to Respiratory Care. . . . .	2
AHE	213	Respiratory Care Clinical Assessment . . . . .	2
AHE	215	Basic Pharmacology . . . . .	2
AHE	217	Cardiopulmonary Anatomy and Physiology. . .	5
AHE	218	Basic Therapeutic Approaches. . . . .	4
AHE	219	Basic Therapeutic Approaches Equipment and Techn . . . . .	1
BUS	100	Fundamentals of Supervision. . . . .	5
Following can be substituted:			
BUS	103	Personnel/Human Resource Management (5)	

**TECHNICAL SPECIALTY COURSES**

The following courses required for Bachelor of Applied Science Degree (B.A.S.):

RCP	472	Advanced Practitioner Exam Review . . . . .	1
AHE	330	Information Literacy for Health Sciences. . . .	5
AHE	401	Principles of Research . . . . .	5
CHED	304	Principles of Higher Education in Allied Health. .	5
RCP	320	Acute Care Clinical I . . . . .	4
RCP	323	Pathophysiology for Respiratory Care . . . . .	2
RCP	328	Advanced Therapeutic Approaches. . . . .	4
RCP	329	Advanced Therapeutic Approaches Equip and Tech . . . . .	1
RCP	330	Acute Care Clinical II . . . . .	5
RCP	338	Fundamentals of Mechanical Ventilation. . . .	4
RCP	339	Mechanical Ventilation Equipment and Techniques . . . . .	1
RCP	340	Adult Critical Care Clinical I . . . . .	4
RCP	347	Cardiology for Respiratory Care . . . . .	2
RCP	348	Advanced Mechanical Ventilation . . . . .	2
RCP	349	Adv Mechanical Ventilation Equipment & Technique . . . . .	1
RCP	450	Adult Critical Care Clinical II. . . . .	6
RCP	451	Neonatal/Pediatric Pathophysiology . . . . .	2
RCP	455	Advanced Pharmacology (Respiratory Care). . .	2
RCP	458	Neonatal/Pediatric Respiratory Care . . . . .	4
RCP	459	Neonatal/Pediatric Equipment and Techniques .	1
RCP	460	Neonatal/Pediatric Clinical . . . . .	6
RCP	463	Advanced Pathophysiology for Respiratory Care. . . . .	2
RCP	464	Pulmonary Rehabilitation and Home Care . . .	2
RCP	467	Advanced Cardiopulmonary Physiology . . . .	2
RCP	468	Adv Cardiopulmonary Diagnostics . . . . .	3
RCP	469	Diagnostic Equipment and Techniques . . . . .	1
RCP	470	Adult Critical Care Clinical III . . . . .	6
RCP	476	Advanced Patient Assessment. . . . .	3
RCP	479	Senior Capstone Project . . . . .	4
TOTAL PROGRAM CREDITS			180

Total required credits for BAS degree (180 credits) includes prerequisite credits (60 credits total).

(Allied Health AAS-T degree awarded at completion of 90 credits – includes prerequisite credits)

NOTE: Eligibility for graduation requires a minimum 2.0 GPA in all technical specialty and related instruction courses, including prerequisite courses.

The Respiratory Care BAS degree track can help you meet the requirements to apply to UW School of Medicine's MEDEX Northwest Physicians Assistant training program. For more information, please email AlliedHealthBAS.Central@seattlecolleges.edu.

## Care Navigation and Coordination Short-Term Certificate

The Care Navigation and Coordination program is designed to prepare students to assist clients and patients in navigating the social services and healthcare systems, and to be strong members of teams providing coordinated, client and patient-centered care. Students will learn about factors affecting patients such as chronic disease, behavioral health, wellness and patient activation and engagement as well as communication strategies such as patient/client coaching, motivational interviewing, and health literacy.

**TECHNICAL SPECIALTY COURSES**

SHS	121	Introduction to Care Navigation . . . . .	5
SHS	122	Care Navigation: Systems of Care . . . . .	5
TOTAL PROGRAM CREDITS			10

## Central Supply Processing Short-Term Certificate

**Allied Health Division**

With this certification, you will be qualified to become a certified Central Supply & Instrument Technician. Medical staff depend on Central Supply & Instrument Technicians to provide them with the correct tools in order to administer the highest levels of patient care. They work in hospitals and clinics, sterilizing and packaging surgical instruments and maintaining supply inventories.

Prereq: Permission.

**TECHNICAL SPECIALTY COURSES**

AHE	126	Essential Skills in Healthcare. . . . .	2
AHE	140	Central Supply/Instrument Technician . . . .	10
TOTAL PROGRAM CREDITS			12

## Dental Assistant Certificate

### Allied Health

The Dental Assistant Certificate of Completion program has been granted full accreditation by the American Dental Association. This program prepares students for entry level employment within the dental industry. Students are taught chairside dental assisting through lecture, hands-on experience and 275 hours of mandatory clinical experience in the workplace.

Coursework includes anatomy and physiology, medical terminology, clinical procedures, and specialty dental courses that prepare the student for employment following completion of the program.

### TECHNICAL SPECIALTY COURSES

AHE	126	Essential Skills in Healthcare. . . . .	2
DAST	110	Introduction to Dental Assisting . . . . .	1
DAST	111	Foundations of Dental Assisting . . . . .	6
DAST	112	Pre-Clinical Chairside Assisting . . . . .	4
DAST	113	Dental Practice Management. . . . .	1
DAST	114	Preventive Dentistry . . . . .	2
DAST	121	Fundamentals of Chairside Procedures I. . . . .	4
DAST	122	Clinical Chairside Procedures I. . . . .	7
DAST	123	Dental Assisting Law and Ethics. . . . .	2
DAST	124	Fundamentals of Dental Imaging . . . . .	2
DAST	125	Dental Imaging Laboratory. . . . .	2
DAST	131	Fundamentals of Chairside Procedures II . . . . .	3
DAST	132	Clinical Chairside Procedures II . . . . .	10
DAST	133	Professional Preparations . . . . .	2
DAST	140	Experiential Dental Assisting . . . . .	12
TOTAL PROGRAM CREDITS			60

## Expanded Function Dental Auxiliary Short-Term Certificate

### Allied Health Division

The Expanded Function Dental Auxiliary (EFDA) are used primarily in Community Health Clinics to increase the delivery of restorations, allowing dentists to increase their productivity in delivering these services to the community. Currently, registered dental hygiene practitioners are licensed to perform these restorative duties; however, they are underutilized in this capacity because traditional periodontal care is in high demand. Only about 30% of registered dental hygienists are performing restorative functions.

### TECHNICAL SPECIALTY COURSES

EFDA	100	Procedures I. . . . .	1
EFDA	101	Restorative Lab I . . . . .	3
EFDA	110	Dental Coronal Anatomy . . . . .	2
EFDA	111	Dental Materials and Technique . . . . .	2
EFDA	200	Procedures II . . . . .	1
EFDA	201	Restorative Clinic II. . . . .	4
EFDA	202	WRED Preparation . . . . .	1
EFDA	212	Ethics and Jurisprudence . . . . .	1
TOTAL PROGRAM CREDITS			15

## Global Health (A.A.-DTA)

This two-year pathway is designed for students who wish to obtain an Associate of Arts - Direct Transfer Agreement degree with an emphasis in Global Health. Students in this pathway will learn about worldwide health access and improvement, reduction of disparities, and protection against global health challenges. Students learn to work with diverse populations, provide international service, and understand the nuances of global healthcare.

Completion of this program is designed to prepare students for further education at a four-year college or university in global health or a related field such as public health, social sciences, international studies and more.

## Leadership in Healthcare Short-Term Certificate

### Health and Human Services Division

This 10-credit certificate introduces students to the major concepts of leadership in healthcare organizations.

### TECHNICAL SPECIALTY COURSES

AHE	426	Leadership and Team Building/Organizational . . . . .	5
HSM	322	Human Resources . . . . .	5
TOTAL PROGRAM CREDITS			10

## Medical Assistant Certificate

### Allied Health

Medical Assistants are allied health professionals who perform a wide range of roles in physicians' offices, clinics and other health care settings. They are proficient in many clinical and administrative tasks and are vital members of the health care delivery team. The Medical Assistant Certificate of Completion program teaches the business and clinical skills to become a Medical Assistant. This fully accredited program provides the mechanism for graduates to take the National Board Examination to become a nationally Certified Medical Assistant. Emphasis is on both front and back office. Front office skills include patient relations, medical insurance, finances, coding, anatomy and physiology, medical terminology, interpersonal communication skills, administrative procedures, skill development in computer usage and transcription. Back office skills include clinical skills such as medical and surgical asepsis, charting, patient prep, procedure set-ups, prioritizing, medication calculation and administration, EKG, diagnostic imaging theory, and lab skills such as hematology, urinalysis, basic microbiology and phlebotomy.

The program is accredited by the Commission on Accreditation of Allied Health Education Programs (caahep.org) on recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowments (AAMAE).

### PREREQUISITES

AHE	168	Medical Terminology . . . . .	5
Following can be substituted:			
AMA	117	Medical Terminology (5)	

### TECHNICAL SPECIALTY COURSES

CMA	101	Introduction to Medical Assisting . . . . .	5
CMA	102	Fundamentals of Administrative Medical Assisting . . . . .	4
CMA	103	Fundamentals of Clinical Medical Assisting . . . . .	8
CMA	104	Billing and Coding Procedures . . . . .	5
CMA	105	Phlebotomy and Laboratory Procedures . . . . .	8
CMA	106	Administrative and Clinical Practice/Review . . . . .	7
CMA	107	Medication Administration & Pharmacology . . . . .	8
CMA	108	Medical Assisting Practicum . . . . .	12
TOTAL PROGRAM CREDITS			57

## Medical Assisting Apprenticeship Certificate

### Allied Health

The MA Certificate is a collection of courses that consist of the Related Supplemental Instruction of the Medical Assisting Apprenticeship.

### TECHNICAL SPECIALTY COURSES

CMAA	131	Introduction to Medical Assisting . . . . .	3
CMAA	132	Fundamentals of Administrative Medical Assisting . . . . .	2
CMAA	133	Clinic Medical Assisting . . . . .	2
CMAA	134	Billing and Coding Procedures . . . . .	2
CMAA	135	Laboratory Procedures . . . . .	4
CMAA	136	Administrative and Clinic Practice Review . . . . .	3
CMAA	137	Pharmacology . . . . .	4
TOTAL PROGRAM CREDITS			21

## Nursing: Nursing Assistant Short-Term Certificate

### Health and Human Services Division

This course provides instruction and hands on experience in basic nursing care skills including First Aid, CPR, and HIV/AIDS and supervised clinical training in a long-term care facility. Instruction will also be provided in student success and career transition skills. After successful completion of the Nursing Assistant Program, students are eligible to sit for the State of Washington NAC exam for certification as a Nurse Assistant.

### TECHNICAL SPECIALTY COURSES

AHE	111	Nursing Assistant Certified . . . . .	12
TOTAL PROGRAM CREDITS			12

## Nursing: R.N. Associate Degree Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Nursing

The associate degree nursing program prepares students to become Registered Nurses. It is approved by the Washington State Board of Nursing and accredited by the National League for Nursing Accrediting Commission. The program includes general education courses, nursing theory, lab and clinical practice. New students are accepted into the six-quarter program each fall. See website for application deadlines and admission procedures. Graduates are awarded an Associate of Applied Science-T (A.A.S.-T) degree and are eligible to take the National Council of State Boards of Nursing Examination NCLEX-RN and apply for a license as a registered nurse in Washington State.



Any required non-nursing course may be completed before entering the nursing program. For more information, contact the division office.

### PREREQUISITES

It is strongly suggested students complete related instruction support courses prior to entrance to the program. If not, the courses must be completed in the quarter or sequence listed.

NOTE: A 2.5 GPA is required in each nursing, science and related instruction course in the program.

Must be eligible for MATH&107 – Math in Society.

BIOL& 241	Human Anatomy and Physiology 1 . . . . .	5
BIOL& 241 and 242 MUST be taken within 3 years prior to entrance to the program.		
BIOL& 242	Human Anatomy and Physiology 2 . . . . .	5
BIOL& 241 and 242 MUST be taken within 3 years prior to entrance to the program.		
BIOL& 260	Microbiology. . . . .	5
CHEM&121	Introduction to Chemistry . . . . .	5
Following can be substituted:		
One year of high school Chemistry in the last 3 years		
ENGL& 101	English Composition I . . . . .	5
PSYC& 100	General Psychology. . . . .	5

### ADVANCED PLACEMENT

Students who have taken nursing education courses within the past three years and who meet the prerequisite and grade requirements stated above may be considered for advanced placement. After evaluation of transcripts, advanced placement students will be accepted on a first-come, first-served, space-available basis.

Washington State Licensed Practical Nurses who have satisfied the prerequisites and first-year support courses may enter the second year of the nursing program after successful completion of the one-quarter transition courses, NUR 106 (LPN-RN Transition) and NUR 120 (LPN-RN Transition: Assessments & Intervention).

NOTE: Eligibility for graduation requires a minimum 2.5 GPA in all required technical specialty and related instruction courses.

### TECHNICAL SPECIALTY COURSES

NUR 101	Nursing I: Fundamentals of Nursing . . . . .	5
NUR 102	Nursing II: Medical Surgical Nursing . . . . .	3
NUR 103	Nursing III: Medical Surgical Nursing. . . . .	4
NUR 111	Nursing Practice I . . . . .	3
NUR 112	Nursing Practice II. . . . .	3
NUR 113	Nursing Practice III . . . . .	4
NUR 122	Psychosocial Nursing I . . . . .	2
NUR 123	Pharmacology for Nursing . . . . .	4
NUR 185	Gerontology for Nurses . . . . .	2
NUR 201	Nursing IVA: Psychosocial Nursing II . . . . .	2
NUR 206	Nursing IVB: Medical Surgical Nursing . . . . .	3
NUR 207	Nursing V: Medical Surgical Nursing . . . . .	4
NUR 208	Nursing VI: Developing Family Nursing . . . . .	6
NUR 211	Nursing Practice IVA . . . . .	3

NUR 216	Nursing Practice IVB . . . . .	3
NUR 217	Nursing Practice V . . . . .	5
NUR 218	Nursing Practice VI . . . . .	3
NUR 220	Health Promotions and Managing Care . . . . .	2
NUR 230	Transition to Professional Nursing Role . . . . .	2

### GENERAL EDUCATION NURSING SUPPORT COURSES

MATH& 107	Math in Society . . . . .	5
NTR 150	Human Nutrition . . . . .	5
PSYC& 200	Lifespan Psychology . . . . .	5
TOTAL PROGRAM CREDITS		108

## Nutrition Science (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement degree with a concentration in Nutrition Science. Students in this program will study how nutrients and food components influence growth, metabolism, health, disease and includes human behavior as it relates to food choices.

This program prepares graduates for entry-level positions in traditional health settings such as hospitals, private medical offices, and public health agencies, as well as integrative health and wellness organizations and companies. It can also prepare graduates to transfer at the junior level into a food science, nutrition science, or related program at a four-year college or university.

## Prenursing (A.A.-DTA)

This transfer pathway is designed for students who wish to transfer to a Bachelor of Science in Nursing (BSN) program at a four-year college or university by taking their science and general education classes at Central to prepare to begin their nursing classes and earn a Bachelor of Science in Nursing (BSN) degree.

Students in this pathway develop skills in applying and communicating fundamental concepts/principles of science to one's daily life, demonstrating the process of scientific inquiry, solving problems analytically, and thinking critically. In addition, students will learn verbal communication, and group communication and collaboration, and awareness of human behavior and thinking. Completion of this AA-DTA degree prepares students to complete a Bachelor of Science in Nursing (BSN) or related degree at a four-year college or university, or a Bachelor of Applied Science (BAS) degree in a healthcare field at one of the Seattle Colleges.

## Public Health (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts Associate of Arts - Direct Transfer Agreement degree with a concentration in Public Health. Students in this pathway will study methods of preserving health on a large scale through education, prevention, and community initiatives that range from local to global.

Completion of this program prepares students to transfer to a public health, health administration, or a related field at a four-year college or university, as well as opening doors to careers that concentrate on human health, illnesses, disease prevention and the environment.

## Surgical Technology Certificate

### Allied Health, Business, Languages & Cultures Division

This three-quarter program prepares students to share in the responsibility of the operating room team in the care of the patient requiring surgery. A surgical technologist is an allied health professional who works closely with surgeons, anesthesiologists, registered nurses and other surgical personnel delivering health care and assuming appropriate responsibilities before, during and after surgery. The technologist is at all times under the supervision of the physician and/or registered nurse.

Instruction covers the basic sciences, anatomy and physiology, medical terminology, surgical functions in the operating room, surgical instrumentation and equipment, and aseptic techniques. The program is nationally accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Clinical practice takes place in various health care facilities throughout Washington state. Graduation requirements include a minimum 2.0 GPA in each surgical technology course and related instruction and must be completed in the designated quarter to proceed to the next quarter. Entry is during the Fall Quarter only. Surgical Technology also offers a short-term certificate: Central Supply Instrument Technician.

### PROGRAM ENTRANCE REQUIREMENTS

High School Diploma or GED equivalent in the U.S.

Eligibility for MATH 085

All prerequisites must be completed with a 2.5 GPA for each course before a student can enter the program or be placed on the waiting list. Entrance into the program or waiting list is on a first come first served basis.

### PREREQUISITES

AHE	168	Medical Terminology . . . . .	5
Students intending on earning the AAS Degree must take AHE 168.			
BIOL	128	Survey of Human Anatomy & Physiology . . . . .	5
ENGL&	101	English Composition I . . . . .	5
PSYC&	100	General Psychology. . . . .	5
Following can be substituted:			
PSYC& 200 – Lifespan Psychology (5)			

TOTAL PREREQUISITE CREDITS	20
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### TECHNICAL SPECIALTY COURSES

AHE	126	Essential Skills in Healthcare. . . . .	2
AHE	140	Central Supply/Instrument Technician . . . . .	10
SURG	111	Surgical Lab . . . . .	6
SURG	113	Surgical Theory I . . . . .	10
SURG	115	Clinical Orientation . . . . .	2
SURG	121	Surgical Specialty/Professional PREP . . . . .	6
SURG	123	Surgical Theory II . . . . .	8
SURG	125	Clinical Practice I . . . . .	4
SURG	133	Surgical Theory III . . . . .	8
SURG	135	Clinical Practice II . . . . .	10
TOTAL PROGRAM CREDITS			86

## Surgical Technology Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Allied Health, Business, Languages & Cultures Division

This three-quarter program prepares students to share in the responsibility of the operating room team in the care of the patient requiring surgery. A surgical technologist is an allied health professional who works closely with surgeons, anesthesiologists, registered nurses and other surgical personnel delivering health care and assuming appropriate responsibilities before, during and after surgery. The technologist is at all times under the supervision of the physician and/or registered nurse.

Instruction covers the basic sciences, anatomy and physiology, medical terminology, surgical functions in the operating room, surgical instrumentation and equipment, and aseptic techniques. The program is nationally accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Clinical practice takes place in various health care facilities throughout Washington state. Graduation requirements include a minimum 2.0 GPA in each surgical technology course and related instruction and must be completed in the designated quarter to proceed to the next quarter. Entry is during the Fall Quarter only. Surgical Technology also offers a short-term certificate: Central Supply Instrument Technician.

**PROGRAM ENTRANCE REQUIREMENTS**

High School Diploma or GED equivalent in the U.S.

Eligibility for Math 085

All prerequisites must be completed with a 2.5 GPA for each course before a student can enter the program or be placed on the waiting list. Entrance into the program or waiting list is on a first come first served basis.

**PREREQUISITES**

AHE	168	Medical Terminology . . . . .	5
BIOL	128	Survey of Human Anatomy & Physiology . . . . .	5
ENGL&	101	English Composition I . . . . .	5
HUM	105	Intercultural Communication . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5
PHYS&	100	Physics for Non-Science Majors . . . . .	5
Following can be substituted:			
PHYS&200 – Lifespan Psychology			

TOTAL PREREQUISITES CREDITS	30
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**TECHNICAL SPECIALTY COURSES**

AHE	126	Essential Skills in Healthcare. . . . .	2
AHE	140	Central Supply/Instrument Technician . . . . .	10
SURG	111	Surgical Lab . . . . .	6
SURG	113	Surgical Theory I . . . . .	10
SURG	115	Clinical Orientation . . . . .	2
SURG	121	Surgical Specialty/Professional Prep . . . . .	6
SURG	123	Surgical Theory II . . . . .	8
SURG	125	Clinical Practice I . . . . .	4
SURG	133	Surgical Theory III . . . . .	8
SURG	135	Clinical Practice II . . . . .	10

TOTAL PROGRAM CREDITS	96
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## SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH

### Astronomy (A.S. Track 2)

This pathway is designed for students who wish to complete an Associate of Science - Track 2 degree with a focus in Physics and Astronomy. In this program students will explore Newton's Laws of Motion, conservation of energy and momentum, and other principles that help explain the physical world. Students will develop strong skills in problem solving, analytical abilities, mathematical modeling, design and interpretation of experiments, research experience, and communication skills.

Completion of this program prepares students to transfer at the junior level into a physics, astronomy, applied physics, engineering, computer science or a related program at a four-year college or university.

### Biology (A.S. Track 1)

This two-year pathway is designed for students who wish to complete an Associate of Science - Track 1 degree with a concentration in Biology. Students in this pathway develop skills in applying and communicating fundamental concepts/principles of biology to one's daily life, demonstrating the process of scientific inquiry, and solving problems analytically.

Completion of this program opens doors to a variety of careers in sectors including research, healthcare, education, non-profit, technology and government. It also allows you to transfer at the junior level into a biology program such as Botany, Zoology, Microbiology, Genetics, Marine Biology, Environmental Science, or a related field at a four-year college or university, or to a Bachelor of Applied Science (BAS) at one of the Seattle Colleges.

### Chemistry (A.S. Track 1)

This two-year pathway is designed for students who wish to complete an Associate of Science - Track 1 with a concentration in Chemistry. Students in this pathway learn about matter and energy down to the molecular level. Courses build a solid foundation in general chemistry and develop students' understanding of the scientific method of experimentation, observation, and analysis of results. Students will also gain hands-on experience in the lab.

Completion of this program opens doors to a variety of academic, industry, and medical careers in research & development, manufacturing, and more across the public and private sectors. It also allows students to transfer into a chemistry or related major at a four-year college or university, or to a Bachelor of Applied Science (BAS) at one of the Seattle Colleges.

### CISCO Certified Network Professional (CCNP) Certificate Short-Term Certificate

#### Business, Information Technologies & Creative Arts Division

Students work through the CISCO CCNP curriculum to earn a college certificate and be CISCO certification ready. Applying Cisco coursework to industry, this certificate validates the ability to plan, implement, and verify local and wide-area enterprise networks. This foundational CCNP curriculum prepares administrators for additional variants that support advanced troubleshooting, provisioning for the cloud, advanced security, and voice, wireless and video solutions. The CCNP Routing and Switching certification is appropriate for those with a CCNA and/or a year of networking experience.

#### Program Certificate Outcomes:

- Plan and manage multiple projects, both individually and as a team member
- Explain and implement network industry standards such as: the OSI model; Routing protocols, Address Resolution, and Reverse Address Resolution Protocols; IP Addresses and Sub netting; and MAC addressing
- Apply industry standard techniques for troubleshooting, collecting, analyzing, and optimizing data within an enterprise network infrastructure.

#### TECHNICAL SPECIALTY COURSES

NTI	350	Enterprise Switching – CCNP 2 . . . . .	5
NTI	360	Enterprise Troubleshooting – CCNP 3 . . . . .	5
NTI	340	Software Defined Networking 1 . . . . .	5
TOTAL PROGRAM CREDITS			15

## CISCO Specialist II Short-Term Certificate

### Information Technology Programs

A short term, intensive CISCO Certified Network Administrator (CCNA or ICND 2) certificate in network infrastructure, Linux Administration and Network Security skills for entry level workers or established workers seeking updated skills

### PREREQUISITES

Must meet all college requirements and Eligibility for ENG 101 and MAT 081. Prerequisites completed with minimum 2.0 or better GPA in each course and completion of Cisco Specialist I Short Term Certificate with 2.0 or better or related CompTIA certification and prior work experience.

ENGL&	101	English Composition I . . . . .	5
ITC	140	Introduction to Computer Hardware . . . . .	5
MATH	084	Algebra I . . . . .	5
NET	120	Network Essentials – CompTIA Network + . . . . .	5

### TECHNICAL SPECIALTY COURSES

ITC	151	Introduction to Security for Computing . . . . .	5
ITC	299	Independent Study . . . . .	5
NET	138	UNIX for Network Administration . . . . .	5
NET	146	Network Management – CISCO III. . . . .	5

TOTAL PROGRAM CREDITS 16-18

## Cloud Specialist Short-Term Certificate

### Business, Information Technologies & Creative Arts Division

This certificate is designed to provide core knowledge in Internet (cloud) technologies. Four areas of emphasis include: Solution architectures, risk and governance, mobility and applications, and service management. Cloud computing at Seattle Central focuses on new Internet-only business models and the re-ordering of traditional client server local area networking technologies in a highly distributed, mobile world. Entry into the certificate requires Linux and Windows experience. The Enterprise Virtualization and Cloud Management Capstone course requires the highest skill set.

### Program Certificate Outcomes:

- Plan and manage multiple projects, both individually and as a team member
- Assess, develop, and maintain network security systems using ethical best practices and standardized tools.
- Design, implement, and manage hybrid-distributed environments.

### TECHNICAL SPECIALTY COURSES

NTI	430	Collaboration and Secure Content Management . . . . .	5
NTI	440	Devices and Services Cloud Environments . . . . .	5
NTI	460	Enterprise Virtualization and Cloud Management Capstone . . . . .	5

TOTAL PROGRAM CREDITS 15

## Computer Science (A.S. Track 2)

This two-year pathway is designed for students who wish to complete an Associate of Science - Track 2 degree with a concentration in Computer Science. The pathway focuses on the study of theory, experimentation, and engineering that form the basis for the design and use of computers. Students will study a variety of subjects including programming languages, such as Python and Java, software programming, developing new software applications, and network and systems administration.

Completion of this program prepares students to transfer at the junior level to a Computer Science or related field at a four-year college or university, as well as opening doors to a variety of careers such as software engineering, web design, computer programming and more.

## Earth Sciences (A.S. Track 1)

This two-year pathway is designed for students who wish to complete an Associate of Science - Track 2 degree with a concentration on Earth Sciences. Earth sciences is the study of the solid Earth, its waters, and the air that envelops it. Included are the geologic, hydrologic, and atmospheric sciences. The Associate of Science with a concentration in Earth Sciences enables students to obtain a broad understanding of earth sciences as a background for interests such as science journalism, environmental law, science education, and environmental policy.

Completion of this program prepares students to transfer at the junior level to an Earth Sciences or related field of study at a four-year college or university, as well as opening doors to a wide variety of related careers.

## Engineering – Computer, Civil, Aerospace, etc. (A.S. Track 2)

This pathway is designed for students who wish to complete an Associate of Science - Track 2 degree with a concentration in Engineering. Students in this program will study the application of mathematics, science, and practical experience to invent, innovate, design, build, maintain, research, and improve products that impact people's lives. This program provides options to study engineering applications across many fields, with courses in the natural sciences, computer science, math, engineering and more.

Completion of this program prepares students to transfer at the junior level to an engineering or related field of study at a four-year college or university, as well as opening doors to a wide variety of engineering-related careers.



## Environmental Health (A.S. Track 1)

This program is designed for students who wish to complete an Associate of Science – Track 1 degree with a concentration in Environmental Health. It also allows students to transfer at the junior level into an Environmental Science program at a four-year college or university or complete a Bachelor of Applied Science (BAS) from a Washington state community college.

This versatile STEM degree paves the way for careers with highly competitive salaries. Many graduates go directly to work, starting careers as environmental health specialists, workplace safety managers, public health consultants and policy advisers.

Completion of this program prepares students to transfer at the junior level to an Environmental Health program at a four-year college or university, as well as opening doors to a wide variety of related careers.

## Environmental Science (A.S. Track 1)

This two-year pathway is designed for students who wish to complete an Associate of Science - Track 1 degree with a concentration in Environmental Science. Students in this program develop interdisciplinary skills related to the environment and will incorporate fundamental concepts and principles of environmental science into daily life. Students will utilize the process of scientific inquiry, apply awareness of current affairs to environmental issues, and solve problems using critical thinking.

Completion of this program opens doors to a variety of careers in sectors including research, education, health and safety, non-profit, sustainable development, sustainable business, technology, and government. It also allows students to transfer at the junior level into an Environmental Science program at a four-year college or university or complete a Bachelor of Applied Science (BAS) from a Washington state community college.

## Environmental Studies (A.S. Track 1)

This two-year pathway is designed for students who wish to complete an Associate of Science - Track 1 degree with a concentration in Environmental Studies. Environmental studies students receive a foundation in the natural sciences but focus more of their studies on the social sciences, policy studies, environmental design, and the humanities. This program provides a broadly integrated understanding that includes, among others, the business, economic, social, and political facets of environmental challenges with a focus on policy, law, and sociality aspect of these challenges.

Completion of this program prepares students to transfer at the junior level to an environmental studies program or related field at a four-year college or university. This program also prepares students for careers in the non-profit sector, government agencies, environmental planning, sustainability advising, green business, environmental education, environmental journalism, and related areas.

## Geology (A.S.-Track 1)

This two-year pathway is designed for students who wish to complete an Associate of Science - Track 1 degree with a concentration on Geology. Students in this program will learn about earth processes, plate tectonics, and the origin and evolution of the earth. This pathway will provide students with a foundation of Geology, Mathematics, Environmental Science, and Physics.

Completion of this program prepares students to transfer at the junior level to a Geology or related field of study at a four-year college or university, as well as opening doors to a wide variety of related careers.

## Information Technology: Application Development Certificate

### Information Technology Programs

#### TECHNICAL SPECIALTY COURSES

BTM	100	Orientation and Career Exploration . . . . .	2
BTM	112	Business Applications II – Data Analysis w/Excel . . . . .	5
BTM	119	Business Communications II . . . . .	5
BTM	197	Work Experience: Business Technology Management . . . . .	5
BTM	260	Project Management . . . . .	5
IT	115	Intro to Software Development & Version Control. . . . .	5
IT	116	Programming and Web Page Concepts . . . . .	5
IT	120	Database Development. . . . .	5
IT	121	JavaScript 1 . . . . .	5
IT	122	JavaScript 2 . . . . .	5
IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	229	Software Development Career Strategies . . . . .	2
TOTAL PROGRAM CREDITS			54

## Information Technology: CISCO Specialist I Certificate

### Information Technology Programs

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

### PREREQUISITES

Each course listed below be completed with a 2.0 GPA or better.

ENGL&	101	English Composition I	5
IT	130	Network Essentials	5
IT	141	Intro to Hardware Comptia A+	5
MATH	084	Algebra I	5

### TECHNICAL SPECIALTY COURSES

BUS	140	Customer Relations	5
IT	231	Linux Operating System	5
IT	241	CISCO 1	5
IT	242	CISCO 2	5

TOTAL PROGRAM CREDITS	20
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## Information Technology: Computer Network Support Certificate

### Information Technology Programs

### TECHNICAL SPECIALTY COURSES

BTM	100	Orientation and Career Exploration	2
BTM	112	Business Applications II – Data Analysis w/Excel	5
BTM	113	Business Applications III	5
BTM	119	Business Communications II	5
BTM	197	Work Experience: Business Technology Management	5
BTM	260	Project Management	5
BTM	275	Computer User Support	5
IT	130	Network Essentials	5
IT	141	Intro to Hardware Comptia A+	5
IT	142	Introduction to Operating Systems	5

TOTAL PROGRAM CREDITS	47
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## Information Technology: Computer Support Technician Certificate

### Information Technology Programs

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

### PREREQUISITES

Prerequisites require completion with a 2.5 GPA or higher.

(Equivalent course work or experience will be evaluated for possible substitution).

Prerequisites differ for I-BEST students.

ENGL&	101	English Composition I	5
ITC	102	Information Systems Concepts	5
MATH	084	Algebra I	5
MIC	101	Introduction to Microcomputer Applications	4

### TECHNICAL SPECIALTY COURSES

CIS	197	Work Experience – Computer Information Systems	5
HDC	106	Interviewing, Resumes, Job Hunting, Employer/Employee Inte	2

Following can be substituted:

ITC 205 – IT Career Strategies (2)

ITC	134	Intro to Software Development & Version	5
ITC	140	Introduction to Computer Hardware	5
MIC	175	Computer User Support	4
NET	120	Network Essentials – Comptia Network +	5

TOTAL PROGRAM CREDITS	23
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## Information Technology: Database Administration and Development Certificate

### Information Technology Programs

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

### PREREQUISITES

Eligibility for ENGL& 101 and College Math – waivers or test out may be available

Prerequisites do not count toward credits required for this certificate.

IT	100	Information Technology Fundamentals . . . . .	5
Waivers or test out may be available.			

### TECHNICAL SPECIALTY COURSES

IT	111	Programming Fundamentals . . . . .	5
IT	115	Intro to Software Development & Version Control. . . . .	5
IT	120	Database Development. . . . .	5
IT	161	Web Authoring 1 . . . . .	5

### TECHNICAL SPECIALTY TRACKS

Choose from two (2) of the seven (7) tracks below:

#### DATABASE DEVELOPMENT TRACK

IT	112	Web Programming with Python . . . . .	5
IT	221	SQL. . . . .	5
IT	222	Designing Database Solutions . . . . .	5
IT	223	Database Administration. . . . .	5
IT	225	Systems Analysis . . . . .	5

#### DATA ANALYTICS TRACK

IT	112	Web Programming with Python . . . . .	5
IT	125	Intro to Data Analytics . . . . .	5
IT	221	SQL. . . . .	5
IT	225	Systems Analysis . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5

### MOBILE DEVELOPMENT TRACK

IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	216	Android Application Development 1 . . . . .	5
IT	217	Android Application Development 2 . . . . .	5
IT	225	Systems Analysis . . . . .	5

### SOFTWARE DEVELOPER TRACK

IT	125	Intro to Data Analytics . . . . .	5
IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	225	Systems Analysis . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5

### WEB DESIGN TRACK

IT	162	Web Authoring 2 . . . . .	5
IT	163	Web Authoring 3 . . . . .	5
IT	171	Theory of Web Design . . . . .	5
IT	172	User Interface & Experience Design for the Web . . . . .	5
IT	174	Usability Research Methods for the Web . . . . .	5

### WEB DEVELOPMENT TRACK

IT	112	Web Programming with Python . . . . .	5
Following can be substituted:			
IT 270 – CMS with WordPress (5)			
IT	162	Web Authoring 2 . . . . .	5
IT	261	Web App Programming 1 . . . . .	5
IT	262	Web Application Programming 2 . . . . .	5
Following can be substituted: IT 121 – JavaScript 1 (5)			
IT	263	Web Application Programming 3 . . . . .	5
Following can be substituted: IT 122 – JavaScript 2 (5)			

### WEB SCRIPTING TRACK

IT	121	JavaScript 1 . . . . .	5
IT	122	JavaScript 2 . . . . .	5
IT	162	Web Authoring 2 . . . . .	5

### RELATED INSTRUCTION

IT	229	Software Development Career Strategies . . . . .	2
IT		Electives . . . . .	15
		Following can be substituted: Internship	
		Based on chosen tracks, student may either take an additional 0-15 credits of IT electives or internship or some combination of both to make the 62 credits required for this certificate.	

TOTAL PROGRAM CREDITS	62-72
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## Information Technology: Mobile Product Development Specialist Certificate

### Business, Information Technologies & Creative Arts Division

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

At this time the program is under revision. Please contact division office for current information.

### PREREQUISITES

One of the following certificates OR passage of all programs and courses:

Computer Programming Certificate or  
Web Design Certificate

Eligibility for the following courses:

MATH& 141 Pre-Calculus I (Compass or MATH 098 pass)

ENGL& 101 English Composition

BTM 111 Business Applications I . . . . .5  
Following can be substituted:  
80%+ on Science and Math (SAM) Challenge –  
MS Office

BTM 120 Customer Relations Management . . . . .5  
Following can be substituted:  
Type 25 wpm Keyboarding

BUS& 101 Introduction to Business . . . . .5

ENGL 106 Technical Writing. . . . .3

ITC 102 Information Systems Concepts . . . . .5  
Following can be substituted:  
1+ year prior work experience OR credit by exam

ITC 110 Programming Fundamentals . . . . .5

ITC 134 Intro to Software Development & Version . . . . .5

### TECHNICAL SPECIALTY COURSES

BTM 228 Small Business Management . . . . .5

BTM 260 Project Management. . . . .5

BUS 150 Marketing Social Media Mobile Client. . . . .3

BUS 185 Small Business Management . . . . .5

ECON& 201 Micro Economics . . . . .5

ITC 115 Object Oriented Programming . . . . .5

ITC 162 Android Application Development 1 . . . . .5

ITC	298	Special Topics . . . . .	5
Credit Range: 1-5/Total required credits for ITC 298: 4			
ITC	299	Independent Study . . . . .	5
WEB	202	User Interface & Experience Design for the Web . . . . .	5
TOTAL PROGRAM CREDITS			44

## Information Technology: Network Design and Administration Certificate

### Information Technology Programs

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

### PREREQUISITES

Prerequisites do not count toward credits required for this certificate.

Eligibility for ENGL& 101 and College Math

IT 100 Information Technology Fundamentals . . . . .5  
Following can be substituted:  
BTM 111 – Business Applications I or Previous  
computer experience and MS Office

### TECHNICAL SPECIALTY CLASSES

CIS 197 Work Experience-Computer Information  
Systems . . . . .3  
Credit range: 3-5

Total required work experience credits for CIS 197: 3

IT 130 Network Essentials. . . . .5

IT 131 Network OS 1 Install Config Windows Server . .5

IT 132 Network Operating Systems 2 – Server. . . . .5

IT 133 Network OS 3 Windows Network Infrastructure 5

IT 135 TCP/IP. . . . .5

IT 141 Intro to Hardware Comptia A+ . . . . .5

IT 231 Linux Operating System. . . . .5

IT 232 UNIX for Network Administration . . . . .5

IT 241 CISCO 1. . . . .5

IT 242 CISCO 2. . . . .5

IT 243 CISCO 3. . . . .5

IT 250 Intro to Security for Computing. . . . .5

IT 257 Enterprise Applications . . . . .5

TOTAL PROGRAM CREDITS 68

## Information Technology: Network Design and Administration Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Information Technology Programs

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

Completion of Certificate Requirements: 68 credits

### PREREQUISITES

Prerequisites do not count toward credits required for this certificate.

Eligibility for ENGL& 101 and College Math

IT	100	Information Technology Fundamentals . . . . .	5
Following can be substituted:			
BTM 111 – Business Applications I or Previous computer experience and MS Office			

### TECHNICAL SPECIALTY CLASSES

CIS	197	Work Experience-Computer Information Systems . . . . .	3
Credit range: 3-5			
Total required work experience credits for CIS 197: 3			
IT	130	Network Essentials . . . . .	5
IT	131	Network OS 1 Install Config Windows Server . . . . .	5
IT	132	Network Operating Systems 2 – Server . . . . .	5
IT	133	Network OS 3 Windows Network Infrastructure . . . . .	5
IT	135	TCP/IP . . . . .	5
IT	141	Intro to Hardware Comptia A+ . . . . .	5
IT	231	Linux Operating System . . . . .	5
IT	232	UNIX for Network Administration . . . . .	5
IT	241	CISCO 1. . . . .	5
IT	242	CISCO 2. . . . .	5
IT	243	CISCO 3. . . . .	5
IT	250	Intro to Security for Computing . . . . .	5
IT	257	Enterprise Applications . . . . .	5

### RELATED INSTRUCTION

CSC	110	Introduction to Computer Programming . . . . .	5
Following can be substituted:			
Other Natural Science course			
ENGL&	101	English Composition I . . . . .	5
ENGL&	102	Composition II . . . . .	5
Following can be substituted:			
Other Communications course			
HUM	105	Intercultural Communication . . . . .	5
Following can be substituted:			
Other Humanities course			
MATH	136	Inferential Statistics . . . . .	5
Following can be substituted:			
MATH& 146 – Introduction to Statistics			
PSYC&	100	General Psychology . . . . .	5
Following can be substituted:			
Other Social Science course			

TOTAL PROGRAM CREDITS	98
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## Information Technology: Network Design and Administration – CISCO Certificate

### Information Technology Programs

### PREREQUISITES

Prerequisites do not count toward credits required for this certificate.

ENGL	106	Technical Writing . . . . .	3
IT	100	Information Technology Fundamentals . . . . .	5
Following can be substituted:			
BTM 111 – Business Applications I or Previous computer experience and MS Office			

IT	130	Network Essentials . . . . .	5
IT	141	Intro to Hardware Comptia A+ . . . . .	5
MATH	119	Mathematics Behind Information Technology. . . . .	3

### TECHNICAL SPECIALTY COURSES

IT	131	Network OS 1 Install Config Windows Server . . . . .	5
IT	132	Network Operating Systems 2 – Server . . . . .	5
IT	133	Network OS 3 Windows Network Infrastructure . . . . .	5
IT	135	TCP/IP . . . . .	5
IT	231	Linux Operating System . . . . .	5
IT	241	CISCO 1. . . . .	5
IT	242	CISCO 2. . . . .	5
IT	243	CISCO 3. . . . .	5

TOTAL PROGRAM CREDITS	40
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## Information Technology: Networking Bachelor of Applied Science Degree (B.A.S.)

### Information Technology Programs

The BAS in IT Networking (BAS-ITN) will help students prepare for network related jobs in IT, including computer and network administrators and network systems and security analysts. The degree will help meet the growing regional demand for employees with advanced certifications or skills, including: Cisco Certified Network Professionals (CCNP); industry certifications in Microsoft SQL and SharePoint; supplemental skills in PERL; and fluency in advanced programming languages, mobile application security, and cloud-based hybrid environments. Along with these specific skills and certifications, general education in the curriculum will prepare graduates by developing the ability to communicate and build working relationships, solve problems, and plan and structure tasks while allocating time and resources effectively.

Associate of Applied Science-T Degree (A.A.S.-T)  
in Networking (98 credits)

### PREREQUISITES

Full-time applicants to the BAS-ITN Program must possess a minimum of an AAS-T degree in Networking from any one of the many options at regional two-year institutions, or from other regionally accredited institutions. Additionally, applicants must have a cumulative grade point average (GPA) of at least 2.0, and a 2.5 or higher GPA in Networking related coursework.

Prior to acceptance into the BAS-ITN, applicants will have completed the following coursework:

Networking Introduction – 5 credits (such as: NET 120)

Cisco I, II, III (CCNA) – 15 credits (such as: NET 142, NET 144, NET 146)

Unix and Security – 15 credits (such as: ITC 136, ITC 151)

General Education\* – 30 credits

&#183; 10 credits of English (e.g. ENGL& 101 and ENGL& 102);

&#183; 5 credits of Visual, Literary and Performing Arts [VLPA] (e.g. HUM 105);

&#183; 5 credits of Quantitative/Symbolic Reasoning [Q/SR] (e.g. MATH& 146);

&#183; 5 credits of Individual, Cultures and Societies [ICS] (e.g. PSYC& 100);

&#183; 5 credits of Natural World [NW](e.g. CSC courses)

\*A total of 60 will be required for the BAS degree. It is suggested that 30 credits be earned prior to BAS enrollment.

### TECHNICAL SPECIALTY COURSES

The following short-term certificates (15 credits each) can be awarded upon completion of the courses noted.

Linux ( NTI 300, NTI 310, and NTI 320 )

Cisco Certified Network Professional [CCNP] (NTI 340, NTI 350, and NTI 360 )

Cloud Specialist ( NTI 430, NTI 440, and NTI 470 )

NTI 310 – Linux Applications (5)

NTI 320 – Optimizing and Monitoring of Enterprise Networks (5)

NTI 350 – CCNP II – Enterprise Switching (5)

NTI 360 – CCNP III – Enterprise Troubleshooting (5)

NTI 400 – Information Security for the Enterprise (5)

NTI 410 – Network Security for the Enterprise (5)

NTI 430 – Secure Content Management (5)

NIT 440 – Devices and Services Cloud Environment (5)

NTI 460 – Practicum (5)

NTI 470 – Capstone (5)

NTI 300 Linux and Enterprise Scripting Technologies . . .5

NTI 340 Software Defined Networking 1 . . . . .5

### GENERAL EDUCATION

SOC 330 Information Literacy in IT . . . . .5

CSC 110 Introduction to Computer Programming . . . . .5  
Following can be substituted: or higher CSC course (5)

ECON& 201 Micro Economics . . . . .5  
Following can be substituted:

ECON& 202 – Macro Economics (5)

PHIL& 106 Introduction to Logic . . . . .5

POLS& 203 International Relations . . . . .5

Lab Science . . . . .5

TOTAL PROGRAM CREDITS 180

## Information Technology: Programming Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Information Technology Programs

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

Completion of Certificate: 62-72 credits

**PREREQUISITES**

Eligibility for ENGL&101 and College Math – waivers or test out may be available

IT	100	Information Technology Fundamentals . . . . .	5
Waivers or test out may be available.			

**TECHNICAL SPECIALTY COURSES**

IT	111	Programming Fundamentals . . . . .	5
IT	115	Intro to Software Development & Version Control . . . . .	5
IT	120	Database Development . . . . .	5
IT	161	Web Authoring 1 . . . . .	5

**TECHNICAL SPECIALTY TRACKS**

Choose from two (2) of the seven (7) tracks below:

**DATA ANALYTICS TRACK**

IT	112	Web Programming with Python . . . . .	5
IT	125	Intro to Data Analytics . . . . .	5
IT	221	SQL . . . . .	5
IT	225	Systems Analysis . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5

**DATABASE DEVELOPMENT TRACK**

IT	112	Web Programming with Python . . . . .	5
IT	221	SQL . . . . .	5
IT	222	Designing Database Solutions . . . . .	5
IT	223	Database Administration . . . . .	5
IT	225	Systems Analysis . . . . .	5

**MOBILE DEVELOPMENT TRACK**

IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	216	Android Application Development 1 . . . . .	5
IT	217	Android Application Development 2 . . . . .	5
IT	225	Systems Analysis . . . . .	5

**SOFTWARE DEVELOPER TRACK**

IT	125	Intro to Data Analytics . . . . .	5
IT	261	Web App Programming 1 . . . . .	5
IT	262	Web Application Programming 2 . . . . .	5
IT	263	Web Application Programming 3 . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5

**USER INTERFACE/USER EXPERIENCE TRACK**

IT	162	Web Authoring 2 . . . . .	5
IT	163	Web Authoring 3 . . . . .	5
IT	171	Theory of Web Design . . . . .	5
IT	172	User Interface & Experience Design for the Web 5	
IT	174	Usability Research Methods for the Web . . . . .	5

**WEB DEVELOPMENT TRACK**

IT	112	Web Programming with Python . . . . .	5
Following can be substituted:			
IT 270 – CMS with WordPress (5)			
IT	162	Web Authoring 2 . . . . .	5
IT	261	Web App Programming 1 . . . . .	5
IT	262	Web Application Programming 2 . . . . .	5
Following can be substituted: IT 121 – JavaScript 1 (5)			
IT	263	Web Application Programming 3 . . . . .	5
Following can be substituted: IT 122 – JavaScript 2 (5)			

**WEB SCRIPTING TRACK**

IT	121	JavaScript 1 . . . . .	5
IT	122	JavaScript 2 . . . . .	5
IT	162	Web Authoring 2 . . . . .	5

**RELATED INSTRUCTION**

IT	229	Software Development Career Strategies . . . . .	2
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Following can be substituted:

IT 289 – Web Career Strategies (2)

IT Electives	. . . . .	10
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Based on chosen tracks, students may either take an additional 5-10 credits of IT electives or internship or some combination of both to make the 60 credits required for this certificate.

**RELATED INSTRUCTION – AAS-T**

ENGL&	101	English Composition I . . . . .	5
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ENGL&	102	Composition II . . . . .	5
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Following can be substituted:

ENGL& 235 – Technical Writing (5)

This course meets the Communications requirement

HUM	105	Intercultural Communication . . . . .	5
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Following can be substituted:

ENGL& 235 – Technical Writing (5)

This course meets the VLPA requirement

IT	228	Capstone Project . . . . .	5
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MATH	136	Inferential Statistics . . . . .	5
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Following can be substituted:

MATH& 146 – Introduction to Stats (5)

Individual, Cultures and Societies	. . . . .	5
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Natural World, the	. . . . .	5
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TOTAL PROGRAM CREDITS		97-107
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## Information Technology: Programming Certificate

**Information Technology Programs**

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

**PREREQUISITES**

Eligibility for ENGL&101 and College Math – waivers or test out may be available.

Prerequisites do not count toward credits required for this certificate.

IT	100	Information Technology Fundamentals . . . . .	5
Waivers or test out may be available.			

**TECHNICAL SPECIALTY COURSES**

IT	111	Programming Fundamentals . . . . .	5
IT	115	Intro to Software Development & Version Control . . . . .	5
IT	120	Database Development . . . . .	5
IT	161	Web Authoring 1 . . . . .	5

**TECHNICAL SPECIALTY TRACKS**

Choose from two (2) of the seven (7) tracks below:

**DATA ANALYTICS TRACK**

IT	112	Web Programming with Python . . . . .	5
IT	125	Intro to Data Analytics . . . . .	5
IT	221	SQL . . . . .	5
IT	225	Systems Analysis . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5

**DATABASE DEVELOPMENT TRACK**

IT	112	Web Programming with Python . . . . .	5
IT	221	SQL . . . . .	5
IT	222	Designing Database Solutions . . . . .	5
IT	223	Database Administration . . . . .	5
IT	225	Systems Analysis . . . . .	5

**MOBILE DEVELOPMENT TRACK**

IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	216	Android Application Development 1 . . . . .	5
IT	217	Android Application Development 2 . . . . .	5
IT	225	Systems Analysis . . . . .	5

**SOFTWARE DEVELOPER TRACK**

IT	125	Intro to Data Analytics . . . . .	5
IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	225	Systems Analysis . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5

**USER INTERFACE/USER EXPERIENCE TRACK**

IT	162	Web Authoring 2 . . . . .	5
IT	163	Web Authoring 3 . . . . .	5
IT	171	Theory of Web Design . . . . .	5
IT	172	User Interface & Experience Design for the Web 5	
IT	174	Usability Research Methods for the Web . . . . .	5

**WEB DEVELOPMENT TRACK**

IT	112	Web Programming with Python . . . . .	5
Following can be substituted:			
IT 270 – CMS with WordPress (5)			
IT	162	Web Authoring 2 . . . . .	5
IT	261	Web App Programming 1 . . . . .	5
IT	262	Web Application Programming 2 . . . . .	5
Following can be substituted: IT 121 – JavaScript 1 (5)			
IT	263	Web Application Programming 3 . . . . .	5
Following can be substituted: IT 122 – JavaScript 2 (5)			

**WEB SCRIPTING TRACK**

IT	121	JavaScript 1 . . . . .	5
IT	122	JavaScript 2 . . . . .	5
IT	162	Web Authoring 2 . . . . .	5

**RELATED INSTRUCTION**

IT	229	Software Development Career Strategies . . . . .	2
Following can be substituted:			
IT 289 – Web Career Strategies (2)			
IT Electives . . . . .			10

Based on chosen tracks, students may either take an additional 5-10 credits of IT electives or internship or some combination of both to make the 60 credits required for this certificate.

TOTAL PROGRAM CREDITS	62-72
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## Information Technology: Programming and IT Support Associate of Applied Science–Transfer Degree (A.A.S.-T)

**Information Technology Programs**

Graduates of the Programming and IT Support Program provide technical support for business systems applications, assisting in one or all areas of applications programming that includes testing, design, and analysis. Employees assist in the maintenance, deployment, and problem solving associated with servers and networking devices. They coordinate and optimize departmental business application systems and the components that integrate with all internal systems, along with assisting with the creation and maintenance of technical documents used for planning and support of local servers and networks.

Graduates of the Programming and IT Support program deploy new or upgraded technologies as defined in approved projects. They work as part of a team and possess superior communication, interpersonal and customer service skills with a variety of departments to identify security needs, data requirements, system functions and integration points to provide actionable data.

Completion of either Computer Network Support or Software Development and Testing Certificate – 47 credits OR Application Development Certificate – 49 credits

**PREREQUISITES – OPTION A:  
COMPUTER NETWORK SUPPORT CERTIFICATE**
**PREREQUISITES – OPTION B:  
SOFTWARE DEVELOPMENT AND TESTING CERTIFICATE**
**PREREQUISITES – OPTION C:  
APPLICATION DEVELOPMENT CERTIFICATE**

Total of 47 credits to complete this certificate

Total of 49 credits to complete this certificate

BTM	100	Orientation and Career Exploration . . . . .	2
BTM	100	Orientation and Career Exploration . . . . .	2
BTM	100	Orientation and Career Exploration . . . . .	2

BTM	112	Business Applications II – Data Analysis w/Excel . . . . .	5
BTM	112	Business Applications II – Data Analysis w/Excel . . . . .	5
BTM	113	Business Applications III . . . . .	5
BTM	113	Business Applications III . . . . .	5
BTM	119	Business Communications II . . . . .	5
BTM	119	Business Communications II . . . . .	5
BTM	119	Business Communications II . . . . .	5
BTM	197	Work Experience: Business Technology Management . . . . .	5
BTM	197	Work Experience: Business Technology Management . . . . .	5
BTM	197	Work Experience: Business Technology Management . . . . .	5
BTM	260	Project Management . . . . .	5
BTM	260	Project Management . . . . .	5
BTM	260	Project Management . . . . .	5
BTM	275	Computer User Support. . . . .	5
IT	115	Intro to Software Development & Version Control . . . . .	5
IT	115	Intro to Software Development & Version Control . . . . .	5
IT	116	Programming and Web Page Concepts . . . . .	5
IT	116	Programming and Web Page Concepts . . . . .	5
IT	120	Database Development. . . . .	5
IT	121	JavaScript 1 . . . . .	5
IT	121	JavaScript 1 . . . . .	5
IT	122	JavaScript 2 . . . . .	5
IT	130	Network Essentials. . . . .	5
IT	141	Intro to Hardware Comptia A+ . . . . .	5
IT	142	Introduction to Operating Systems . . . . .	5
IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	229	Software Development Career Strategies . . . . .	2

**TECHNICAL SPECIALTY COURSES**

CSC	110	Introduction to Computer Programming. . . . .	5
Following can be substituted:			
IT 130 – Network Essentials (5)			
Select whichever course has not been taken as part of the certificate earned			
IT	231	Linux Operating System. . . . .	5
IT	232	UNIX for Network Administration . . . . .	5
IT	250	Intro to Security for Computing. . . . .	5

**GENERAL EDUCATION COURSES**

CMST&	220	Public Speaking . . . . .	5
ENGL&	101	English Composition I . . . . .	5
ENGL&	102	Composition II . . . . .	5
HUM	105	Intercultural Communication . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5
Science or Social Science Elective . . . . .			
See advising for list of approved courses.			

TOTAL PROGRAM CREDITS 97-99

This program provides a pathway into Seattle Central's IT Networking BAS Degree.

## Information Technology: Software Development and Testing Certificate

**Information Technology Programs****TECHNICAL SPECIALTY COURSES**

BTM	100	Orientation and Career Exploration . . . . .	2
BTM	112	Business Applications II – Data Analysis w/Excel . . . . .	5
BTM	113	Business Applications III . . . . .	5
BTM	119	Business Communications II . . . . .	5
BTM	197	Work Experience: Business Technology Management . . . . .	5
BTM	260	Project Management. . . . .	5
IT	115	Intro to Software Development & Version Control . . . . .	5
IT	116	Programming and Web Page Concepts . . . . .	5
IT	121	JavaScript 1 . . . . .	5
IT	211	Object Oriented Programming with JAVA . . . . .	5
TOTAL PROGRAM CREDITS			47

## Information Technology: Web Design Associate of Applied Science–Transfer Degree (A.A.S.-T)

**Information Technology Programs**

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

Completion of Certificate Requirements: 62-77 credits

**TECHNICAL SPECIALTY COURSES**

BTM	260	Project Management. . . . .	5
IT	161	Web Authoring 1 . . . . .	5
IT	164	Typography for the Web . . . . .	4
IT	165	Graphics for the Web. . . . .	4

**TECHNICAL SPECIALTY TRACKS**

Choose from two (2) of the six (6) tracks below:



**ENTREPRENEURSHIP TRACK**

IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	221	SQL . . . . .	5
IT	222	Designing Database Solutions . . . . .	5
IT	223	Database Administration . . . . .	5
IT	225	Systems Analysis . . . . .	5

**MOBILE DEVELOPMENT TRACK**

IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	216	Android Application Development 1 . . . . .	5
IT	217	Android Application Development 2 . . . . .	5
IT	225	Systems Analysis . . . . .	5
IT	228	Capstone Project . . . . .	5

**WEB DESIGN TRACK**

IT	162	Web Authoring 2 . . . . .	5
IT	163	Web Authoring 3 . . . . .	5
IT	171	Theory of Web Design . . . . .	5
IT	172	User Interface & Experience Design for the Web . . . . .	5
IT	174	Usability Research Methods for the Web . . . . .	5

**WEB DEV FOR DESIGN TRACK**

IT	121	JavaScript 1 . . . . .	5
IT	162	Web Authoring 2 . . . . .	5
IT	261	Web App Programming 1 . . . . .	5
IT	270	Content Management Systems with Wordpress . . . . .	5

**WEB PROGRAMMING TRACK**

IT	261	Web App Programming 1 . . . . .	5
IT	262	Web Application Programming 2 . . . . .	5
IT	263	Web Application Programming 3 . . . . .	5

**WEB SCRIPTING TRACK**

IT	121	JavaScript 1 . . . . .	5
IT	122	JavaScript 2 . . . . .	5
IT	162	Web Authoring 2 . . . . .	5

**RELATED INSTRUCTION**

IT	289	Web Career Strategies . . . . .	2
IT Electives		. . . . .	10

Following can be substituted: Internship

Based on chosen tracks, students may either take an additional 10 credits of IT electives or internship or some combination of both to make the 62 credits required for this certificate.

**RELATED INSTRUCTION – AAS-T**

ENGL&	101	English Composition I . . . . .	5
ENGL&	102	Composition II . . . . .	5

Following can be substituted:

ENGL& 235 – Technical Writing (5)

This course meets the Communication requirement.

HUM	105	Intercultural Communication . . . . .	5
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Following can be substituted:

ENGL& 235 – Technical Writing (5)

This course meets the Humanities requirement.

MATH	136	Inferential Statistics . . . . .	5
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Following can be substituted:

MATH& 146 – Introduction to Statistics (5)

Natural World, the . . . . .5

Social Science course . . . . .5

See Advising for list of approved courses.

**TOTAL PROGRAM CREDITS** 92-107

## Information Technology: Web Design Certificate

**Information Technology Programs**

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

**PREREQUISITES**

Prerequisites do not count toward credits required for this certificate.

BTM 111 Business Applications I . . . . .5  
waivers or test out may be available

IT 100 Information Technology Fundamentals . . . . .5  
Following can be substituted: Final Exam test out

**TECHNICAL SPECIALTY COURSES**

BTM	260	Project Management . . . . .	5
IT	161	Web Authoring 1 . . . . .	5
IT	164	Typography for the Web . . . . .	4
IT	165	Graphics for the Web . . . . .	4

**TECHNICAL SPECIALTY TRACKS**

Choose from two (2) of the six (6) tracks below:

**ENTREPRENEURSHIP TRACK**

IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	221	SQL . . . . .	5
IT	222	Designing Database Solutions . . . . .	5
IT	223	Database Administration . . . . .	5
IT	225	Systems Analysis . . . . .	5

**MOBILE DEVELOPMENT TRACK**

IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	216	Android Application Development 1 . . . . .	5
IT	217	Android Application Development 2 . . . . .	5
IT	225	Systems Analysis . . . . .	5
IT	228	Capstone Project . . . . .	5



**WEB DESIGN TRACK**

IT	162	Web Authoring 2 . . . . .	5
IT	163	Web Authoring 3 . . . . .	5
IT	171	Theory of Web Design . . . . .	5
IT	172	User Interface & Experience Design for the Web . . . . .	5
IT	174	Usability Research Methods for the Web . . . . .	5

**WEB DEV FOR DESIGN TRACK**

IT	121	JavaScript 1 . . . . .	5
IT	162	Web Authoring 2 . . . . .	5
IT	261	Web App Programming 1 . . . . .	5
IT	270	Content Management Systems with Wordpress . . . . .	5

**WEB PROGRAMMING TRACK**

IT	261	Web App Programming 1 . . . . .	5
IT	262	Web Application Programming 2 . . . . .	5
IT	263	Web Application Programming 3 . . . . .	5

**WEB SCRIPTING TRACK**

IT	121	JavaScript 1 . . . . .	5
IT	122	JavaScript 2 . . . . .	5
IT	162	Web Authoring 2 . . . . .	5

**RELATED INSTRUCTION**

IT	289	Web Career Strategies . . . . .	2
IT Electives		Following can be substituted: Internship Based on chosen tracks, student may either take an additional 0-15 credits of IT electives or internship or some combination of both to make the 62 credits required for this certificate.	10

TOTAL PROGRAM CREDITS	62-77
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## Information Technology: Web Development Associate of Applied Science–Transfer Degree (A.A.S.-T)

**Information Technology Programs**

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development. Completion of Certificate Requirements: 62-72 credits

**PREREQUISITES**

Eligibility for ENGL&101 and College Math – waivers or test out may be available

Prerequisites do not count toward credits required for this certificate.

IT	100	Information Technology Fundamentals . . . . .	5
		Waivers or test out may be available.	

**TECHNICAL SPECIALTY COURSES**

IT	111	Programming Fundamentals . . . . .	5
IT	115	Intro to Software Development & Version Control . . . . .	5
IT	120	Database Development . . . . .	5
IT	161	Web Authoring 1 . . . . .	5

**TECHNICAL SPECIALTY TRACKS**

Choose from two (2) of the seven (7) tracks below:

**DATA ANALYTICS TRACK**

IT	112	Web Programming with Python . . . . .	5
IT	125	Intro to Data Analytics . . . . .	5
IT	221	SQL . . . . .	5
IT	225	Systems Analysis . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5

**DATABASE DEVELOPMENT TRACK**

IT	112	Web Programming with Python . . . . .	5
IT	221	SQL . . . . .	5
IT	222	Designing Database Solutions . . . . .	5
IT	223	Database Administration . . . . .	5
IT	225	Systems Analysis . . . . .	5

**MOBILE DEVELOPMENT TRACK**

IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	216	Android Application Development 1 . . . . .	5
IT	217	Android Application Development 2 . . . . .	5
IT	225	Systems Analysis . . . . .	5

**SOFTWARE DEVELOPER TRACK**

IT	125	Intro to Data Analytics . . . . .	5
IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	225	Systems Analysis . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5

**USER INTERFACE/USER EXPERIENCE TRACK**

IT	162	Web Authoring 2 . . . . .	5
IT	163	Web Authoring 3 . . . . .	5
IT	171	Theory of Web Design . . . . .	5
IT	172	User Interface & Experience Design for the Web . . . . .	5
IT	174	Usability Research Methods for the Web . . . . .	5

**WEB DEVELOPMENT TRACK**

IT	112	Web Programming with Python . . . . .	5
		Following can be substituted: IT 270 – CMS with WordPress (5)	
IT	162	Web Authoring 2 . . . . .	5
IT	261	Web App Programming 1 . . . . .	5

IT	262	Web Application Programming 2 . . . . .	5
		Following can be substituted: IT 121 – JavaScript 1 (5)	
IT	263	Web Application Programming 3 . . . . .	5
		Following can be substituted: IT 122 – JavaScript 2 (5)	

**WEB SCRIPTING TRACK**

IT	121	JavaScript 1 . . . . .	5
IT	122	JavaScript 2 . . . . .	5
IT	162	Web Authoring 2 . . . . .	5

**RELATED INSTRUCTION**

IT	229	Software Development Career Strategies . . . . .	2
		Following can be substituted:	
		IT 289 – Web Career Strategies (2)	
IT Electives		. . . . .	10
		Based on chosen tracks, student may either take an additional 10 credits of IT electives or internship or some combination of both to make the 62 credits required for this certificate.	

**RELATED INSTRUCTION – AAS-T**

ENGL&	101	English Composition I . . . . .	5
ENGL&	102	Composition II . . . . .	5
		Following can be substituted:	
		ENGL& 235 – Technical Writing (5)	
		This course meets the Communication requirement	
HUM	105	Intercultural Communication . . . . .	5
		Following can be substituted:	
		ENGL& 235 – Technical Writing (5)	
		This course meets the VLPA requirement	
MATH	136	Inferential Statistics . . . . .	5
		Following can be substituted:	
		MATH& 146 – Introduction to Statistics	
		Individual, Cultures and Societies . . . . .	5
		Natural World, the . . . . .	5
TOTAL PROGRAM CREDITS			92-107

## Information Technology: Web Development Certificate

**Information Technology Programs**

The Information Technology three- to seven-quarter certificate and Associate of Applied Science-T degree (A.A.S.-T) programs prepare students for an industry with a growing need for skilled technicians. IT offers certificates and/or degrees in six areas: Applications Support, Database Administration and Development, Mobile Product Development, Network Design and Administration, Programming, Web Design, and Web Development. Graduates can expect to find employment as help desk analysts, programmers, web designers and developers, software support specialists, application developers, network designers and administrators, database designers and administrators and IT security specialists. Short-term certificates or industry certifications are offered in Computer Support Technician, Cisco Specialist I, II, III, Microsoft Specialist I, II, III, and Mobile Product Development.

**PREREQUISITES**

Eligibility for ENGL&101 and College Math – waivers or test out may be available

Prerequisites do not count toward credits required for this certificate.

IT	100	Information Technology Fundamentals . . . . .	5
		Waivers or test out may be available.	

**TECHNICAL SPECIALTY COURSES**

IT	111	Programming Fundamentals . . . . .	5
IT	115	Intro to Software Development & Version Control . . . . .	5
IT	120	Database Development . . . . .	5
IT	161	Web Authoring 1 . . . . .	5

**TECHNICAL SPECIALTY TRACKS**

Choose from two (2) of the six (6) tracks below:

**DATA ANALYTICS TRACK**

IT	112	Web Programming with Python . . . . .	5
IT	125	Intro to Data Analytics . . . . .	5
IT	221	SQL . . . . .	5
IT	225	Systems Analysis . . . . .	5
MATH&	146	Introduction to Statistics . . . . .	5

**DATABASE DEVELOPMENT TRACK**

IT	112	Web Programming with Python . . . . .	5
IT	221	SQL . . . . .	5
IT	222	Designing Database Solutions . . . . .	5
IT	223	Database Administration . . . . .	5
IT	225	Systems Analysis . . . . .	5

**MOBILE DEVELOPMENT TRACK**

IT	211	Object Oriented Programming with JAVA . . . . .	5
IT	212	Data Structures and Algorithms with JAVA . . . . .	5
IT	216	Android Application Development 1 . . . . .	5
IT	217	Android Application Development 2 . . . . .	5
IT	225	Systems Analysis . . . . .	5

**USER INTERFACE/USER EXPERIENCE TRACK**

IT	162	Web Authoring 2 . . . . .	5
IT	163	Web Authoring 3 . . . . .	5
IT	171	Theory of Web Design . . . . .	5
IT	172	User Interface & Experience Design for the Web . . . . .	5
IT	174	Usability Research Methods for the Web . . . . .	5

**WEB DEVELOPMENT TRACK**

IT	112	Web Programming with Python . . . . .	5
		Following can be substituted:	
		IT 270 – CMS with WordPress (5)	
IT	162	Web Authoring 2 . . . . .	5
IT	261	Web App Programming 1 . . . . .	5
IT	262	Web Application Programming 2 . . . . .	5
		Following can be substituted: IT 121 – JavaScript 1 (5)	
IT	263	Web Application Programming 3 . . . . .	5
		Following can be substituted: IT 122 – JavaScript 2 (5)	

**WEB SCRIPTING TRACK**

IT	121	JavaScript 1 . . . . .	5
IT	122	JavaScript 2 . . . . .	5
IT	162	Web Authoring 2 . . . . .	5

**RELATED INSTRUCTION**

IT	229	Software Development Career Strategies . . . .2
		Following can be substituted:
		IT 289 – Web Career Strategies (2)
IT Electives		10
		Based on chosen tracks, student may either take an additional 10 credits of IT electives or internship or some combination of both to make the 62 credits required for this certificate.
TOTAL PROGRAM CREDITS		62-72

**Linux Certificate Short-Term Certificate****Business, Information Technologies & Creative Arts Division**

This three-class series of courses prepare individuals with previous Linux administration skills for implementation in enterprise computing environments, past the equivalency of Linux+ certification. Students examine and demonstrate auto-configuration, file systems, partitioning, logical volumes, firewalling, LAN/WAN support applications, Enterprise Applications, like web, mobility, email, storage, cloud virtualization, database, and troubleshooting. Students will also implement third-party applications and mixed server environments, including integration with Microsoft and Apple products.

**Program Certificate Outcomes:**

- Plan and manage multiple projects, both individually and as a team member
- Apply industry standard techniques for collecting, analyzing, and optimizing data within an enterprise network infrastructure.
- Assess, develop, and maintain network security systems using ethical best practices and standardized tools.

**TECHNICAL SPECIALTY COURSES**

NTI	320	Optimization and Monitoring of Enterprise Networks (5)
NTI	300	Linux and Enterprise Scripting Technologies . .5
NTI	310	Linux Application . . . . .5
TOTAL PROGRAM CREDITS		15

**Math (A.S. Track 2)**

This two-year pathway is designed for students who wish to complete an Associate of Science - Track 2 degree with a concentration in Mathematics. Students in this program will learn how to use mathematical concepts to break down complicated problems into manageable pieces. Students will use creative, exploratory, and lateral thinking in problem-solving as well as strong reasoning and analytical-thinking skills through math courses ranging from basic arithmetic to differential equations.

Completion of this program opens doors to a variety of careers in sectors such as research, finance, accounting, academia and more. It also allows you to transfer at the junior level into a Mathematics program at a four-year college or university, or to a Bachelor of Applied Science (BAS) at one of the Seattle Colleges.

**Physics (A.S. Track 2)**

This two-year pathway is designed for students who wish to complete an Associate of Science - Track 2 degree with a concentration in Physics. Students in this program develop an understanding of physics and skills in experimental design, teamwork, project management, programming, advanced math, technical writing, applying physics to interdisciplinary problems, and effective communication.

Completion of this program prepares students to transfer at the junior level into a Physics program at a four-year college or university which opens doors to a variety of careers in sectors including engineering, computer science, research in the public and private sector, and education. It also prepares students well for graduate coursework in Engineering, Earth and Space Science, Mathematics or a related field at a four-year college or university.

**Sustainable Agriculture  
(A.A.-DTA or A.S.-Track 1)**

This two-year pathway is designed for students who wish to complete an Associate of Arts – Direct Transfer degree with an emphasis in Sustainable Agriculture. Students may earn a degree or applied management and planning certificate with an emphasis in Urban Agriculture. Students in this program focus on urban organic agriculture in western Washington, and prepares you to sustainably manage production and operations that result in resilient, equitable, and local food systems.

Completion of this program prepares students with foundational courses and practical experience to transfer to a four-year college to earn a bachelor's degree in Sustainability, Food Science, Food Processing, or other related fields. Those who earn a certificate may hone their skills in natural resource management, food technology, environmental science, conservation, and management.

## SKILLED TRADES AND TECHNICAL TRAINING

### Carpentry Fundamentals Short-Term Certificate

**Wood Technology: Carpentry**  
**Campus Central | 2310 South Lane**

Teaches the fundamental knowledge and skills of residential carpentry. Topics cover: carpentry math, blueprint reading, building science, building site systems, foundation systems, and the selection and use of tools and material.

#### TECHNICAL SPECIALTY COURSES

WCO	142	Introduction to Carpentry and Blueprint Reading . . . . .	.4
WCO	143	Building Site System Site Selection to Layout .	.5
WCO	144	Foundation System Forms to Concrete Finishes .	.9
TOTAL PROGRAM CREDITS			18

### Finish Fundamentals Short-Term Certificate

**Wood Technology: Carpentry**  
**Campus Central | 2310 South Lane**

Teaches basic Knowledge and skills for applying exterior and interior carpentry finishes. Topics cover: enclosure systems, siding, insulation, windows, drywall, trim work, and the selection and use of construction products and materials.

#### TECHNICAL SPECIALTY COURSES

WCO	148	Exterior Finishes Building Enclosure Finish Trim .	.9
WCO	149	Interior Finishes Door Installation to Trim . . .	.9
TOTAL PROGRAM CREDITS			18

### Framing Fundamentals Short-Term Certificate

**Wood Technology: Carpentry**  
**Campus Central | 2310 South Lane**

Teaches basic knowledge and skills for building framing systems. Topics cover: floor, ceiling, wall, roof, and stair system construction; building codes, best practices for improving a building's energy and resource efficiency; and the selection and use of construction products and material

#### TECHNICAL SPECIALTY COURSES

WCO	145	Framing Systems Floor to Ceiling . . . . .	.9
WCO	146	Roof System Framing to Roofing Installation .	.5
WCO	147	Stair System Rough Framing to Finished Stairwell . . . . .	.4
TOTAL PROGRAM CREDITS			18

### Maritime: Marine Deck Technology Certificate

**Seattle Maritime Academy**  
**4455 Shilshole Ave NW, Seattle**

This program is under review. Contact the department for up-to-date information.

The Marine Deck Technology program combines practical shipboard experience and requisite courses in nautical science with additional courses in computation, communication and human relations. Emphasis is placed on the theory, design, operation and maintenance of deck equipment and applied navigation skills. Students go to sea once a week during the second and third quarters aboard the college's training vessels. The academic program is followed by a 30-day at-sea internship on a large commercial vessel.

SMA offers the Marine Deck Technology curriculum as a 63-64 credit program, culminating in a certificate in Marine Deck Technology. Each graduate who successfully completes the program receives eight months of sea service credit toward a license as Master of Inland Steam or Motor Vessels of Not More Than 100 Gross Tons, or eight months of sea service credit toward a license as Mate of Near Coastal Steam or Motor Vessels of Not More Than 200 Gross Tons. This sea service credit is two-thirds of the total required sea service for the license. On completion, the student also receives eight months of sea service credit toward an Able Seaman-Special endorsement or one-third of the required sea service credit for any other Able Seaman endorsement. Combining the eight months of sea service from the academic program with the two months of actual sea service on SMA's training vessels and the internship gives each graduate 10 months of sea service toward AB-Special. Graduates satisfy both the written and practical examination requirements for both the Able Seaman and the Lifeboatman endorsements. The MDT certificate program also qualifies each graduate for an STCW "ratings forming part of a navigational watch" endorsement.

#### TECHNICAL SPECIALTY COURSES

MGO	101	Principles of Marine Mechanics . . . . .	.2
MGO	103	Survival Craft . . . . .	.3
MGO	111	Seamanship. . . . .	.3
MGO	112	Marlinspike . . . . .	.2
MGO	113	Marine Safety. . . . .	.3
MGO	120	Vessel Maintenance . . . . .	.2
MGO	123	Basic Piloting and Navigation . . . . .	.3
MGO	124	Basic Vessel Handling. . . . .	.2
MGO	133	Seamanship Practicum . . . . .	.6
MGO	137	Electronic Navigation AIDS. . . . .	.2
MGO	140	Nautical Rules of the Road . . . . .	.3
MGO	166	Navigation Practicum . . . . .	.6
MGO	200	At Sea Internship . . . . .	.5

Credit range: 4-5

Total required at Sea Internship credits for MGO 200: 4-5

MTS	201	Naval Architecture. . . . .	2
MTS	202	Stability. . . . .	2
MTS	210	Marine Meteorology. . . . .	2
MTS	223	Advanced Piloting and Navigation. . . . .	3
MTS	284	Shipboard Pollution Prevention. . . . .	2
MTS	294	License Seminar. . . . .	2
		Optional Course	

**RELATED INSTRUCTION**

ENGL	105	Applied Composition. . . . .	3
MGO	105	Leadership and Management. . . . .	3
MGO	119	Marine Mathematics. . . . .	3

TOTAL PROGRAM CREDITS	61-64
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**COMMUNITY SERVICE/INDUSTRY SUPPORT COURSES:**

Basic Electricity for Small Boats & Recreational Boaters  
 Basic Seamanship & Deck Skills  
 Celestial Navigation  
 Coastal Navigation  
 Diesel Engine Maintenance & Operation  
 Electronic Navigation  
 Marine Safety & Survival  
 Vessel Hanging

**CERTIFICATION PREPARATORY COURSES:**

Lifeboatman  
 Master 100 Ton  
 Master 200/500/1600 Ton  
 Mate 200/500/1600 Ton  
 Refrigeration Technician (testing)  
 Standard First Aid & CPR

## Maritime: Marine Engineering Technology Certificate

**Seattle Maritime Academy**  
**4455 Shilshole Ave NW, Seattle**

The Marine Engineering Technology program combines practical shipboard experience and required courses in engineering with additional courses in computation, communication and human relations. Emphasis is placed on the theory, design, operation and maintenance of marine propulsion plants and equipment. Students go to sea once a week during the second and third quarters aboard the college's training vessels. The academic program is followed by a 30- to 90-day-at-sea internship on a large commercial vessel.

SMA offers the Marine Engineering Technology curriculum as a 73-77 credit program, culminating in a certificate in Marine Engineering Technology from Seattle Central. Students will also be eligible for a U.S. Merchant Mariners document endorsed with any and/or all of the following engine room (QMED) ratings: Electrician; Oilier; Pumpman; Refrigeration Engineer; and/or Junior Engineer. If the student's at-sea internship was on a vessel with steam propulsion, they will also be eligible for a "fireman/watertender" QMED rating. The MET certificate program also qualifies each graduate for an STCW "ratings forming part of an engineering watch" endorsement.

**TECHNICAL SPECIALTY COURSES**

MGO	101	Principles of Marine Mechanics. . . . .	2
MGO	103	Survival Craft. . . . .	3
		Optional course	
MGO	111	Seamanship. . . . .	3
MGO	113	Marine Safety. . . . .	3
MGO	127	Fundamentals of Marine Electricity. . . . .	4
MGO	147	Marine Engineering Practicum. . . . .	6
MGO	177	Advanced Engineering Practicum. . . . .	6
MGO	200	At Sea Internship. . . . .	5
MTS	212	Auxiliary Machinery and Ship Design. . . . .	4
MTS	217	Diesel Engine Maintenance and Operation. . . . .	4
MTS	221	Applied Marine Electricity. . . . .	4
MTS	228	Marine Hydraulics. . . . .	5
MTS	233	Marine Refrigeration. . . . .	5
MTS	257	Advanced Diesel Engines. . . . .	4
MTS	263	Propulsion Systems. . . . .	3
MTS	284	Shipboard Pollution Prevention. . . . .	2
MTS	285	Marine Boilers. . . . .	3
MTS	294	License Seminar. . . . .	2

**RELATED INSTRUCTION**

ENGL	105	Applied Composition. . . . .	3
MGO	105	Leadership and Management. . . . .	3
MGO	119	Marine Mathematics. . . . .	3

TOTAL PROGRAM CREDITS	73-77
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## Pre-Apprenticeship Construction Training (P.A.C.T.) Certificate

**Vocational Programs**

The Pre-Apprenticeship Construction Training program is designed to assist adults, to gain the skills needed to make them successful competitors for entry-level jobs in construction trade apprenticeship programs. Participants study and apply subjects and skills that are relevant to the work-sites of many occupations, and tour many apprenticeship schools and construction job sites. Students learn basic carpentry skills and terminology, shop math, and effective and safe operation of power tools and demonstrate their competency. Students learn and receive certification in forklift operation, road flagging, OSHA 10 safety, and first aid/CPR. There is additional emphasis on learning skills and adopting attitudes that lead to becoming a positive and productive member of any worksite team/organization. The focus is on building habits for success, including time management, understanding non-verbal communication, taking the initiative, group/ team communication, and line/ staff/team organization.

Note: Forklift and flagging certification classes are open to the public and are offered at least once per quarter. For information on dates and fees for flagging or forklift, call Registration at (206) 934-4970 or the PACT office at (206) 934-4957.



**TECHNICAL SPECIALTY COURSES**

MTA	161	Construction Job Readins . . . . .	5.5
MTA	163	Blueprint Reading . . . . .	3.5
MTA	164	Industrial 1st Aid/CPR . . . . .	0.5
MTA	165	Road Flagging. . . . .	0.5
Continuing Education course for P.A.C.T.			
MTA	167	Const Trades Training I . . . . .	3
MTA	172	Forklift Operation & Crt . . . . .	1
Continuing Education course for P.A.C.T.			
MTA	174	Tools/Material Id/Handl . . . . .	2
MTA	177	Fitness and Nutrition I. . . . .	2
MTA	179	OSHA 10 Safety . . . . .	1

**RELATED INSTRUCTION**

MATH	110	Applied Math for Technicians . . . . .	3
<b>TOTAL PROGRAM CREDITS</b>			<b>22</b>

## Wood Technology: Boat Building and Repair Certificate

**2310 South Lane**

The Marine Technology program at Seattle Central College will train students for a career in the boatbuilding and repair-refit industries. The program teaches entry-level skills in the building and repair of wood and fiberglass hull and vessel components, outboard and inboard engines, testing, maintaining, and repairing electrical systems, and the installation of marine pumps in new or retrofit vessels. Instruction also includes the techniques of working with fiberglass and related chemicals.

Students who complete the certificate program will have the option to complete an AAS degree by completing an internship, taking marine electronics, marine welding, or advanced wooden boat joinery and repair.

**TECHNICAL SPECIALTY COURSES**

MRT	101	Introduction to Composite Boatbuilding . . . .	14
MRT	102	Introduction to Marine Electrical Systems . . .	4
MRT	103	Wooden Boat Joinery and Repair . . . . .	10
MRT	104	Introduction to Marine Mechanical Systems . .	8
MRT	105	Advanced Composites. . . . .	14
MRT	106	Marine Electrical II . . . . .	4
WCO	110	Introduction to Professional Woodworking . .	18

**RELATED INSTRUCTION**

ENGL	105	Applied Composition . . . . .	3
MATH	110	Applied Math for Technicians . . . . .	3
MIC	103	Computer Applications for Builders. . . . .	3
Following can be substituted:			
MIC 203 – Introduction to CAD (3)			
PSYC	240	Psychology of Human Relations . . . . .	3
<b>TOTAL PROGRAM CREDITS</b>			<b>84</b>

## Wood Technology: Boat Building and Repair Associate of Applied Science Degree (A.A.S.)

**2310 South Lane**

The Marine Technology program at Seattle Central College will train students for a career in the boatbuilding and repair-refit industries. The program teaches entry-level skills in the building and repair of wood and fiberglass hull and vessel components, outboard and inboard engines, testing, maintaining, and repairing electrical systems, and the installation of marine pumps in new or retrofit vessels. Instruction also includes the techniques of working with fiberglass and related chemicals.

**TECHNICAL SPECIALTY COURSES**

MRT	101	Introduction to Composite Boatbuilding . . . .	14
MRT	102	Introduction to Marine Electrical Systems . . .	4
MRT	103	Wooden Boat Joinery and Repair . . . . .	10
MRT	104	Introduction to Marine Mechanical Systems . .	8
MRT	105	Advanced Composites. . . . .	14
MRT	106	Marine Electrical II . . . . .	4
WCO	110	Introduction to Professional Woodworking . .	18

**RELATED INSTRUCTION**

ENGL	105	Applied Composition . . . . .	3
MATH	110	Applied Math for Technicians . . . . .	3
MIC	103	Computer Applications for Builders. . . . .	3
Following can be substituted:			
MIC 203 – Introduction to CAD (3)			
PSYC	240	Psychology of Human Relations . . . . .	3

**ELECTIVES**

Choose from one of the following courses:

MRT 107 – Internship (7-10 credits)			
MRT	107	Internship . . . . .	10
Credit range: 1-10/Total required credits: 7-10			
MRT	108	Advanced Wooden Boat Joinery and Repair . .	18
Course taken at another college . . . . .			
Marine Electronics – Skagit Valley College			
Course taken at another college . . . . .			
Welding Intensive – South Seattle College			

<b>TOTAL PROGRAM CREDITS</b>			<b>94-116</b>
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## Wood Technology: Cabinetmaking & Architectural Woodworking Associate of Applied Science Degree (A.A.S.)

### 2310 South Lane

This program prepares students for employment in the cabinetmaking and fine woodworking trades.

#### TECHNICAL SPECIALTY COURSES

WCO	110	Introduction to Professional Woodworking . . .	18
WCO	150	Cabinetmaking & Fine Woodworking . . . . .	18
WCO	153	Basic Cabinetmaking Fundamentals . . . . .	18
WCO	155	Adv Cabinetmaking Architectural Woodworking Fund . . . . .	18
WCO	157	Independent Capstone Project . . . . .	18

#### RELATED INSTRUCTION

ENGL	105	Applied Composition . . . . .	3
MATH	110	Applied Math for Technicians . . . . .	3
MIC	103	Computer Applications for Builders . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3
TOTAL PROGRAM CREDITS			102

## Wood Technology: Cabinetmaking & Fine Woodworking Certificate

### 2310 South Lane

This program prepares students for employment in the cabinetmaking and fine woodworking trades.

#### TECHNICAL SPECIALTY COURSES

WCO	110	Introduction to Professional Woodworking . . .	18
WCO	150	Cabinetmaking & Fine Woodworking . . . . .	18
		Preliminary Cabinetmaking Skills: Planning, Basic Layout & Shop Safety	
WCO	150	Cabinetmaking & Fine Woodworking . . . . .	18
		Advanced Layout, Traditional & Contemporary Joinery, Residential & Commercial Cabinetry	
WCO	150	Cabinetmaking & Fine Woodworking . . . . .	18
		Custom Furniture Design, Construction: Joinery, Veneering, Jigs, Finishing (Instructor permission required)	
WCO	150	Cabinetmaking & Fine Woodworking . . . . .	18
		Personal Projects (Instructor permission required)	

#### RELATED INSTRUCTION

ENGL	105	Applied Composition . . . . .	3
MATH	110	Applied Math for Technicians . . . . .	3
MIC	103	Computer Applications for Builders . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3
WCO	120	Construction & Marine Industrial First Aid . . .	1
TOTAL PROGRAM CREDITS			103

## Wood Technology: Carpentry Certificate

### 2310 South Lane

The Carpentry program prepares students for employment in residential and light commercial construction trades. Students have the option to earn quarterly short term certificates or the Carpentry Program Associate of Applied Science (A.A.S.) degree. The carpentry one-quarter certificates can build to a full carpentry degree.

#### TECHNICAL SPECIALTY COURSES

WCO	110	Introduction to Professional Woodworking . . .	18
WCO	140	Carpentry . . . . .	18
		Concrete Forms & Footings, Floor Systems, & Job Safety	
WCO	140	Carpentry . . . . .	18
		General Frame Construction, Roof Framing, Staging, Working at Heights	
WCO	140	Carpentry . . . . .	18
		Finish work, Setting Windows & Doors, Machine Safety	
WCO	140	Carpentry . . . . .	18
		Selected Class Projects (Optional – Instructor permission required)	

#### RELATED INSTRUCTION

ENGL	105	Applied Composition . . . . .	3
MATH	110	Applied Math for Technicians . . . . .	3
MIC	103	Computer Applications for Builders . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3
WCO	120	Construction & Marine Industrial First Aid . . .	1
TOTAL PROGRAM CREDITS			85

## SOCIAL SCIENCES, HUMANITIES, AND LANGUAGE

### Anthropology (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement degree with a concentration in Anthropology. Students in this pathway develop skills in data analysis, research design, oral and written communication, group communication and collaboration, and become adept in diversity, equity, and inclusion.

Completion of this program allows students to transfer at the junior level into an Anthropology program at a four-year college or university. It also opens doors to a variety of careers in sectors including international relations/law, non-profits, museums/zoos, education, government, health care, tourism, and business.

### Communication Studies (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement degree with a concentration in Communication Studies. Students in this program develop skills in verbal communication, analysis and research, multicultural awareness, computer and technical literacy, audience analysis, group communication and collaboration, interpersonal communication, leadership, and facilitation.

Completion of this program allows students to transfer at the junior level into a Communication Studies, Media & Communications, Journalism, or a related program at a four-year college or university. It also opens doors to a variety of careers in sectors including non-profit, business, government, entertainment, and education.

### English, Literature, and Writing Studies (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement degree with a focus on English. Students in this pathway will develop skills in written communication, information literacy, analysis and research, multicultural awareness, metacognition/critical self-reflection, problem-solving, audience awareness, group communication and collaboration, and interpersonal communication.

Completion of this program allows students to transfer at the junior level into an English, Media & Communications, Journalism or a related field at a four-year college or university. It also opens doors to a variety of careers in sectors including education, media/entertainment, publishing, law, government, non-profit, and business.

### Equity and Social Justice (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement (A.A.-DTA) degree with an emphasis in Equity and Social Justice. Students in this program engage in an interdisciplinary examination of various dimensions of human diversity – including race, class, gender, sexuality, ability, religion, and more – with a focus on social justice and change. Students will develop skills in oral and written communication, critical thinking and problem solving, systems analysis, research design and planning, digital technology, collaboration, leadership, and intercultural fluency.

Completion of this program allows students to transfer into a social sciences or humanities major at a four-year college or university. Completion of this degree also opens doors to a variety of careers in sectors including social services, government, non-profit, education, media, law, and business.

### Ethnic Studies (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts-Direct Transfer Agreement degree with a concentration in Ethnic Studies. Students will take courses that are interdisciplinary and multicultural. Courses may focus on historical and contemporary societies. Students will develop skills in oral and written communication, critical thinking and problem solving, systems analysis, collaboration, and intercultural fluency.

Completion of this program allows students into an ethnic studies program at a four-year college or university. Completion of this degree also opens doors to a variety of careers in sectors including non-profit, healthcare, government, law, education, and more.

## Gender, Women, and Sexuality Studies (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement degree with a concentration in Gender, Women and Sexuality Studies. Students in this pathway develop skills in critical thinking, writing and verbal communication, analysis and research, cultural competency, and multicultural awareness, as well as collaboration, interpersonal communication, and leadership.

Completion of this program allows students to transfer at the junior level into a Gender and Women Studies or related program at a four-year college or university, as well as opening doors to a variety of careers in sectors including non-profit, business, government, entertainment, and education.

## Global Studies (A.A.-DTA)

This two-year program is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement degree with an emphasis on Global Studies. This program integrates the study of politics, economics, and the arts with analyses of cultural practices, beliefs, and social systems. Students learn to appreciate and understand world cultures, focus on themes of global significance, and develop an interdisciplinary approach to international issues.

Completion of this program prepares students to transfer at the junior level into a global/international studies program at a four-year college or university. It also opens doors into a variety of careers including translation, education, and work with government and non-profit/non-governmental organizations.

## History (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement degree with a concentration in History. Students in the program learn how to think historically, hone their written and verbal communication skills, acquire research methods and analytical tools, develop information literacy, and better comprehend how events in the past influence our present.

Completion of this program allows students to transfer at the junior level into several fields of study at a four-year college or university, including History, American Ethnic Studies, Queer Studies, Archeology, Anthropology and more. Completion of this program also opens doors to a variety of careers in museums, government, research, park service, political activism, nonprofits, policy, and education.

## Humanities and Cultural Studies (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement degree with a concentration in Humanities & Cultural Studies. Students pursuing this degree combine the study of language, film and media studies, popular culture, literature, multicultural and diversity studies, and philosophy. Students will analyze issues such as race, gender, and class in relation to popular culture, global movements, and social justice, and gain the ability to reason critically, research and communicate effectively.

Completion of this program allows students to transfer at the junior level into several fields of study such as comparative literature, cinema, communications, film studies, comparative history of ideas, English, women/gender/sexuality studies or a related field at a four-year college or university.

## Philosophy (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement degree with a concentration in Philosophy. Students in this program develop skills in problem solving, analytical thinking, communication, information management, writing, reading and interpretation of text.

Completion of this program allows students to transfer at the junior level into a Philosophy program at a four-year college or university, as well as opening doors to a variety of careers in sectors including non-profit, business, government, entertainment, and education.

## Political Science (A.A.-DTA)

This two-year program is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement degree with a concentration in Political Science. Students in this pathway develop skills in critical analysis, research, multicultural awareness, communication, information literacy, audience analysis, networking, and leadership. Students will build foundational knowledge of political institutions, policy, American systems, globalization, and political theory.

Completion of this program allows students to transfer at the junior level to a Political Science, Economics, Media & Communications, or a related program at a four-year college or university with core Political Science classes completed. Completion of this degree also opens doors to a variety of careers in fields including public service, government, interest groups, sustainability, businesses, social media, and education.

## Psychology (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts -Direct Transfer Agreement degree with a concentration in Psychology. Students in this program develop an awareness of human behavior and thinking that will serve them in both personal and professional capacities. Students will also develop skills in critical thinking, research, interpersonal awareness, group communication and collaboration, problem solving, information-finding, and time management.

Completion of this program allows students to transfer at the junior level to a Psychology program at a four-year college or university, as well as opening doors to entry level employment in many sectors including non-profit, social work, healthcare, education, business, and government.

## Social Sciences (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts – Direct Transfer Agreement degree with a concentration in Social Sciences. Students taking courses in Social Sciences develop skills that are valuable for many 4-year university programs, graduate level programs, as well as various job sectors. Students practice qualitative and quantitative research methods, analytical thinking, critical thinking, and written and oral communication. With additional degrees, students may enter fields such as Law, Social Work, Health, Urban Planning, International Relations, Education, and more.

Completion of this program prepares students with foundational courses to transfer to a four-year college to earn a bachelor's degree in Liberal Arts or other fields, as well as opening doors to a variety of careers including non-profit, business, government, marketing, advertising, social justice, and more.

## Sociology (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts - Direct Transfer Agreement degree with a concentration in Sociology. Students in this program think from a systems perspective, broaden their worldview, and become thoughtful citizens of the world. Students develop skills in analysis and research, multicultural awareness, computer and technical literacy, group communication and collaboration, interpersonal communication, institutional analysis, critical thinking, reading, and writing.

Completion of this program prepares students with foundational courses to transfer to a four-year college to earn a bachelor's degree in sociology or a related field, as well as opening doors to a variety of careers in sectors including non-profit, business, government, marketing, advertising, social justice, and education.

## Technical Theater for Social Justice (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts – Direct Transfer degree with an emphasis in Technical Theater for Social Justice. You will receive training in technical theatre and film elements including costumes and properties fabrication, stage lighting, electrics, projections, audio engineering, and scenic carpentry and painting. You will also work alongside Union professionals on Intiman's mainstage productions, while studying equity and social justice at the college.

Completion of this program prepares students to transfer to a four-year college to earn a bachelor's degree, or directly apply for IATSE union membership and enter the industry.

## World Languages (A.A.-DTA)

This two-year pathway is designed for students who wish to complete an Associate of Arts-Direct Transfer Agreement degree with a concentration in World Languages/Linguistics. Students in this program develop skills in verbal communication, analysis and research, multicultural awareness, group communication and collaboration, interpersonal communication, and language acquisition. Students will also develop basic computer skills such as typing and using a computer in different languages, Excel, Word, and PowerPoint.

Completion of this program allows students to transfer at the junior level to a Linguistics or specific World Languages program at a four-year college or university. Completion of this degree also opens doors to a variety of careers in sectors including non-profit, healthcare, international business, government, entertainment, legal and education.



# South Seattle College

## Welcome

Welcome to South Seattle College. South has educational opportunities to meet a wide variety of interests and needs, whether on the main campus in West Seattle, through online courses, or at one of the satellite campuses. Real-world experience is emphasized through team-learning projects and portfolio development or through internships and classes that engage students in the learning process.

The main campus is located on 87 wooded acres in West Seattle, overlooking downtown Seattle and Elliott Bay. The six-acre college arboretum is adjacent to the site of the developing Seattle Chinese Garden.

Students are offered a wide variety of educational opportunities, from certificates to Associate of Arts degrees and even bachelor's degrees. In addition to offering classes toward a bachelor's degree through our on-campus university partners, South offers three Bachelor of Applied Science degrees: Hospitality Management, career and technical Teacher Education, and Sustainable Building Science Technology.

South takes pride in celebrating a diverse campus that includes a wide mix of students from regions all over the globe. As a campus, South's faculty and staff are committed to student success and to helping students turn their academic dreams into reality. Start here, go anywhere!



## Getting Started at South

<b>Admissions</b>	<b>(206) 934-7943</b>
<b>Financial Aid</b>	<b>(206) 934-5317</b>
<b>Registration</b>	<b>(206) 934-7938</b>
<b>TDD</b>	<b>(206) 934-5845</b>

**[southseattle.edu](http://southseattle.edu)**

## Mission

As an open-access learning institution, Seattle Colleges prepares each student for success in life and work, fostering a diverse, engaged, and dynamic community.

## Vision

Seattle Colleges is recognized as an exemplary learning institution that transforms lives, promotes equity, and enriches the community.

## Core Themes

- Student Achievement
- Teaching and Learning
- College Culture and Climate
- Community Engagement and Partnerships

**Facts at a Glance\*****2019–2020 ANNUAL PROFILES**

Annual attendance 2019–2020	10,056
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**Special Enrollments**

Distance Education	6,389
Running Start	553
International Students	601
Worker Retraining	475

**FALL 2019 PROFILES****Students \*\***

Median age	28
Ethnic diversity	40%
Male/Female	57%/36%
With bachelor or higher degrees	9%
Full-time/Part-time attendance	32%/68%

**Programs**

College Transfer	41%
Career and Technical	49%
Basic Skills, Pre-college, and other	10%

**Course Funding Sources**

State-funded	75%
Contract-supported	13%
Student-supported	12%

\* Source: State Board for Community and Technical Colleges  
Data Warehouse and Seattle College District's Database.

\*\* State-funded

**Specialized Training Centers****Georgetown Campus of South Seattle College****Apprenticeship & Education Center****Washington State Labor, Education and Research Center****Corporate & Customized Training Center****6737 Corson Avenue S****(206) 934-5350 | [georgetown.southseattle.edu](http://georgetown.southseattle.edu)**

South Seattle College's Georgetown campus is known as the area's premier workforce education and training institution. The Apprenticeship & Education Center is the largest apprenticeship training facility on the West Coast serving over 3,000 apprentices and journey-level workers in more than 50 trades. Georgetown also houses Corporate & Customized Training to meet the education and training needs of the business community.

The Washington State Labor, Education, and Research Center at Georgetown works with unions, community-based organizations and within colleges to provide training and workshops to help working women and men develop the skills, confidence, and knowledge to be leaders at work and in their communities. The BAS in Sustainable Building Science Technology prepares industry professionals to apply expertise and systems knowledge to support highly technical building operations.

The Georgetown campus received a 2008 Governor's Economic and Workforce Development Award and a 2009 Vision 2020 Award from the Puget Sound Regional Council. In 2013 the Manufacturing Academy won the National Council for Workforce Education's Outstanding Program Award. The Georgetown campus has also been a winner of recent U.S. Department of Labor grant rounds in TAACCCT, AAI and Tech Hire.

**NewHolly Learning Center****7058 32nd Ave S, Seattle, WA 98118****Second floor of the Learners Building****(206) 934-6642 | [southseattle.edu/programs/holly.htm](http://southseattle.edu/programs/holly.htm)**

NewHolly is a community with the mission to foster the success of youth, adults, and families. In implementing this mission, South Seattle College, along with community partners, values and promotes services that build on strengths, diversity and multiculturalism, public-private collaboration, an open and engaged community, and a commitment to innovation. South Seattle College offers English as a Second Language (ESL) and a corrections training program at NewHolly.

**Harbor Island Training Center****1731 13th Ave. SW, Seattle, WA 98134****[southseattle.edu/harbor-island-training-center/](http://southseattle.edu/harbor-island-training-center/)**

South Seattle College and Vigor have formed the Harbor Island Training Center, a public/private partnership located on-site at Vigor on Harbor Island. A college in a shipyard, South Seattle offers an intensive maritime welding program to train welders with the necessary certifications needed for the regional shipbuilding and repair community.

## Student Services

### Advising Center

(206) 934-5387

[southseattle.edu/advising](https://southseattle.edu/advising)

The Advising Center assists students to define and meet their educational goals while providing effective referrals to other support services. Services provided by advisors include academic advising and educational planning, college transfer degree information, Professional Technical degree information, assistance with petitions for waivers and/or exceptions, assistance with academic difficulty, transfer planning, monitoring degree progress, and graduation applications. Advisors serve new students and students enrolled in college transfer, professional technical career training, high school diploma (ages 21+), General Education Development (GED®), English as a Second Language (ESL), and undecided students.

### Counseling Services

(206) 934-6409

[southseattle.edu/counseling](https://southseattle.edu/counseling)

Counselors are faculty members who help students and prospective students establish and achieve educational, career, and personal goals based on a comprehensive assessment of their personalities, interests, skills, values, and other resources. South Seattle College has three full-time counselors who hold master's degrees in counseling.

### WorkSource Career Services

(206) 934-5304

[southseattle.edu/worksource/](https://southseattle.edu/worksource/)

**Student & Alum Job Board:** [seattlecolleges.edu/handshake](https://seattlecolleges.edu/handshake)

The WorkSource/Career Services Center offers a full spectrum of employment services to students, alums, and community members, using an innovative "Embedded Career Services" approach that partners with faculty to help students obtain employment upon program completion.

The WorkSource/Career Services Center has self-service labs with multiple computers, career exploration tools, and knowledgeable staff to assist in navigating the internet to apply for positions and research employers.

Individuals may schedule one-on-one appointments with embedded career specialists or WIOA staff members and community partners and participate in workshops focused on creating resumes and interviewing successfully.

### Class Schedule – Quarterly

[csprd.ctclink.us/psp/csprd/EMPLOYEE/SA/s/WEBLIB\\_HCX\\_CM.H\\_CLASS\\_SEARCH.FieldFormula.IScript\\_Main?institution=WA064](https://csprd.ctclink.us/psp/csprd/EMPLOYEE/SA/s/WEBLIB_HCX_CM.H_CLASS_SEARCH.FieldFormula.IScript_Main?institution=WA064)

Each college produces a quarterly Class Schedule listing the specific courses being offered that quarter. This schedule is available online approximately six weeks before the start of each quarter. View or download the online class schedule at the website above.

### Center for Equity, Inclusion, and Diversity

(206) 934-6831

[southseattle.edu/student-life/center-equity-inclusion-and-diversity](https://southseattle.edu/student-life/center-equity-inclusion-and-diversity)

The Center for Equity, Inclusion, and Diversity empowers student leaders to explore, celebrate, and educate the campus community about the diversity among us. We offer an inclusive and reflective space, multicultural programming, and support services that encourage positive interaction, academic persistence, and growth among students, faculty, and staff.

### Disability Support Services Access Services

(206) 934-5137 (voice)

TTY 1-800-833-6384 or 711 for Washington State relay service  
[southseattle.edu/access-services](https://southseattle.edu/access-services)

Disability Support Services (DSS) coordinates services and arranges academic adjustments for students with disabilities at South Seattle College. The DSS Office provides accommodations to ensure physical and programmatic access to college services, programs, and activities.

To receive services, students complete an intake appointment in the DSS Office and provide documentation of disability. Individualized academic adjustments will then be determined. Please note that some services may require six weeks or more to arrange. Contact the DSS Office as early as possible in your educational planning to avoid delays in service.

This office also offers consultation and resources to faculty in providing academic adjustments to meet the needs of students with disabilities. Assistive technology is also available for student use on campus.

*Please see page 229 for specific details and additional information on eligibility and policies.*

## Information Technology Services (ITS)

(206) 934-5844

[itservices.seattlecolleges.edu/](http://itservices.seattlecolleges.edu/)

The college provides a high-speed network linking Windows-based workstations to the internet via a fiber-optic system. At our main campus, we have 27 instructional computer/lab classrooms and three open labs. Our remote sites, Georgetown and NewHolly, have two computer classrooms at each site. Each machine is equipped with a large variety of production software available for student use. Open computer labs are available for use by any student who pays the computer lab fee. A quarterly lab fee is charged at registration, and a student must have a valid Student ID number in order to log on to computers on campus.

## International Programs, ww121

(206) 934-5360

Email: [IntlSouth@seattlecolleges.edu](mailto:IntlSouth@seattlecolleges.edu)  
[intl.seattlecolleges.edu](http://intl.seattlecolleges.edu)

This office provides comprehensive support services for students on non-resident visas studying at South. Key functions of the office include advising on immigration and instructional programs, housing, medical insurance, or personal concerns that may be impacting student success. Field trips and other student activities that help students adjust to life in Seattle and promote intercultural communication and an enhanced experience of American culture are also provided.

*See page 28 for additional International Programs and Services serving the Seattle Colleges, including international student admissions. Study Abroad opportunities are outlined at [intl.seattlecolleges.edu/go-abroad](http://intl.seattlecolleges.edu/go-abroad).*

## Library

(206) 934-6408

[libguides.southseattle.edu/home/](http://libguides.southseattle.edu/home/)

The library supports the college's mission by providing students, faculty, staff, and the community with the services, information, resources, and equipment necessary to accomplish the college's academic and institutional goals. The library acquires and maintains relevant collections in a variety of formats and offers services to promote their use and foster information literacy skills in patrons.

The library also plays an active role in the instructional program by offering course-related library instruction and by consulting with faculty about collection development and services. Goals include service excellence through timely, competent, and cheerful service; a comfortable physical environment; and responsiveness to the changing needs of patrons.

The library collection includes over 60,000 print books, reference volumes, and periodicals, as well as more than two dozen databases with access to thousands of periodicals, books, and other sources.

## Opportunity Grant Scholarship

(206) 934-6742

[southseattle.edu/opportunity-grant-scholarship](http://southseattle.edu/opportunity-grant-scholarship)

The goal of the Opportunity Grant Scholarship (OGS) is to assist low-income adults in reaching the educational tipping point and beyond in high-wage, high-demand professional technical careers by providing financial and student support services. Reaching the tipping point allows students to complete 45 credits, receive a credential, and increase job skills and knowledge through career pathways. Students are encouraged to visit the OGS website for further information and the application form

## Student Assessment Services

(206) 934-6767

[southseattle.edu/student-assessment-services](http://southseattle.edu/student-assessment-services)

Student Assessment Services, as part of its assessment functions, administers placement tests, GED examinations, and various other instruments for students and our community. See the college website for the assessment calendar, links to practice sites, information about the tests, and more. Location: Room 76, Robert Smith Building.

## Student Success Programs

### AANAPISI

**Asian American Native American Pacific Islander Serving Institution Program**

**(206) 934-5221**

**[southseattle.edu/aanapisi](https://southseattle.edu/aanapisi)**

South is one of the first institutions to be designated as an Asian American Native American Pacific Islander Serving Institution (AANAPISI).

The AANAPISI Center is a great place to study and to receive services, including:

- Academic advising
- Professional development on understanding and working with AAPI students
- Deferrals to appropriate campus and community services
- Support from AAPI student groups, such as the Pacific Islander student club
- Study groups
- Tutoring services

### TRiO – Student Success Services

**(206) 934-6434**

**[southseattle.edu/trio/student-success-services](https://southseattle.edu/trio/student-success-services)**

Student Success Services promotes student retention by providing students with resources that help them progress in college, graduate, and transfer to four-year universities.

Key features include:

- Educating students about how the college system works and how to improve their academic performance and problem-solving skills
- Creating a welcoming environment where students feel a sense of belonging in the college setting
- Adapting college educational policies and services in response to wide-ranging and changing student development needs

The program's primary components are CLIC (Collaborative Learning and Instruction Center), transfer and scholarship assistance, and information regarding financial aid, economic literacy, and referrals to resources.

Student Success Services is funded through the U.S. Department of Education's Title IV TRiO grants. The program works with first-generation college students, low-income students, and physically and/or learning-disabled students, as outlined in the Department of Education guidelines. Students are encouraged to participate in the program throughout their attendance at South until they graduate or transfer.

## Transfer Resources

**(206) 934-5202**

**[southseattle.edu/transfer-resources](https://southseattle.edu/transfer-resources)**

Transfer resources are available to all students wanting to transfer to a four-year college or university to earn a bachelor's degree. Students are guided through the transfer process as they learn about admission guidelines, preparing for their major, writing personal statements, and other important topics. Transfer events, workshops, and fairs are hosted on campus throughout the academic year to connect students directly with representatives from the four-year schools.

## Tutoring Services

### Tutoring Center

**(206) 934-6650**

**[southseattle.edu/tutoring](https://southseattle.edu/tutoring)**

The South Seattle College Tutoring Center recognizes the complex needs of our diverse student population in academic and vocational programs. We support student success by providing a variety of free tutoring services, including drop-in centers, small-group tutoring, and online tutoring, to ensure that students receive the help they need in order to complete their educational goals. Students should contact the Tutoring Center for more information and schedules.

### MAST: The Math and Science Tutoring Center

**(206) 934-6650**

**[southseattle.edu/tutoring/mast](https://southseattle.edu/tutoring/mast)**

Drop-in help is available for all levels of math and science. Tutors are available to help students solve problems and improve their math, chemistry, physics, and statistics. Students can earn credit while working in MAST by signing up for MAT 089, MAT 090, or MAT 198.

### The MALL: Math and Learning Lab

**(206) 934-6650**

**[southseattle.edu/tutoring/mall](https://southseattle.edu/tutoring/mall)**

Drop-in help is available for students enrolled in developmental math classes. Emphasis is placed on learning good study skills along with individual help in problem solving.

### GEEK HAUZ: Computer Learning Center

**(206) 934-6650**

**[southseattle.edu/tutoring/geek-hauz](https://southseattle.edu/tutoring/geek-hauz)**

Drop-in tutoring assistance is available for students enrolled in computer technology courses and students who need help troubleshooting their computer problems. Schedules may vary based on student need.



**Writing Center****(206) 934-6412****[southseattle.edu/tutoring/writing-center](https://southseattle.edu/tutoring/writing-center)**

The Writing Center assists students with their writing assignments and promotes writing across the curriculum. Students work with trained peer writing assistants who help them explore and develop ideas; clarify their thoughts; and produce a polished, finished product. User-friendly word processing programs are available for student use.

**WELL: Writing and English Language Lab****(206) 934-6650****[southseattle.edu/tutoring/well](https://southseattle.edu/tutoring/well)**

The Writing and Language Lab (The WALL) assists students with their writing assignments and oral presentations and study skills. Students work with faculty or tutors and in study groups in a lab setting. The WALL is particularly designed for students who do not speak English as their first language and for students in the Adult Basic Education program. However, all students enrolled at South are welcome.

**E-Tutoring****(206) 934-6650****[southseattle.edu/tutoring/e-tutoring](https://southseattle.edu/tutoring/e-tutoring)**

South Seattle College is a member of the Northwest E-Tutoring Consortium and offers free online tutoring in all subject areas. Students who can't meet with tutors during our normal operating hours are invited to explore the e-tutoring service. Anyone registered at South may use this service to receive online tutoring in writing, math, accounting, biology, and numerous other academic subjects.

**BUS/ACCT: Business & Accounting Center****(206) 934-6650****[southseattle.edu/tutoring/business-accounting](https://southseattle.edu/tutoring/business-accounting)**

Drop-in help is available in OLY 205 for students enrolled in business and accounting classes.

**Veterans Affairs****(206) 934-5811****[southseattle.edu/veterans-affairs-benefits](https://southseattle.edu/veterans-affairs-benefits)**

The Veterans Affairs Office at South Seattle serves as a liaison between military veterans, dependents, reservists/guardsmen, and disabled veterans (military service-connected disabilities) and the Department of Veterans Affairs. The office also approves state tuition waivers for eligible veterans and their dependents and is the primary contact for assistance with completing the necessary paperwork required to obtain veteran educational benefits and for guidance on VA regulations regarding educational benefits.

*See page 216 for further veterans' assistance and financial aid information.*

**WorkForce/BFET Programs****(206) 934-5835****[southseattle.edu/workforce-education](https://southseattle.edu/workforce-education)**

The Workforce Education Office can help you enter or re-enter the workforce through career training, financial aid assistance, job placement assistance, and academic planning. These services are designed to help you achieve your personal and professional goals. Workforce Education's various tuition assistance programs include dislocated workers, low-income adults, and recipients of Temporary Assistance for Needy Families (TANF) and/or federally issued basic food benefits (SNAP). If you qualify, you may be eligible for help with required tuition, fees, books, and transportation. Academic planning and job-placement assistance is also available to qualifying students.

# Campus Life

## Art Gallery

(206) 934-5337

[southseattle.edu/student-life/art-gallery](https://southseattle.edu/student-life/art-gallery)

The mission of the art gallery is to promote understanding and the appreciation of the arts within the South Seattle College campus and in the surrounding communities. The art gallery mounts exhibitions that contribute to education and cultural enrichment while engaging the college community in learning opportunities and supporting cultural and artistic diversity.

## Bookstore

(206) 934-5338

[southscc.bncollege.com](https://southscc.bncollege.com)

The Bookstore carries new, used, rental, and digital textbooks, as well as school supplies, clothing, gifts, food, beverages, and greeting cards. Textbooks and other supplies may be purchased online for store pickup or direct shipping. The Bookstore also offers cash for books. The best time to sell is finals week of each quarter.

## Food Services

[southseattle.edu/food-dining](https://southseattle.edu/food-dining)

A variety of meal and snack selections is available in the campus cafeteria/food court, ranging from complete hot meals or quick food items to custom-made sandwiches, beverages, snacks, and takeout items. Both breakfast and lunch items are available.

In addition, Culinary Arts students prepare and serve award-winning cuisine in two dining rooms, also located in the Food Science Building. The Café Alki offers a modern fast-casual experience. The Alhadeff Grill, with more upscale dining, offers a full menu. The dining rooms are open for lunch weekdays during the instructional quarter. Reservations are encouraged. at Alhadeff Grill.

Student Life also operates a food pantry, the bookstore has snacks and drinks for sale, and vending machines are located in several campus locations.

## Housing

(206) 934-5332

On-campus housing is not available. However, a bulletin board located in the Jerry Brockey Student Center lists various accommodations available in the local area. Check out the bulletin board for housing needs, or phone with room or apartment rental availability. Flyers can be posted in the Brockey Student Center, Room 135.

## Recreation & Intramurals

### Campus Recreation

(206) 934-6670

[southseattle.edu/student-life/campus-recreation](https://southseattle.edu/student-life/campus-recreation)

Campus Recreation at South includes the Games Room, Fitness Center, outdoor sports court facilities, recreational activities, and intramural sports. The staff, through facilities and services, provides health, wellness, nutritional, and personal growth programs that complement overall learning outcomes and promote student retention and success.

The Games Room offers gaming systems, billiards tables, table tennis, and board games, as well as sports equipment for checkout with a student ID.

Campus Recreation also offers excursions to professional sports games, hiking, kayaking, and team sports on a clubs/intramurals level. Recreational clubs and sports clubs can be formed through our campus recreation department. Contact the recreation coordinator or visit the Game Room Office in the Brockey Student Center, Room 152.

### Fitness Center

(206) 934-6471

[southseattle.edu/student-life/fitness-center](https://southseattle.edu/student-life/fitness-center)

The Fitness Center provides the campus community with an opportunity to promote a healthy lifestyle at this weightlifting and training facility. Cardio equipment (treadmills, ellipticals, stepmill, arc trainer, bikes, and rowing machines), resistance equipment (cable weight machines and free weights), lockers, and showers are available. Student ID is required. The Fitness Center is located in the Multi-Purpose Building/Fitness Center. Check the website for updated hours.

## Campus Safety & Security

**Main Campus: (206) 934-0911**

**Georgetown Campus: (206) 354-6185**

**[southseattle.edu/safety-security-emergency-prep](https://southseattle.edu/safety-security-emergency-prep)**

Student well-being and safety are of the utmost importance. It is vital that students follow strict safety procedures with equipment in all classes, especially technical-vocational classes. In the event of an on-campus accident or injury, the incident should be reported to the Security Office so an accident report can be completed. Students should immediately call 911 for serious injuries. Instructors must be notified if the accident occurs during class.

*For further information on personal safety, see page 226.*

## Student Clubs

**(206) 934-5330**

**[southseattle.edu/student-life/student-clubs](https://southseattle.edu/student-life/student-clubs)**

By getting involved in clubs, students participate in team-building exercises, participate in the campus community, and strengthen their organizational and leadership skills. Students also have the opportunity to organize new student clubs at South. For more information and a list of current student clubs, please contact the club center coordinator or visit the Student Life Office in Brockey Center.

## Student Government

**(206) 934-6752**

**[southseattle.edu/student-life/student-leadership/united-student-association](https://southseattle.edu/student-life/student-leadership/united-student-association)**

The United Student Association (USA) is the official governing body for students at South. Student officers are elected each spring to represent student interests. The USA meets weekly. For more information about how to get involved and/or how to become a paid student representative, contact the USA president or vice president. Office mailboxes are located in the Student Life Office, Room 119.

## Student Life Office

**(206) 934-5332**

**[southseattle.edu/student-life](https://southseattle.edu/student-life)**

The Office of Student Life in Room 135 of the Brockey Student Center oversees several areas in order to support and assist students in making their experience at South Seattle a successful one, including Phi Theta Kappa Honor Society, student activities, lost and found, student clubs, United Student Association (USA), student development transcript, and a student lounge with free coffee and tea.

## Transportation and Parking

**Transportation Coordinator**

**(206) 934-5157**

**[southseattle.edu/parking-transportation](https://southseattle.edu/parking-transportation)**

### Bus Service

**(206) 553-3000 (Metro rider information)**

Due to space limitations and environmental concerns, carpooling and bus transportation are strongly encouraged. Students registered for 10 or more credits are eligible to purchase a discounted ORCA transit pass issued by the college at the Cashier's Office. The ORCA pass may be used to ride Community, Everett, Kitsap, Metro, Pierce, and Sound Transit. For inquiries about other transportation options and benefits, contact the campus transportation coordinator.

## Parking Services

**(206) 934-5157**

**[southseattle.edu/parking-transportation](https://southseattle.edu/parking-transportation)**

Parking on campus is available to registered students with the purchase of a student parking permit. Permits are available for purchase 30 days prior to the start of the quarter at [seattlecolleges.edu/ParkingPermit](https://seattlecolleges.edu/ParkingPermit).

Carpool parking is also available. Please see the Security and Transportation Office for details. Parking rules and Washington state motor vehicle laws are enforced. The campus speed limit is 15 mph. Daily parking is available for purchase at the Cashier's Office or at a parking permit machine located near the parking lots.

## Veterans Student Center

(206) 934-5308

[southseattle.edu/veteran-affairs-benefits/veterans-student-center/](https://southseattle.edu/veteran-affairs-benefits/veterans-student-center/)

The Veterans Student Center is committed to ensuring that military, veterans, and their families successfully make the transition from the military environment to campus life and are assisted in their progress toward the completion of their educational goals. The Veterans Student Center provides services and activities and coordinates with other campus departments, such as Academic Advising and Counseling, Educational Support Services, and Veteran Affairs.

## Affiliate Organizations

### Foundation Scholarships

#### South Seattle College Foundation

206) 930-7927

[southseattle.edu/foundation-support](https://southseattle.edu/foundation-support)

#### Seattle Colleges Foundation

206-934-4100

[southseattle.edu/foundation-support](https://southseattle.edu/foundation-support)

The South Seattle College Foundation, a nonprofit 501(c)(3) tax-exempt organization, promotes and supports educational programs and training pursuits.

The Seattle Colleges Foundation serves the philanthropic needs for each college as well as the Seattle Colleges District as a whole.

Foundation scholarships are awarded multiple times each year.

# Learning Outcomes

## General Education Learning Outcomes

Student Learning Outcomes are also known as General Education Requirements. These are the knowledge and abilities every student should have upon graduating with a certificate or degree from South Seattle College. While each academic or technical program has its own specific outcomes, these outcomes are the core curriculum for the college.

### Communication

- Read and listen actively to learn and communicate
- Speak and write effectively for personal, academic, and career purposes

### Computation

- Use arithmetic and other basic mathematical operations as required by program of study
- Apply quantitative skills for personal, academic and career purposes

### Human Relations

- Use social skills to work in groups effectively
- Have knowledge of the diverse cultures represented in our multicultural society

### Critical Thinking & Problem-Solving

- Think critically in evaluating information, solving problems, and making decisions

### Technology

- Select and use appropriate technological tools for personal, academic, and career tasks

### Personal Responsibility

- Uphold the highest standards of academic honesty and integrity
- Respect the rights of others in the classroom, online, and in all other school activities.
- Attend class regularly, complete assignments on time, and effectively participate in classroom and online discussions, group work, and other class-related projects and activities.
- Abide by appropriate safety rules in laboratories, shops, and classrooms

### Information Literacy

- Have knowledge about legal and ethical issues related to the use of information
- Use information effectively and ethically for a specific purpose.

## Associate of Science Degree Learning Outcomes

Students who successfully complete this program will show:

- An ability to apply knowledge of mathematics and science to complex problems
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to think critically in evaluating information, solving problems, and making decisions
- An ability to function on diverse, multidisciplinary teams
- An ability to access and evaluate information from a variety of sources, including the Internet
- An understanding of professional and ethical responsibility
- An ability to communicate effectively with written, oral, and visual means
- The broad education necessary to understand the impact of scientific and engineering solutions in a global and societal context
- A recognition of the need for and an ability to engage in lifelong learning
- An ability to use modern scientific and engineering techniques, skills, and technology necessary for scientific and engineering practice



# College Transfer

## Academic Programs

(206) 934-6600

South Seattle College offers the Associate of Arts (A.A.) degree to meet the general education requirements for four-year baccalaureate degrees in arts and sciences. In addition to the general A.A. degree, the college offers an A.A. option in Asian and Pacific Islander Studies, an Associate in Business – Direct Transfer Agreement/Major-Ready Program (A.B.-DTA/MRP). The college also offers an Associate of Science (A.S.) transfer degree, with several major-specific pathways (or “tracks”), which include Biology, Chemistry, Computer Science, Physics, and various Engineering specialties. Students should contact an advisor for details.

Students are encouraged to attain an Associate of Arts or Associate of Science transfer degree at South in order to ease transfer to a four-year institution, but students may also take individual classes for transfer. Students should confer with an academic advisor to ensure course transferability to their target four-year institution.

Students may be required to complete work in the college preparatory program if their records and test scores indicate a need for additional preparation in order to complete a degree program. College preparatory courses are not credited toward transfer degree requirements. College transfer courses at South Seattle College are offered in several disciplines, including the following:

*See page 11 for college transfer course requirements for A.A. or A.S. degree.*

## Associate of Arts (A.A.) Degree Direct Transfer Agreement

The Associate of Arts (A.A.) degree is a 90-credit transfer degree that fulfills the general education requirements for most four-year degrees in arts and sciences. To earn the A.A. degree, students must achieve a cumulative grade point average of 2.0 or better in courses numbered 100 and above, complete at least 15 credits at the college awarding the degree, and meet the requirements outlined below.

Students should contact college advising offices for listings of courses that satisfy degree requirements. Students planning to transfer to a four-year institution should be aware that they must complete all admission requirements for their destination institution. In addition, students are encouraged to give early consideration to possible majors and obtain information about requirements for these majors at their destination college or university.

### BASIC REQUIREMENTS

Total Basic Requirements of 15 credits is comprised of 10 credits from the courses listed below and 5 credits from Quantitative/Symbolic Reasoning section that follows

ENGL& 101	English Composition	5
ENGL& 102	Composition II	5
BASIC REQUIREMENTS CREDITS		15

### BASIC REQUIREMENTS – QUANTITATIVE/SYMBOLIC REASONING

Students completing the QSR requirement will be able to use quantitative or symbolic reasoning to understand, analyze, interpret, and solve problems. Successful completion of any of the following classes satisfies the QSR requirement for Seattle Colleges. These courses may also satisfy the QSR requirement at baccalaureate institutions. Students should check the requirements of their destination institution. Select five credits from the courses listed below:

MATH& 107	Math in Society	5
If using MATH &107 to meet both the IA proficiency requirement and the QSR requirement, students must earn a minimum 2.0 grade in the course.		
MATH 116	Q Applications of Math to Management Life & Social Sciences	5
MATH& 131	Math for Elementary Education 1	5
MATH 120, &131, and &132 do not meet the QSR requirement at the University of Washington.		
MATH& 132	Math for Elementary Education 2	5
MATH 120, &131, and &132 do not meet the QSR requirement at the University of Washington.		
MATH 136	Inferential Statistics	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II	5
MATH& 146	Introduction to Statistics	5
MATH& 148	Business Calculus	5
MATH& 151	Calculus I	5
MATH& 152	Calculus II	5
MATH& 163	Calculus III	5
MATH 220	Q – Linear Algebra	5
MATH 224	Q – Vector Calculus	5
MATH 238	Q – Differential Equations	5
PHIL& 120	Symbolic Logic	5
QUANTITATIVE/SYMBOLIC REASONING CREDITS		5

**ELECTIVES**

Electives include:

- All college transfer courses numbered 100 or above
- Accounting, business administration and transfer engineering classes
- Physical Education activity courses (3-credit maximum)
- A maximum of 15 credits from a combination of the following:
  - Workforce Education Career and Technical courses numbered 100 and above
  - Human Development courses (HDC) numbered 100 and above (6-credit maximum)
  - Library research courses (6-credit maximum)
  - Cooperative Work Experience (CWE) courses numbered 100 and above (5-credit maximum)

ELECTIVES PROGRAM CREDITS 30

**AREAS OF KNOWLEDGE DISTRIBUTION**

Visual, Literary, and Performing Arts . . . . .15  
 Choices must include a minimum of two different course prefixes, and no more than 5 credits each of a world language at the 100 level and a studio/performance class may be applied to the distribution requirements.

Individual, Cultures, and Societies. . . . .15  
 Choices must include a minimum of two different course prefixes.

The Natural World . . . . .15  
 Choices must include a minimum of two different prefixes; 5 credits must be in a lab science. Students may choose up to 5 credits from the following list of courses: Anthropology, Computer Science, Engineering, Geography, Mathematics, Philosophy OR Psychology.

AREAS OF KNOWLEDGE DISTRIBUTION CREDITS 45

TOTAL PROGRAM CREDITS 90

## Associate in Business Direct Transfer Agreement (DTA)

This degree is suited for students planning to transfer into a baccalaureate business degree program. It will satisfy the lower-division education requirements for business degrees at Washington's public four-year colleges and universities including accounting & business courses.

**BASIC REQUIREMENTS****Communication Skills**

ENGL& 101 English Composition I . . . . .5  
 ENGL& 102 Composition II . . . . .5  
 COMMUNICATION SKILLS CREDITS 10

**Quantitative/Symbolic Reasoning Skills**

MATH&148 Business Calculus . . . . .5  
 Following can be substituted:  
 MATH 151 Calculus I . . . . .5

QUANTITATIVE/SYMBOLIC REASONING SKILLS CREDITS 5

BASIC REQUIREMENTS CREDITS 15

**DISTRIBUTION REQUIREMENTS****Visual, Literary and Performing Arts**

Choose from a minimum of two different prefixes - must include five credits in Communication (CMST)

Communication . . . . .5

VISUAL, LITERARY, AND PERFORMING ARTS CREDITS 15

**Individuals, Cultures, and Societies**

ECON&amp;201 Micro Economics . . . . .5

ECON&amp;202 Macro Economics . . . . .5

ECON&amp;202 satisfies Global Studies requirement.

U.S. Cultures . . . . .5

INDIVIDUALS, CULTURES, AND SOCIETIES CREDITS 15

**The Natural World**

MATH 116 Application of Math to Management,  
 Life & Social Sciences. . . . .5

Elective . . . . .5

Lab Science . . . . .5

THE NATURAL WORLD CREDITS 15

DISTRIBUTION REQUIREMENTS CREDITS 45

**BUSINESS ELECTIVES**

ACCT&amp; 201 Principles of Accounting I . . . . .5

ACCT&amp; 202 Principles of Accounting II . . . . .5

ACCT&amp; 203 Principles of Accounting III . . . . .5

BUS 210 Business and Economic Statistics . . . . .5

Following can be substituted:

MATH&amp;146 Intro to Statistics . . . . .5

Elective . . . . .5

BUSINESS ELECTIVES CREDITS 30

TOTAL PROGRAM CREDITS 90

Note: While many Washington state universities accept transfer of this degree, each has individual requirements and/or acceptable course substitutions needed for their specific programs. Also, admission to many business schools is competitive and higher grades are often required. It is essential to learn the requirements of your transfer school and to consult Advising Services.

## Associate of Arts – Emphasis in Asian Studies (A.A.)

The Associate of Arts (A.A.) degree with an emphasis in Asian Studies is intended to be a transferable two-year degree designed for students planning to transfer to a four-year institution offering a baccalaureate degree in Asian Studies. This degree currently offers two regional areas of focus: Eastern Asia and Southeastern Asia. Students have the opportunity to expand their knowledge of art, culture, history, language, literature, and the religions of these diverse regions. Students should contact the Advising office for details.

## Associate of Science (A.S.) Transfer Degree – Pre-Major Program

This two-year Associate of Science degree program is designed for those who intend to pursue a bachelor's, master's, or doctoral degree in the following areas:

- Atmospheric Sciences
- Biological Sciences
- Chemistry
- Computer Science
- Engineering
- Environmental Sciences
- Geology
- Mathematics
- Medicine
- Pharmacy
- Physics

### BASIC REQUIREMENTS

Select from the following depending on pre-major area:

ENGL& 101	English Composition I	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5
MATH& 152	Calculus II	5

BASIC REQUIREMENTS CREDITS 20

### AREAS OF KNOWLEDGE

Courses taken must have at least three different prefixes and must be from both areas:

Visual, Literary, and Performing Arts	5
Individual, Cultures, and Societies	5

AREAS OF KNOWLEDGE CREDITS 15

### MAJOR AREAS OF STUDY

The number of credit requirements for major areas of study vary depending on pre-major. Students should consult with an advisor before preparing their academic plan.

MAJOR AREAS OF STUDY CREDITS 55-58

TOTAL PROGRAM CREDITS 90

## Associate in Business (A.B.) Degree DTA/MRP

The Associate in Business (A.B.) is a transfer degree for students planning to transfer to a four-year college or university and major in Accounting, Business Administration, Marketing, or a related major. The A.B. transfer degree is 90 college-level credits, and students will complete their prerequisite courses as part of this transfer degree. Students are strongly encouraged to meet with an advisor to discuss specific career goals and recommended coursework.

ENGL& 101	English Composition I	5
ENGL& 102	Composition II	5
MATH& 148	Business Calculus	5

Following can be substituted:

MATH&151	Calculus I	5
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This course meets the Quantitative/Symbolic Reasoning Requirement

ACCT& 201	Principles of Accounting I	5
ACCT& 202	Principles of Accounting II	5
ACCT& 203	Principles of Accounting III	5
BUS& 201	Business Law	5
BUS 210	Business and Economic Statistics	5
ECON& 201	Micro Economics	5

Credits from this class applied toward the 15 credits required for Individuals, Cultures, and Societies.

ECON& 202	Macro Economics	5
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Credits from this class applied toward the 15 credits required for Individuals, Cultures, and Societies.

Visual, Literary, and Performing Arts	15
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Minimum of two different subjects.

No more than 5 credits in a studio/performance course and 5 credits in a foreign language.

Recommended course: CMST&220 Public Speaking

Individual, Cultures, and Societies	5
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Select course with a non-ECON prefix from the list from approved courses.

The Natural World	10
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Minimum of two different subjects.

Recommended course: MATH 116 Application of Math to Management, Life, & Social Sciences

Natural World – Lab Science	5
Elective	5

Only necessary to meet the 90-credit minimum.

Course taken should also be able to fulfill the U.S. Cultures Special Requirement if it is not met by course taken under Areas of Knowledge.

Note: While many Washington state universities accept transfer of this degree, each has individual requirements and/or acceptable course substitutions needed for their specific programs. Also, admission to many business schools is competitive and higher grades are often required. It is essential to learn the requirements of your transfer school and to consult Advising Services.

## Associate of Science (A.S.) Degree Engineering

The Associate of Science Degree: Option 2 is intended for students planning to transfer to a four-year college or university and major in engineering, computer science, physics, or atmospheric science.

Students complete 90 credits, including many of the laboratory and prerequisite courses for their major prior to transferring. Students are strongly encouraged to meet with an advisor to discuss specific career goals and recommended coursework.

### BASIC REQUIREMENTS – ENGLISH

ENGL& 101	English Composition I	5
ENGL& 102	Composition II	5

### BASIC REQUIREMENTS – MATHEMATICS

Choose five credits from the following courses:

MATH 116	Application of Math to Management, Life, & Social Sciences	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II	5
MATH& 148	Business Calculus	5
MATH& 151	Calculus I	5
MATH& 152	Calculus II	5
MATH 220	Linear Algebra	5
MATH 224	Vector Calculus	5

### BASIC REQUIREMENTS – COMPUTER SCIENCE

Choose 5 credits from the following courses:

CSC 110	Introduction to Computer Programming	5
CSC 111	Computers for Math and Science	5
CSC 142	Computer Programming I	5
CSC 143	Computer Programming II	5
ENGR 142	Computer Programming	5

### AREAS OF KNOWLEDGE DISTRIBUTION REQUIREMENTS

See advisor for list of approved courses or use links below.

Visual, Literary, and Performing Arts	5
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Courses in this area include languages, literature, art, music, drama, and communication. Choices must include a minimum of two different course prefixes and no more than 5 credits each of a world language at the 100 level, and a studio/performance class may be applied to the distribution requirements.

Individual, Cultures, and Societies	5
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Courses in this area include social sciences, such as anthropology, psychology, and sociology, as well as areas of study like history, philosophy, and ethnic and gender studies. Choices must include a minimum of two different course prefixes.

#### Pre-Major Requirements

Course selection should be in compliance with major requirements as indicated by the four-year institution to which the student is planning to transfer. See an advisor or counselor prior to beginning your program of study.

The Natural World	5
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Courses in this area include physical and life sciences and certain mathematics, computer science, and social science courses. Choices must include a minimum of two different prefixes; 9 credits must be in a lab science.

### ELECTIVES

See advisor for list of approved courses.

Elective	5
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## Associate of Arts (A.A.) Liberal Arts

The Associate of Arts (A.A.) is a flexible degree that prepares students to transfer to a four-year institution in a variety of majors related to the humanities, literature, political science, psychology, sociology, and more. A.A. degree students receive a broad education in English composition, quantitative reasoning, and social and natural sciences. Students complete 90 credits, tailored to meet individual academic goals. Students are strongly encouraged to meet with an advisor to discuss specific career goals and recommended coursework.

### ELECTIVES

See advisor for list of approved courses.

### AREAS OF KNOWLEDGE DISTRIBUTION REQUIREMENTS

See advisor for list of approved courses.

## Associate of Science (A.S.) Degree Science

The Associate of Science degree: Option 1 is intended for students planning to transfer to a four-year college or university and major in biology, environmental/resource sciences, chemistry, geology, or earth sciences. Students will complete 90 credits, including many of the laboratory and prerequisite courses for their major prior to transferring. Students are strongly encouraged to meet with an adviser to discuss specific career goals and recommended coursework.

### BASIC REQUIREMENTS – ENGLISH

ENGL& 101	English Composition I	5
ENGL& 102	Composition II	5

### BASIC REQUIREMENTS – MATHEMATICS

Choose five credits from the following courses:

MATH 116	Application of Math to Management, Life, & Social Sciences	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II	5
MATH& 148	Business Calculus	5
MATH& 151	Calculus I	5
MATH& 152	Calculus II	5
MATH 220	Linear Algebra	5
MATH 224	Vector Calculus	5

**BASIC REQUIREMENTS – COMPUTER SCIENCE**

Choose five credits from the following courses:

CSC	110	Introduction to Computer Programming. . . . .	5
CSC	111	Computers for Math and Science . . . . .	5
CSC	142	Computer Programming I. . . . .	5
CSC	143	Computer Programming II . . . . .	5
ENGR	142	Computer Programming. . . . .	5

**AREAS OF KNOWLEDGE DISTRIBUTION REQUIREMENTS**

See advisor for list of approved courses or use links below.

Visual, Literary, and Performing Arts . . . . .	15
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Courses in this area include languages, literature, art, music, drama, and communication. Choices must include a minimum of two different course prefixes and no more than 5 credits each of a world language at the 100 level, and a studio/performance class may be applied to the distribution requirements.

Individual, Cultures, and Societies. . . . .	15
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Courses in this area include social sciences, such as anthropology, psychology, and sociology, as well as areas of study like history, philosophy, and ethnic and gender studies. Choices must include a minimum of two different course prefixes.

**PRE-MAJOR REQUIREMENTS**

Course selection should be in compliance with major requirements as indicated by the four-year institution to which the student is planning to transfer. See an advisor or counselor prior to beginning your program of study.

The Natural World . . . . .	40
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Courses in this area include physical and life sciences and certain mathematics, computer science, and social science courses. Choices must include a minimum of two different prefixes; 9 credits must be in a lab science.

**ELECTIVES**

See advisor for list of approved courses.

Elective . . . . .	5
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## Areas of Study

### ARTS, DESIGN, AND GRAPHICS

#### Painting & Drawing (2D Fine Arts)

This two-year program is designed for students that wish to obtain an Associate of Arts (AA) degree with an emphasis in painting & drawing. Students pursuing this degree develop a foundational knowledge of creating visual forms of expression and communication in two-dimensional media, as well as developing artistic skills and techniques through faculty instruction and hands-on studio work in drawing, painting and more.

Completion of this degree is designed to prepare students for further education at a four-year college or university in fine arts, studio arts, art history, interdisciplinary arts, design or a related field.

#### Ceramics & Sculpture (3D Fine Arts)

This two-year program is designed for students that wish to obtain an Associate of Arts (AA) degree with an emphasis in 3D fine Art in mediums such as ceramics and sculpture. Students pursuing this degree will grow their passion and appreciation for art, while completing the foundational courses required to transfer at the junior level to a four-year university, college or art school.

As a student in this program, you will develop artistic skills and techniques through faculty instruction and hands-on studio work creating functional ceramics and/or sculpture while strengthening a foundational knowledge of 3D composition that is critical to developing representational, spatial and model awareness.

Completion of this degree is designed to prepare students for further education at a four-year college or university in fine arts, art history, design or a related field.

#### Digital Art and Photography (A.A.)

This two-year program is designed for students that wish to obtain an Associate of Arts (AA) degree with a specialization in Digital Art and Digital Photography. Students in this pathway will leave with fluency in Adobe software such as Photoshop, Illustrator, InDesign, Premier, and After Effects. Students will gain skills in photo editing, compositional strategies, and formal design elements. Students will also demonstrate collaborative attitude, skills, and knowledge in Digital Art and Digital Photography, and will learn how to effectively critique and document work through a contemporary lens.

Completion of this degree is designed to prepare students for further education at a four-year college or university in the visual arts such as a Bachelor of Arts degree in Studio Art or Art History, Bachelor of Fine Arts degree or Master of Fine Arts in Visual Art.

#### Music (A.A.)

This two-year program is designed for students that wish to obtain an Associate of Arts (AA) degree with a specialization in Music. In this program, students complete the general education requirements for a bachelor's degree while studying music theory, history and performance. Students will grow as musicians through private instruction and many vocal and instrumental performance opportunities, including large and small ensembles, solo recitals, workshops with professional artists, and regional and national competitions.

This program prepares students to pursue further studies in music or a related field at a four-year college or university, as well as teaching valuable skills that are desirable to employers in a variety of music-related fields, including sound design, composing, recording production and more.

#### Music History (A.A.)

This two-year program is designed for students that wish to obtain an Associate of Arts (AA) degree with a specialization in Music History. Designed for students who wish to explore music from an historical perspective, this program emphasizes listening to, discussing, and writing about various forms and eras of music throughout history.

This program prepares students to pursue further studies in music history or a related field at a four-year college or university, and can also lead to a variety of careers in music performance, composition, education, and various opportunities involving music technology.

## BUSINESS AND ACCOUNTING

### Accounting Certificate: One-Year

#### Technical Education

This program provides a foundation for management trainee positions. Students receive background in accounting, communications skills, law and finance; students gain an understanding of today's business world and business technology. Check with the department for short-term certificate offerings such as Medical Office Assistant.

#### PREREQUISITES

Must enter program with 25 wpm keyboarding skill – if not met, BUS 104 – Keyboarding must be taken in the first quarter

#### TECHNICAL SPECIALTY COURSES

ACCT	110	Introduction to Accounting/Bookkeeping I . . . .	5
ACCT	120	Introduction to Accounting/Bookkeeping II . . . .	5
ACCT	214	Accounting Systems . . . . .	5
ACCT	257	Business Tax Accounting . . . . .	5
BUS	104	Keyboarding . . . . .	3
If 25 wpm keyboarding speed prerequisite isn't met – BUS 104 must be taken first quarter			
BUS	115	Computational Skillbuilding . . . . .	2
BUS	177	Spreadsheets . . . . .	5

#### RELATED INSTRUCTION

BUS&	101	Introduction to Business . . . . .	5
BUS	116	Business Math/Spreadsheets . . . . .	5
BUS	131	Integrated Communications I . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
BUS	230	Business Communications . . . . .	5
PSYC&	100	General Psychology . . . . .	5
Following can be substituted:			
PSYC 240 – Psychology of Human Relations (3)			

TOTAL PROGRAM CREDITS 58-60

### Accounting Associate of Applied Science Degree (A.A.S.)

#### Technical Education

This program provides a foundation for management trainee positions. Students receive background in accounting, communications skills, law and finance; students gain an understanding of today's business world and business technology. Check with the department for short-term certificate offerings such as Medical Office Assistant.

#### PREREQUISITES

Must enter program with 25 wpm keyboarding skill – if not met, BUS 104 – Keyboarding must be taken in the first quarter

#### TECHNICAL SPECIALTY COURSES

ACCT	110	Introduction to Accounting/Bookkeeping I . . . .	5
ACCT	120	Introduction to Accounting/Bookkeeping II . . . .	5
ACCT&	203	Principles of Accounting III . . . . .	5
ACCT	214	Accounting Systems . . . . .	5
ACCT	257	Business Tax Accounting . . . . .	5
BUS	104	Keyboarding . . . . .	3
If 25 wpm keyboarding speed prerequisite isn't met – BUS 104 must be taken first quarter			
BUS	115	Computational Skillbuilding . . . . .	2
BUS	175	Applied Business Statistics: Decision-Making App. . . . .	5
Following can be substituted:			
BUS 210 – Business & Economic Statistics (5)			
BUS	177	Spreadsheets . . . . .	5
BUS&	201	Business Law . . . . .	5
Following can be substituted:			
POLS& 200 – Intro to Law (5)			
BUS	216	Professional Development . . . . .	5
Following can be substituted:			
ACCT 197 – Work Experience – Accounting (3-5)			
BUS	235	Oral Communications in Business . . . . .	5
Following can be substituted:			
CMST& 101 – Introduction to Communication (5)			

#### RELATED INSTRUCTION

BUS&	101	Introduction to Business . . . . .	5
BUS	116	Business Math/Spreadsheets . . . . .	5
BUS	131	Integrated Communications I . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
BUS	230	Business Communications . . . . .	5
ECON&	201	Micro Economics . . . . .	5
Following can be substituted:			
ECON& 202 – Macro Economics (5)			
PSYC&	100	General Psychology . . . . .	5
Following can be substituted:			
PSYC 240 – Psychology of Human Relations (3)			

#### RELATED INSTRUCTION – ELECTIVE

Select two of the following:

BUS	170	Information Technology I . . . . .	5
CTN	120	Databases I . . . . .	5
SMG	100	Leadership and Supervision . . . . .	3
SMG	103	Supervising a Diverse Workforce . . . . .	3
SMG	120	Hiring Personnel . . . . .	3

TOTAL PROGRAM CREDITS 94-99

## Accounting Associate of Applied Science –Transfer Degree (A.A.S.-T)

### Technical Education

This program provides a foundation for management trainee positions. Students receive background in accounting, communications skills, law and finance; students gain an understanding of today's business world and business technology. Check with the department for short-term certificate offerings such as Medical Office Assistant.

### TECHNICAL SPECIALTY COURSES

ACCT	110	Introduction to Accounting/Bookkeeping I . . . .5
Following can be substituted:		
ACCT& 201 – Principles of Accounting (5)		
ACCT	120	Introduction to Accounting/Bookkeeping II . . .5
Following can be substituted:		
ACCT& 202 – Principles of Accounting (5)		
ACCT&	203	Principles of Accounting III . . . . .5
ACCT	214	Accounting Systems . . . . .5
ACCT	257	Business Tax Accounting . . . . .5
BUS	104	Keyboarding . . . . .3
BUS	115	Computational Skillbuilding . . . . .2
BUS	175	Applied Business Statistics:
		Decision-Making App. . . . .5
Following can be substituted:		
BUS 210 – Business & Economic Statistics (5) or		
MATH 109 – Elementary Statistics (5)		
BUS	177	Spreadsheets . . . . .5
BUS	200	Law and Society . . . . .5
Following can be substituted:		
BUS& 201 – Business Law (5)		
BUS	216	Professional Development . . . . .5
Following can be substituted:		
ACCT 197 – Work Experience – Accounting (5)		
BUS	235	Oral Communications in Business . . . . .5
Following can be substituted:		
CMST& 101 – Intro to Communication (5)		

### RELATED INSTRUCTION

BUS&	101	Introduction to Business . . . . .5
BUS	169	Using Computers in Business . . . . .5
ECON&	201	Micro Economics . . . . .5
Following can be substituted:		
ECON& 202 – Macro Economics (5)		
ENGL&	101	English Composition I . . . . .5
ENGL&	102	Composition II . . . . .5
MATH	102	College Algebra . . . . .5
PSYC&	100	General Psychology . . . . .5

### RELATED INSTRUCTION: ELECTIVE

Select two of the following:

BUS	170	Information Technology I . . . . .5
CTN	120	Databases I . . . . .5
SMG	100	Leadership and Supervision . . . . .3
SMG	103	Supervising a Diverse Workforce . . . . .3
SMG	120	Hiring Personnel . . . . .3

TOTAL PROGRAM CREDITS 96-99

## Business Information Technology Associate of Applied Science Degree (A.A.S.)

### Technical Education

This program prepares students for employment as specialists in information processing and office administrative assistant positions requiring computer literacy in word processing, spreadsheet and database business applications.

Completion of Certificate Requirements: 45-47 credits

### TECHNICAL SPECIALTY COURSES

ACCT	110	Introduction to Accounting/Bookkeeping I . . . .5
ACCT	214	Accounting Systems . . . . .5
BUS	113	Diversity Issues in Business . . . . .3
BUS	116	Business Math/Spreadsheets . . . . .5
BUS	131	Integrated Communications I . . . . .5
BUS	140	Customer Relations . . . . .5
BUS	169	Using Computers in Business . . . . .5
BUS	170	Information Technology I . . . . .5
BUS	175	Applied Business Statistics:
		Decision-Making App. . . . .5
Following can be substituted:		
BUS 210 – Business & Economic Statistics (5)		
MATH 109 – Elementary Statistics (5)		
BUS	177	Spreadsheets . . . . .5
BUS	179	Word Processing . . . . .5
BUS	182	Information and Database Management . . . .5
BUS	197	Work Experience-Business Occupations . . . .5
BUS	216	Professional Development . . . . .5
BUS	230	Business Communications . . . . .5
BUS	235	Oral Communications in Business . . . . .5

### RELATED INSTRUCTION

BUS&	101	Introduction to Business . . . . .5
BUS&	201	Business Law . . . . .5
Following can be substituted:		
BUS 200 – Law and Society (5)		
PSYC	240	Psychology of Human Relations . . . . .3
Following can be substituted:		
PSYC& 100 – General Psychology (5)		

### ELECTIVE COURSES

A minimum of 5 credits in the following areas

■ Visual, Literary, & Performing Arts	
■ Individuals, Cultures, & Societies	
Visual, Literary and Performing Arts . . . . .5	
Individual, Cultures and Societies . . . . .5	

TOTAL PROGRAM CREDITS 98-100

## Business Information Technology Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Technical Education

This program prepares students for employment as specialists in information processing and office administrative assistant positions requiring computer literacy in word processing, spreadsheet and database business applications.

### PREREQUISITES

Enter program with 25 wpm keyboarding skills or either one of the following

BUS	104	Keyboarding	3
BUS	106	Keyboarding/Skillbuilding	3

### TECHNICAL SPECIALTY COURSES

ACCT	110	Introduction to Accounting/Bookkeeping I	5
ACCT	214	Accounting Systems	5
BUS&	101	Introduction to Business	5
BUS	113	Diversity Issues in Business	3
BUS	140	Customer Relations	5
BUS	169	Using Computers in Business	5
BUS	170	Information Technology I	5
BUS	175	Applied Business Statistics: Decision-Making App.	5

Following can be substituted:

BUS 210 – Business and Economic Statistics (5)  
MATH 109 – Elementary Statistics (5)

BUS	177	Spreadsheets	5
BUS	179	Word Processing	5
BUS	182	Information and Database Management	5
BUS	197	Work Experience-Business Occupations	5
Credit range: 1-15/Total required credits: 5			
BUS&	201	Business Law	5
Following can be substituted:			
BUS 200 – Law and Society (5)			
BUS	216	Professional Development	5
BUS	235	Oral Communications in Business	5

### RELATED INSTRUCTION

ENGL&	101	English Composition I	5
ENGL&	102	Composition II	5
MATH	102	College Algebra	5
PSYC&	100	General Psychology	5

### ELECTIVES

Choose 5 credits from one of the following areas:

Visual, Literary and Performing Arts	5
Individual, Cultures and Societies	5

TOTAL PROGRAM CREDITS 100-102

## Business Information Technology (Business Operations and Project Management Support) Certificate

### Technical Education

This program prepares students for employment as specialists in information processing and office administrative assistant positions requiring computer literacy in word processing, spreadsheet and database business applications.

### TECHNICAL SPECIALTY COURSES

BUS	113	Diversity Issues in Business	3
BUS	116	Business Math/Spreadsheets	5
BUS	131	Integrated Communications I	5
BUS	140	Customer Relations	5
BUS	166	Career Development III	2
BUS	169	Using Computers in Business	5
BUS	177	Spreadsheets	5
BUS	197	Work Experience-Business Occupations	5
SMG	210	Project Management	3

TOTAL PROGRAM CREDITS 38

## Economics (A.B.)

This two-year program is designed for students that wish to obtain an Associate of Business (AB) degree with an emphasis in Economics. Students in this pathway develop skills in data analysis, critical thinking, quantitative and qualitative research, verbal communication, group communication and collaboration, and leadership and facilitation. Topics include markets and prices, consumer behavior, employment, inflation, international trade, and government policy.

Completion of this program prepares students for further education at a four-year college or university such as a Bachelor's degree in Economics, Business, Finance, Data Analytics, or a related field.

## Office Assistant Short-Term Certificate

### Business Information Technology

The Office Assistant Certificate is the first in a series of short term training certificates within the Business Information Technology department. This certificate prepares students for entry-level jobs as member services representatives, customer relations associates, office assistants and front desk agents.

### TECHNICAL SPECIALTY COURSES

BUS	113	Diversity Issues in Business	3
BUS	131	Integrated Communications I	5
BUS	140	Customer Relations	5
BUS	164	Career Development I	2
BUS	169	Using Computers in Business	5
TOTAL PROGRAM CREDITS			19

## Supervision & Management Certificate

### Technical Education

Designed for middle managers seeking to sharpen their skills or attain a promotion, the Supervision and Management program is also open to employees who are interested in advancing to management.

Levels of recognition are provided during progressive phases of the program, including a Certificate in Personnel Management (upon completion of six specific courses), a Certificate in Nonprofit Leadership (upon completion of six specific courses), a Certificate of Achievement (upon completion of a minimum of 55 credits), and an A.A.S. degree (upon completion of the required course of study). The Supervision and Management program is articulated to four-year institutions.

### TECHNICAL SPECIALTY COURSES

SMG	100	Leadership and Supervision	3
SMG	103	Supervising a Diverse Workforce	3
SMG	110	Financial Management	3
SMG	120	Hiring Personnel	3
SMG	197	Internship or Cooperative Education Experience	5
Credit range: 1-15/Total required internship credits: 5			
SMG	210	Project Management	3
SMG	217	Organizational Behavior	3
SMG	220	Personnel Performance Management	3
SMG	222	Management and Labor Relations	3
SMG	265	Marketing Management	3

### RELATED INSTRUCTION

BUS	110	Business Mathematics	5
Following can be substituted:			
BUS 116 – Business Mathematics/Spreadsheet (5)			
BUS	131	Integrated Communications I	5
Following can be substituted:			
ENGL& 101 – English Composition I (5)			
BUS	169	Using Computers in Business	5
ability to type 25 wpm			
BUS	230	Business Communications	5
Following can be substituted:			
ENGL& 102 – Composition II (5)			
PSYC	240	Psychology of Human Relations	3
TOTAL PROGRAM CREDITS			55

## Supervision & Management Associate of Applied Science Degree (A.A.S.)

### Technical Education

Designed for middle managers seeking to sharpen their skills or attain a promotion, the Supervision and Management program is also open to employees who are interested in advancing to management.

Levels of recognition are provided during progressive phases of the program, including a Certificate in Personnel Management (upon completion of six specific courses), a Certificate in Nonprofit Leadership (upon completion of six specific courses), a Certificate of Achievement (upon completion of a minimum of 55 credits), and an A.A.S. degree (upon completion of the required course of study). The Supervision and Management program is articulated to four-year institutions.

Completion of Certificate Requirements: 55 credits

### TECHNICAL SPECIALTY COURSES

SMG	100	Leadership and Supervision	3
SMG	103	Supervising a Diverse Workforce	3
SMG	110	Financial Management	3
SMG	120	Hiring Personnel	3
SMG	197	Internship or Cooperative Education Experience	5
SMG	210	Project Management	3
SMG	217	Organizational Behavior	3
SMG	220	Personnel Performance Management	3
SMG	222	Management and Labor Relations	3
SMG	265	Marketing Management	3



**RELATED INSTRUCTION**

BUS&	101	Introduction to Business . . . . .	5
BUS	110	Business Mathematics . . . . .	5
BUS	131	Integrated Communications I . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
BUS&	201	Business Law . . . . .	5
BUS	230	Business Communications . . . . .	5
BUS	235	Oral Communications in Business . . . . .	5
PSYC	240	Psychology of Human Relations . . . . .	3
SMG	197	Internship or Cooperative Education Experience . . . . .	5
Credit range: 1-15			
Total required internship/co-op experience credits: 5			

**RELATED INSTRUCTION ELECTIVES**

Total required credits: 15

Choose minimum of 15 credits from the following areas:

- Accounting
- Computer Science and Technology
- Economics, Trainer Education (OTE)
- College Transfer Track

TOTAL PROGRAM CREDITS	90-95
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## Supervision & Management Associate of Applied Science–Transfer Degree (A.A.S.-T)

**Technical Education**

Designed for middle managers seeking to sharpen their skills or attain a promotion, the Supervision and Management program is also open to employees who are interested in advancing to management.

Levels of recognition are provided during progressive phases of the program, including a Certificate in Personnel Management (upon completion of six specific courses), a Certificate in Nonprofit Leadership (upon completion of six specific courses), a Certificate of Achievement (upon completion of a minimum of 55 credits), and an A.A.S. degree (upon completion of the required course of study). The Supervision and Management program is articulated to four-year institutions.

**TECHNICAL SPECIALTY COURSES**

BUS&	101	Introduction to Business . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
Following can be substituted:			
CSC 100 – Beginning Computers (5)			
BUS&	201	Business Law . . . . .	5
BUS	230	Business Communications . . . . .	5
BUS	235	Oral Communications in Business . . . . .	5
SMG	100	Leadership and Supervision . . . . .	3
SMG	103	Supervising a Diverse Workforce . . . . .	3
SMG	110	Financial Management . . . . .	3
SMG	120	Hiring Personnel . . . . .	3
SMG	197	Internship or Cooperative Education Experience . . . . .	5

Credit range: 1-15

Total required internship/co-op experience credits: 6-8

SMG	210	Project Management . . . . .	3
SMG	217	Organizational Behavior . . . . .	3
SMG	220	Personnel Performance Management . . . . .	3
SMG	222	Management and Labor Relations . . . . .	3
SMG	265	Marketing Management . . . . .	3

**RELATED INSTRUCTION**

ENGL&	101	English Composition I . . . . .	5
MATH	102	College Algebra . . . . .	5
PSYC&	100	General Psychology . . . . .	5

**RELATED INSTRUCTION ELECTIVES**

Total required credits: 17-20

Choose a concentration from the following:  
(minimum of 17-20 credits)

- Accounting
- Computer Science and Technology
- Economics, Trainer Education (OTE)
- College Transfer Track

TOTAL PROGRAM CREDITS	90-95
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## CULINARY, HOSPITALITY, AND WINE

### Culinary Arts: Banquets & Catering Certificate

#### Culinary Arts Department

Restaurant industry leaders recognize that the Culinary Arts program at South Seattle College provides outstanding culinary arts training. The program is a member of the prestigious International Association of Culinary Professionals and offers internships and training at partner institutions in Spain, Italy, Ireland, China and France. The department works closely with the hospitality industry to develop innovative, realistic programs that provide students with skills needed for successful employment.

Culinary Arts students learn the food production skills necessary to operate multifaceted food service operations on campus. A Food Court features a cafeteria with classic and contemporary menus, a short order grill, grab-and-go items, and a delicatessen. Two waited-service dining rooms, Café Alki and Alhadeff Grill, feature cooked-to-order menus with preparation typical of upscale restaurants in the Northwest. Food management classes train students in inventory control, operations analysis, purchasing, production, supervision, and personnel management. Students prepare for careers in dining room service, food production, and supervision for hotel, restaurant, catering and institutional food service operations.

The Culinary Arts and Pastry and Baking Arts programs require all uniforms, tools, and books which will be used throughout the program to be purchased by the first day of class. Please check with the Culinary Arts Office for a complete list of uniform and tool kit options, prices, and for a list of required texts.

#### TECHNICAL SPECIALTY COURSES

FSD	100	Health and Sanitation . . . . .	3
FSD	101	Orientation to Culinary Arts . . . . .	1
FSD	160	Culinary Fundamentals . . . . .	5
FSD	165	Fundamentals of Classical Techniques . . . . .	15
FSD	170	Theory 2 – Advanced Culinary Fundamentals . . . . .	5
FSD	175	Advanced Classical Techniques . . . . .	15
FSD	180	Garde Manger and Menu Development . . . . .	5
FSD	185	Restaurant Production 1 . . . . .	15
FSD	190	Cost Controls . . . . .	5
FSD	195	Restaurant Production 2 . . . . .	15
FSD	200	Theory 5 – Management Techniques . . . . .	5
FSD	215	Banquets and Catering . . . . .	15
HOS	203	Commercial Food Nutrition . . . . .	3

#### RELATED INSTRUCTION

ENGL	105	Applied Composition . . . . .	3
ENGL	106	Technical Writing . . . . .	3
MATH	110	Applied Math for Technicians . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3

TOTAL PROGRAM CREDITS 119

### Culinary Arts: Banquets & Catering Associate of Applied Science Degree (A.A.S.)

#### Culinary Arts Department

Restaurant industry leaders recognize that the Culinary Arts program at South Seattle College provides outstanding culinary arts training. The program is a member of the prestigious International Association of Culinary Professionals and offers internships and training at partner institutions in Spain, Italy, Ireland, China and France. The department works closely with the hospitality industry to develop innovative, realistic programs that provide students with skills needed for successful employment.

Culinary Arts students learn the food production skills necessary to operate multifaceted food service operations on campus. A Food Court features a cafeteria with classic and contemporary menus, a short order grill, grab-and-go items, and a delicatessen. Two waited-service dining rooms, Café Alki and Alhadeff Grill, feature cooked-to-order menus with preparation typical of upscale restaurants in the Northwest. Food management classes train students in inventory control, operations analysis, purchasing, production, supervision, and personnel management. Students prepare for careers in dining room service, food production, and supervision for hotel, restaurant, catering and institutional food service operations.

The Culinary Arts and Pastry and Baking Arts programs require all uniforms, tools, and books which will be used throughout the program to be purchased by the first day of class. Please check with the Culinary Arts Office for a complete list of uniform and tool kit options, prices, and for a list of required texts.

Completion of Certificate Requirements: 119 credits

#### REQUIREMENTS

To earn an A.A.S degree, students must maintain a minimum cumulative grade point average of 2.0.

#### TECHNICAL SPECIALTY COURSES

FSD	100	Health and Sanitation . . . . .	3
FSD	101	Orientation to Culinary Arts . . . . .	1
FSD	160	Culinary Fundamentals . . . . .	5
FSD	165	Fundamentals of Classical Techniques . . . . .	15
FSD	170	Theory 2 – Advanced Culinary Fundamentals . . . . .	5
FSD	175	Advanced Classical Techniques . . . . .	15
FSD	180	Garde Manger and Menu Development . . . . .	5

FSD	185	Restaurant Production 1 . . . . .	15
FSD	190	Cost Controls . . . . .	5
FSD	195	Restaurant Production 2 . . . . .	15
FSD	200	Theory 5 – Management Techniques. . . . .	5
FSD	215	Banquets and Catering . . . . .	15
HOS	203	Commercial Food Nutrition . . . . .	3

**RELATED INSTRUCTION**

ENGL	105	Applied Composition . . . . .	3
ENGL	106	Technical Writing. . . . .	3
MATH	110	Applied Math for Technicians . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3

**ELECTIVES – GENERAL EDUCATION**

A minimum of ten (10) elective credits from at least two of the following categories:

Visual, Literary and Performing Arts. . . . .	5
Individual, Cultures and Societies . . . . .	5
Science & Mathematics . . . . .	5
Business & Office . . . . .	5
<b>TOTAL PROGRAM CREDITS</b>	<b>129</b>

## Culinary Arts: Banquets & Catering Associate of Applied Science–Transfer Degree (A.A.S.-T)

**Culinary Arts Department**

Restaurant industry leaders recognize that the Culinary Arts program at South Seattle College provides outstanding culinary arts training. The program is a member of the prestigious International Association of Culinary Professionals and offers internships and training at partner institutions in Spain, Italy, Ireland, China and France. The department works closely with the hospitality industry to develop innovative, realistic programs that provide students with skills needed for successful employment.

Culinary Arts students learn the food production skills necessary to operate multifaceted food service operations on campus. A Food Court features a cafeteria with classic and contemporary menus, a short order grill, grab-and-go items, and a delicatessen. Two waited-service dining rooms, Café Alki and Alhadeff Grill, feature cooked-to-order menus with preparation typical of upscale restaurants in the Northwest. Food management classes train students in inventory control, operations analysis, purchasing, production, supervision, and personnel management. Students prepare for careers in dining room service, food production, and supervision for hotel, restaurant, catering and institutional food service operations.

The Culinary Arts and Pastry and Baking Arts programs require all uniforms, tools, and books which will be used throughout the program to be purchased by the first day of class. Please check with the Culinary Arts Office for a complete list of uniform and tool kit options, prices, and for a list of required texts.

**REQUIREMENTS**

To earn an A.A.S.-T degree, students must maintain a minimum cumulative grade point average of 2.0.

**TECHNICAL SPECIALTY**

FSD	100	Health and Sanitation . . . . .	3
FSD	101	Orientation to Culinary Arts . . . . .	1
FSD	160	Culinary Fundamentals . . . . .	5
FSD	165	Fundamentals of Classical Techniques . . . . .	15
FSD	170	Theory 2 – Advanced Culinary Fundamentals. . . . .	5
FSD	175	Advanced Classical Techniques . . . . .	15
FSD	180	Garde Manger and Menu Development . . . . .	5
FSD	185	Restaurant Production 1 . . . . .	15
FSD	190	Cost Controls . . . . .	5
FSD	195	Restaurant Production 2 . . . . .	15
FSD	200	Theory 5 – Management Techniques. . . . .	5
FSD	215	Banquets and Catering . . . . .	15
HOS	203	Commercial Food Nutrition . . . . .	3

**RELATED INSTRUCTION**

ENGL&	101	English Composition I . . . . .	5
ENGL&	102	Composition II . . . . .	5
MATH	102	College Algebra . . . . .	5
PSYC&	100	General Psychology. . . . .	5

**ELECTIVES**

A minimum of ten (10) elective credits from at least two of the following categories:

Visual, Literary and Performing Arts. . . . .	5
Science & Mathematics . . . . .	5
Business & Office . . . . .	5
<b>TOTAL PROGRAM CREDITS</b>	<b>137</b>

## Culinary Arts Certificate

**Culinary Arts Department**

The Pastry and Specialty Baking program covers basic and advanced skills in pastry and specialty baking and decorating. It includes cakes and Danish; French and Swiss pastries; fancy desserts; confections; tortes; fillings; specialty breads; decorating; and sugar and chocolate work. Graduates are prepared for pastry positions in hotels, fine restaurants, clubs, and a variety of positions in retail and wholesale bakeries.

**TECHNICAL SPECIALTY COURSES**

FSD	100	Health and Sanitation . . . . .	3
HOS	203	Commercial Food Nutrition . . . . .	3
PST	101	Pastry and Baking Orientation . . . . .	5
PST	102	Introduction to Baking Management . . . . .	5
PST	103	Decoration Theory 1 . . . . .	4
PST	104	Decoration Theory 2 . . . . .	4
PST	105	Decoration Theory 3 . . . . .	4
PST	111	Baking 1 . . . . .	15
PST	112	Pastry 1. . . . .	15
PST	113	Baking 2 . . . . .	15
PST	211	Pastry 2. . . . .	15
PST	212	Pastry 3. . . . .	15
PST	213	Pastry 4. . . . .	15

**RELATED INSTRUCTION**

ENGL	105	Applied Composition . . . . .	3
ENGL	106	Technical Writing. . . . .	3
MATH	110	Applied Math for Technicians . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3
TOTAL PROGRAM CREDITS			130

## Culinary Arts: Pastry & Baking Arts Associate of Applied Science Degree (A.A.S.)

**Culinary Arts Department**

The Pastry and Specialty Baking program covers basic and advanced skills in pastry and specialty baking and decorating.

It includes cakes and Danish; French and Swiss pastries; fancy desserts; confections; tortes; fillings; specialty breads; decorating; and sugar and chocolate work. Graduates are prepared for pastry positions in hotels, fine restaurants, clubs, and a variety of positions in retail and wholesale bakeries.

Completion of Culinary Arts: Pastry & Baking Arts certificate requirements: 130 credits

**REQUIREMENTS**

To earn an A.A.S degree in Pastry and Baking Arts, students must:

- maintain a minimum cumulative grade point average of 2.0.
- complete selected Culinary Arts certificate requirements (130 credits)

**TECHNICAL SPECIALTY COURSES**

FSD	100	Health and Sanitation . . . . .	3
HOS	203	Commercial Food Nutrition . . . . .	3
PST	101	Pastry and Baking Orientation . . . . .	5
PST	102	Introduction to Baking Management . . . . .	5
PST	103	Decoration Theory 1 . . . . .	4
PST	104	Decoration Theory 2 . . . . .	4
PST	105	Decoration Theory 3 . . . . .	4
PST	111	Baking 1 . . . . .	15
PST	112	Pastry 1. . . . .	15
PST	113	Baking 2 . . . . .	15
PST	211	Pastry 2. . . . .	15
PST	212	Pastry 3. . . . .	15
PST	213	Pastry 4. . . . .	15

**RELATED INSTRUCTION**

ENGL	105	Applied Composition . . . . .	3
ENGL	106	Technical Writing. . . . .	3
MATH	110	Applied Math for Technicians . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3

**ELECTIVES – GENERAL EDUCATION**

A minimum of ten (10) elective credits from at least two of the following categories:

Visual, Literary and Performing Arts. . . . .	5
Individual, Cultures and Societies . . . . .	5
Science & Mathematics . . . . .	5
Business & Office . . . . .	5

TOTAL PROGRAM CREDITS	140
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## Culinary Arts: Pastry & Baking Arts Associate of Applied Science–Transfer Degree (A.A.S.-T)

**Culinary Arts Department**

The Pastry and Specialty Baking program covers basic and advanced skills in pastry and specialty baking and decorating. It includes cakes and Danish; French and Swiss pastries; fancy desserts; confections; tortes; fillings; specialty breads; decorating; and sugar and chocolate work. Graduates are prepared for pastry positions in hotels, fine restaurants, clubs, and a variety of positions in retail and wholesale bakeries.

**REQUIREMENTS**

To earn an A.A.S.-T degree in Pastry and Baking Arts, students must maintain a minimum cumulative grade point average of 2.0.

**TECHNICAL SPECIALTY**

FSD	100	Health and Sanitation . . . . .	3
HOS	203	Commercial Food Nutrition . . . . .	3
PST	101	Pastry and Baking Orientation . . . . .	5
PST	102	Introduction to Baking Management . . . . .	5
PST	103	Decoration Theory 1 . . . . .	4
PST	104	Decoration Theory 2 . . . . .	4
PST	105	Decoration Theory 3 . . . . .	4
PST	111	Baking 1 . . . . .	15
PST	112	Pastry 1. . . . .	15
PST	113	Baking 2 . . . . .	15
PST	211	Pastry 2. . . . .	15
PST	212	Pastry 3. . . . .	15
PST	213	Pastry 4. . . . .	15

**RELATED INSTRUCTION**

ENGL&	101	English Composition I . . . . .	5
ENGL&	102	Composition II . . . . .	5
MATH	102	College Algebra . . . . .	5
PSYC&	100	General Psychology. . . . .	5

**ELECTIVES**

Select 10 credits from the following courses:

Visual, Literary and Performing Arts. . . . .	5
Individual, Cultures and Societies . . . . .	5
Science & Mathematics . . . . .	5
Business & Office . . . . .	5

TOTAL PROGRAM CREDITS	148
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## Culinary Arts: Restaurant Production Certificate

### Culinary Arts Department

Restaurant industry leaders recognize that the Culinary Arts program at South Seattle College provides outstanding culinary arts training. The program is a member of the prestigious International Association of Culinary Professionals and offers internships and training at partner institutions in Spain, Italy, Ireland, China and France. The department works closely with the hospitality industry to develop innovative, realistic programs that provide students with skills needed for successful employment.

Culinary Arts students learn the food production skills necessary to operate multifaceted food service operations on campus. A Food Court features a cafeteria with classic and contemporary menus, a short order grill, grab-and-go items, and a delicatessen. Two waited-service dining rooms, Café Alki and Alhadeff Grill, feature cooked-to-order menus with preparation typical of upscale restaurants in the Northwest. Food management classes train students in inventory control, operations analysis, purchasing, production, supervision, and personnel management. Students prepare for careers in dining room service, food production, and supervision for hotel, restaurant, catering and institutional food service operations.

The Culinary Arts and Pastry and Baking Arts programs require all uniforms, tools, and books which will be used throughout the program to be purchased by the first day of class. Please check with the Culinary Arts Office for a complete list of uniform and tool kit options, prices, and for a list of required texts.

### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

FSD	100	Health and Sanitation . . . . .	3
FSD	165	Fundamentals of Classical Techniques . . . . .	15
FSD	175	Advanced Classical Techniques . . . . .	15
FSD	185	Restaurant Production 1 . . . . .	15
FSD	210	Intro Sustainable Food Systems . . . . .	5

### RELATED INSTRUCTION

BUS	116	Business Math/Spreadsheets . . . . .	5
ENGL	107	Applied Composition . . . . .	5
PSYC	240	Psychology of Human Relations . . . . .	3
Following can be substituted:			
		BUS 113 – Diversity Issues in Business (3)	

TOTAL PROGRAM CREDITS

66

## Culinary Arts: Restaurant Production Associate of Applied Science Degree (A.A.S.)

### Culinary Arts Department

Restaurant industry leaders recognize that the Culinary Arts program at South Seattle College provides outstanding culinary arts training. The program is a member of the prestigious International Association of Culinary Professionals and offers internships and training at partner institutions in Spain, Italy, Ireland, China and France. The department works closely with the hospitality industry to develop innovative, realistic programs that provide students with skills needed for successful employment.

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The Culinary Arts and Pastry and Baking Arts programs require all uniforms, tools, and books which will be used throughout the program to be purchased by the first day of class. Please check with the Culinary Arts Office for a complete list of uniform and tool kit options, prices, and for a list of required texts.

### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### REQUIREMENTS

To earn an A.A.S degree, students must maintain a minimum cumulative grade point average of 2.0.

### TECHNICAL SPECIALTY COURSES

FSD	100	Health and Sanitation . . . . .	3
FSD	165	Fundamentals of Classical Techniques . . . . .	15
FSD	175	Advanced Classical Techniques . . . . .	15
FSD	185	Restaurant Production 1 . . . . .	15
FSD	195	Restaurant Production 2 . . . . .	15
FSD	205	Leadership Practicum . . . . .	15
FSD	210	Intro Sustainable Food Systems . . . . .	5



**RELATED INSTRUCTION**

BUS	116	Business Math/Spreadsheets . . . . .	5
ENGL	107	Applied Composition . . . . .	5
NUTR&	101	Nutrition . . . . .	5
PSYC	240	Psychology of Human Relations . . . . .	3
Following can be substituted:			
		BUS 113 – Diversity Issues in Business	
TOTAL PROGRAM CREDITS			101

## Culinary Arts: Restaurant Production Associate of Applied Science–Transfer Degree (A.A.S.-T)

**Culinary Arts Department**

Restaurant industry leaders recognize that the Culinary Arts program at South Seattle College provides outstanding culinary arts training. The program is a member of the prestigious International Association of Culinary Professionals and offers internships and training at partner institutions in Spain, Italy, Ireland, China and France. The department works closely with the hospitality industry to develop innovative, realistic programs that provide students with skills needed for successful employment.

Culinary Arts students learn the food production skills necessary to operate multifaceted food service operations on campus. A Food Court features a cafeteria with classic and contemporary menus, a short order grill, grab-and-go items, and a delicatessen. Two waited-service dining rooms, Café Alki and Alhadeff Grill, feature cooked-to-order menus with preparation typical of upscale restaurants in the Northwest. Food management classes train students in inventory control, operations analysis, purchasing, production, supervision, and personnel management. Students prepare for careers in dining room service, food production, and supervision for hotel, restaurant, catering and institutional food service operations.

The Culinary Arts and Pastry and Baking Arts programs require all uniforms, tools, and books which will be used throughout the program to be purchased by the first day of class. Please check with the Culinary Arts Office for a complete list of uniform and tool kit options, prices, and for a list of required texts.

**PROGRAM PREREQUISITE**

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

**REQUIREMENTS**

To earn an A.A.S.-T degree, students must maintain a minimum cumulative grade point average of 2.0.

**TECHNICAL SPECIALTY**

FSD	100	Health and Sanitation . . . . .	3
FSD	165	Fundamentals of Classical Techniques . . . . .	15
FSD	175	Advanced Classical Techniques . . . . .	15
FSD	185	Restaurant Production 1 . . . . .	15
FSD	195	Restaurant Production 2 . . . . .	15
FSD	205	Leadership Practicum . . . . .	15
FSD	210	Intro Sustainable Food Systems . . . . .	5

**RELATED INSTRUCTION**

ENGL&	101	English Composition I . . . . .	5
MATH&	107	Math in Society . . . . .	5
NUTR&	101	Nutrition . . . . .	5
PSYC&	100	General Psychology . . . . .	5

TOTAL PROGRAM CREDITS			103
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## Hospitality Management Bachelor of Applied Science Degree (BAS)

**Technical Education**

The Bachelor of Applied Science (B.A.S.) in Hospitality Management at South Seattle College prepares those students who have completed a two-year technical degree or approved associate's degree with a broad skill set of competencies in the hospitality industry.

Students take upper-division classes to prepare for management, marketing, human resource, and technical positions in all facets of the hospitality industry, including tourism, hotel operation, restaurant management, catering, cruise ship-casino operations, and travel. Students will have opportunities to gain occupational competencies through internships and networking with industry leaders.

This program is unique in its focus to provide applied management training to students in the region's largest hospitality industry.

**PREREQUISITES – AA DEGREE**

The 90 credits of AA degree are included in the total credits required for BAS.

ENGL&	101	English Composition I . . . . .	5
ENGL&	102	Composition II . . . . .	5
Visual, Literary and Performing Arts . . . . .			15

Choices must include a minimum of two different course prefixes, and no more than 5 credits each of a world language at the 100 level and a studio/performance class may be applied to the distribution requirements.			
Individual, Cultures and Societies . . . . .			15
Choices must include a minimum of two different course prefixes.			
Natural World, the . . . . .			15

Choices must include a minimum of two different prefixes; 5 credits must be in a lab science. Students may choose up to 5 credits from the following list of courses: Anthropology, Computer Science, Engineering, Geography, Mathematics, Philosophy OR Psychology.

Quantitative/Symbolic Reasoning . . . . .	5
Electives . . . . .	30

## Electives include:

- All college transfer courses numbered 100 or above
- Accounting, business administration and transfer engineering classes
- Physical education activity courses (3 credit maximum)
- A maximum of 15 credits from a combination of the following:
  - Workforce Education Career and Technical courses numbered 100 and above
  - Human Development courses (HDC) numbered 100 and above
  - Library research courses
  - Cooperative Work Experience (CWE) courses numbered 100 and above

**TECHNICAL SPECIALTY COURSES**

The courses listed below are also referred to as 'core courses' or 'core credits.'

HMG 301	Introduction to Hospitality . . . . .	3
HMG 302	Hospitality Management . . . . .	5
HMG 303	Hospitality Marketing . . . . .	5
HMG 310	Hospitality Computer Applications . . . . .	3
HMG 311	Lodging Operations . . . . .	3
HMG 312	Legal Issues in Hospitality . . . . .	3
HMG 313	Entrepreneurship . . . . .	3
HMG 314	Diversity and Culture in Travel and Tourism . . .	5
HMG 401	Cost Controls . . . . .	5
HMG 402	Hospitality Accounting . . . . .	5
HMG 411	Human Resource Management . . . . .	3
HMG 412	Service Operations Management . . . . .	5
HMG 420	Ethical Leadership . . . . .	3
HMG 489	Professional Career Development . . . . .	1
HMG 490	Internship Lecture . . . . .	3
HMG 491	Hospitality Management Capstone . . . . .	5

**GENERAL EDUCATION COURSES**

Individual, Cultures and Societies . . . . .	5
Must be any 200 level course	
Natural World, the . . . . .	5
Lab Science . . . . .	5
See Advising for list of approved courses.	
Communication/Writing . . . . .	10
Must be any 200 level course	
See Advising for list of approved courses.	
Business Statistics . . . . .	5
If a Business Statistics course has already been taken, then an Elective of 5 credits	
See Advising for list of approved courses.	

TOTAL PROGRAM CREDITS	180
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## Meatcutter Associate of Applied Science –Transfer Degree (A.A.S.-T)

**Georgetown Campus**

The Meatcutter program allows individuals completing approved apprenticeship programs to earn an AAS-T degree. To earn the degree, candidates must have certification from their JATC that they have completed an apprenticeship program of at least credits 50 credits: 4000 hours structured On-The Job-Training (OJT) and 300 hours related supplemental instruction courses. In addition, the program requires a minimum of 20 credits of general education (Transfer level) requirements (communications, quantitative reasoning, English composition, and social science) and 30 credits of professional-technical courses in nutrition, culinary, and business. These courses may be taken at any time during the apprenticeship program prior to or after the certification from the JATC. Students must complete a total of 90 credits of instruction to receive the AAS-T Degree.

**TECHNICAL SPECIALTY COURSES**

HAR 141	Introduction to Principles of Meatcutting . . .	5.5
HAR 142	Principles of Meatcutting II . . . . .	5
HAR 143	Principles of Meatcutting III . . . . .	5
HAR 151	Meatcutting IV . . . . .	5.5
HAR 152	Meatcutting V . . . . .	4
HAR 153	Principles of Meatcutting VI . . . . .	3.5

**GENERAL EDUCATION COURSES**

Written Composition – Transfer Level 100+ . . . . .	5
Communication – Transfer Level 100+ . . . . .	5
Quantitative Reasoning – Transfer Level 100+ . . . . .	5
Social Science – Transfer Level 100+ . . . . .	5

**RELATED INSTRUCTION**

BUS& 101	Introduction to Business . . . . .	5
	Following can be substituted:	
	BUS 114 – Intro to Marketing (5)	
FSD 160	Culinary Fundamentals . . . . .	5
FSD 170	Theory 2 – Advanced Culinary Fundamentals . . .	5
	Following can be substituted:	
	FSD 180 – Theory 3 – Garde Manger (5)	
Nutrition – Transfer Level 100+	. . . . .	5

**ON-THE-JOB TRAINING (OJT)**

Total of 20 credits (4000 hours) in structured on-the-job training is required.

TOTAL PROGRAM CREDITS	90
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## Wine Industry: Food & Wine Pairing Certificate

### Culinary Arts Department

The program provides introductory and professional development classes relating to the wine industry, including certificates, Associate of Arts and Associate of Arts-T degrees in these areas: Wine Making (learning to produce quality wines and develop an individual style of wine); Wine Marketing and Sales; and Food and Wine Pairing (the intricacies of bridging food and wine). The program prepares individuals for careers in the wine industry, and provides advanced skill training for those already employed in the industry.

### PROGRAM PREREQUISITE

Must be 21 years or older to apply.

### TECHNICAL SPECIALTY COURSES

WIN	101	Introduction to Enology & Viticulture . . . . .	4
WIN	121	Introduction to Viticulture . . . . .	3
WIN	123	Sensory Evaluation . . . . .	4
WIN	131	Introduction to Washington Wines . . . . .	4
WIN	133	Introduction to Wines of the World . . . . .	4
WIN	151	Introduction to Food and Wine Pairing . . . . .	4
WIN	152	Advanced Food and Wine Pairing . . . . .	4
WIN	160	Sommelier Service and Beverage Management . . . . .	4

### TECHNICAL SPECIALTY ELECTIVES

Select 9 credits from any WIN course not already taken.

WIN course . . . . .	3
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### RELATED INSTRUCTION

ENGL	107	Applied Composition . . . . .	5
MATH	110	Applied Math for Technicians . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3

TOTAL PROGRAM CREDITS 46

For more information on the wine industry program, visit South Seattle's Wine Studies page at: [southseattle.edu/programs/proftech/wine](http://southseattle.edu/programs/proftech/wine).

## Wine Industry: Food & Wine Pairing Associate of Applied Science Degree (A.A.S.)

### Culinary Arts Department

The program provides introductory and professional development classes relating to the wine industry, including certificates, Associate of Arts and Associate of Arts-T degrees in these areas: Wine Making (learning to produce quality wines and develop an individual style of wine); Wine Marketing and Sales; and Food and Wine Pairing (the intricacies of bridging food and wine). The program prepares individuals for careers in the wine industry, and provides advanced skill training for those already employed in the industry.

### PROGRAM PREREQUISITE

Must be 21 years or older to apply.

### TECHNICAL SPECIALTY COURSES

WIN	101	Introduction to Enology & Viticulture . . . . .	4
WIN	121	Introduction to Viticulture . . . . .	3
WIN	123	Sensory Evaluation . . . . .	4
WIN	131	Introduction to Washington Wines . . . . .	4
WIN	132	Wine History: Ancient Times to the Enlightenment . . . . .	3
WIN	133	Introduction to Wines of the World . . . . .	4
WIN	151	Introduction to Food and Wine Pairing . . . . .	4
WIN	152	Advanced Food and Wine Pairing . . . . .	4
WIN	153	Food and Wine Pairing – Varietals I . . . . .	4
WIN	154	Food and Wine Pairing – Varietals II . . . . .	4
WIN	155	Food and Wine Pairing – Varietals III . . . . .	4
WIN	156	Food and Wine Pairing – Fortified Wines . . . . .	2
WIN	157	Food and Wine Pairing – Desserts . . . . .	2
WIN	197	Internship in Wine Technology . . . . .	3

### REQUIRED COURSES

ACCT	110	Introduction to Accounting/Bookkeeping I . . . . .	5
Following can be substituted:			
ACCT& 201 – Principals of Accounting I (5)			
BUS&	101	Introduction to Business . . . . .	5
BUS&	201	Business Law . . . . .	5
Following can be substituted:			
POLS& 200 – Intro to Law (5)			
BUS	235	Oral Communications in Business . . . . .	5
Following can be substituted:			
CMST& 210 – Interpersonal Communication (5) or			
CMST& 220 – Public Speaking (5)			
SMG	210	Project Management . . . . .	3

### REQUIRED COURSES – ELECTIVE

Take 15 credits from the following courses:

BUS	140	Customer Relations . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
BUS	170	Information Technology I . . . . .	5
BUS	177	Spreadsheets . . . . .	5
BUS	182	Information and Database Management . . . . .	5
CTN	160	Web Production I . . . . .	5

### RELATED INSTRUCTION

BUS	116	Business Math/Spreadsheets . . . . .	5
ENGL	105	Applied Composition . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3

### GENERAL EDUCATION ELECTIVES

Visual, Literary and Performing Arts . . . . .	10
A minimum of 10 credits from two (2) courses in the above area	

TOTAL PROGRAM CREDITS 104

For more information on the wine industry program, visit South Seattle's Wine Studies page at: [southseattle.edu/programs/proftech/wine](http://southseattle.edu/programs/proftech/wine).

## Wine Industry: Food & Wine Pairing Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Culinary Arts Department

The program provides introductory and professional development classes relating to the wine industry, including certificates, Associate of Arts and Associate of Arts-T degrees in these areas: Wine Making (learning to produce quality wines and develop an individual style of wine); Wine Marketing and Sales; and Food and Wine Pairing (the intricacies of bridging food and wine). The program prepares individuals for careers in the wine industry, and provides advanced skill training for those already employed in the industry.

### PROGRAM PREREQUISITE

Must be 21 years or older to apply.

### TECHNICAL SPECIALTY COURSES

WIN	101	Introduction to Enology & Viticulture . . . . .	4
WIN	121	Introduction to Viticulture . . . . .	3
WIN	123	Sensory Evaluation . . . . .	4
WIN	131	Introduction to Washington Wines . . . . .	4
WIN	132	Wine History: Ancient Times to the Enlightenment. . . . .	3
WIN	133	Introduction to Wines of the World . . . . .	4
WIN	151	Introduction to Food and Wine Pairing . . . . .	4
WIN	152	Advanced Food and Wine Pairing . . . . .	4
WIN	153	Food and Wine Pairing – Varietals I . . . . .	4
WIN	154	Food and Wine Pairing – Varietals II . . . . .	4
WIN	155	Food and Wine Pairing – Varietals III . . . . .	4
WIN	156	Food and Wine Pairing – Fortified Wines . . . . .	2
WIN	157	Food and Wine Pairing – Desserts . . . . .	2
WIN	197	Internship in Wine Technology . . . . .	5
Total Required Credits: 3			

### REQUIRED COURSES

ACCT	110	Introduction to Accounting/Bookkeeping I . . . . .	5
Following can be substituted:			
ACCT& 201 – Principals of Accounting I (5)			
BUS&	101	Introduction to Business . . . . .	5
BUS&	201	Business Law . . . . .	5
Following can be substituted:			
POLS& 200 – Intro to Law (5)			
BUS	235	Oral Communications in Business . . . . .	5
Following can be substituted:			
CMST& 210 – Interpersonal Communication (5) or			
CMST& 220 – Public Speaking (5)			
SMG	210	Project Management . . . . .	3

### REQUIRED COURSES – ELECTIVE

Take 15 credits from the following courses:

BUS	140	Customer Relations . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
BUS	170	Information Technology I . . . . .	5
BUS	177	Spreadsheets . . . . .	5
BUS	182	Information and Database Management . . . . .	5
CTN	160	Web Production I . . . . .	5

### RELATED INSTRUCTION

ENGL&	101	English Composition I . . . . .	5
MATH	102	College Algebra . . . . .	5
PSYC&	100	General Psychology . . . . .	5

### GENERAL EDUCATION ELECTIVES

Visual, Literary and Performing Arts . . . . .			10
A minimum of 10 credits from two (2) courses in the above area			

TOTAL PROGRAM CREDITS	108
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For more information on the wine industry program, visit South Seattle's Wine Studies page at: [southseattle.edu/programs/proftech/wine](http://southseattle.edu/programs/proftech/wine).

## Wine Industry: Marketing and Sales of Food & Wine Certificate

### Culinary Arts Department

The program provides introductory and professional development classes relating to the wine industry, including certificates, Associate of Arts and Associate of Arts-T degrees in these areas: Wine Making (learning to produce quality wines and develop an individual style of wine); Wine Marketing and Sales; and Food and Wine Pairing (the intricacies of bridging food and wine). The program prepares individuals for careers in the wine industry, and provides advanced skill training for those already employed in the industry.

### PROGRAM PREREQUISITE

Must be 21 years or older to apply.

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

WIN	101	Introduction to Enology & Viticulture . . . . .	4
WIN	123	Sensory Evaluation . . . . .	4
WIN	132	Wine History: Ancient Times to the Enlightenment. . . . .	3
WIN	133	Introduction to Wines of the World . . . . .	4
WIN	141	Wine Marketing and Sales . . . . .	4
WIN	142	Wine Business – Winery Operations . . . . .	4
WIN	151	Introduction to Food and Wine Pairing . . . . .	4
WIN	160	Sommelier Service and Beverage Management . . . . .	4
WIN	257	Advanced Food and Wine Pairing Dessert . . . . .	4

**RELATED INSTRUCTION**

BUS	116	Business Math/Spreadsheets . . . . .	.5
ENGL	107	Applied Composition . . . . .	.5
PSYC	240	Psychology of Human Relations . . . . .	.3
Following can be substituted:			
BUS 113 – Diversity Issues in Business (3)			

TOTAL PROGRAM CREDITS 49

For more information on the wine industry program, visit South Seattle's Wine Studies page at: [southseattle.edu/programs/wine-studies](http://southseattle.edu/programs/wine-studies).

## Wine Industry: Marketing and Sales of Food & Wine Associate of Applied Science Degree (A.A.S.)

### Culinary Arts Department

The program provides introductory and professional development classes relating to the wine industry, including certificates, Associate of Arts and Associate of Arts-T degrees in these areas: Wine Making (learning to produce quality wines and develop an individual style of wine); Wine Marketing and Sales; and Food and Wine Pairing (the intricacies of bridging food and wine). The program prepares individuals for careers in the wine industry, and provides advanced skill training for those already employed in the industry.

### PROGRAM PREREQUISITE

Must be 21 years or older to apply.

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

WIN	101	Introduction to Enology & Viticulture . . . . .	.4
WIN	123	Sensory Evaluation . . . . .	.4
WIN	130	Wine Tourism . . . . .	.4
WIN	131	Introduction to Washington Wines . . . . .	.4
WIN	132	Wine History: Ancient Times to the Enlightenment . . . . .	.3
WIN	133	Introduction to Wines of the World . . . . .	.4
WIN	140	Tasting Room Management . . . . .	.4
WIN	141	Wine Marketing and Sales . . . . .	.4
WIN	142	Wine Business-Winery Operations . . . . .	.4
WIN	143	Wine Business-Distribution Network and Suppliers . . . . .	.4
WIN	145	Wine Business – Entrepreneurship and Innovation . . . . .	.4
WIN	150	Winery Compliance: Taxes and Legal Issues . . . . .	.2
WIN	151	Introduction to Food and Wine Pairing . . . . .	.4
WIN	152	Advanced Food and Wine Pairing . . . . .	.4
WIN	160	Sommelier Service and Beverage Management . . . . .	.4
WIN	170	Food & Wine Pairing: Other Ferments . . . . .	.4
WIN	233	Advanced Wines of the World – France & Spain . . . . .	.4
WIN	235	Advanced Wines of the World: New World . . . . .	.3
WIN	257	Advanced Food and Wine Pairing Dessert . . . . .	.4

**RELATED INSTRUCTION**

BUS	116	Business Math/Spreadsheets . . . . .	.5
ENGL	107	Applied Composition . . . . .	.5
PSYC	240	Psychology of Human Relations . . . . .	.3
Following can be substituted:			
BUS 113 – Diversity Issues in Business (3)			

Visual, Literary and Performing Arts . . . . . 5

Following can be substituted:

Individuals, Cultures, and Societies (5) or

The Natural World (5)

TOTAL PROGRAM CREDITS 92

For more information on the wine industry program, visit South Seattle's Wine Studies page at: [southseattle.edu/programs/wine-studies](http://southseattle.edu/programs/wine-studies).

## Wine Industry: Marketing and Sales of Food & Wine Associate of Applied Science – Transfer Degree (A.A.S.-T)

### Culinary Arts Department

The program provides introductory and professional development classes relating to the wine industry, including certificates, Associate of Arts and Associate of Arts-T degrees in these areas: Wine Making (learning to produce quality wines and develop an individual style of wine); Wine Marketing and Sales; and Food and Wine Pairing (the intricacies of bridging food and wine). The program prepares individuals for careers in the wine industry, and provides advanced skill training for those already employed in the industry.

### PROGRAM PREREQUISITE

Must be 21 years or older to apply.

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

WIN	101	Introduction to Enology & Viticulture . . . . .	.4
WIN	123	Sensory Evaluation . . . . .	.4
WIN	130	Wine Tourism . . . . .	.4
WIN	131	Introduction to Washington Wines . . . . .	.4
WIN	132	Wine History: Ancient Times to the Enlightenment . . . . .	.3
WIN	133	Introduction to Wines of the World . . . . .	.4
WIN	140	Tasting Room Management . . . . .	.4
WIN	141	Wine Marketing and Sales . . . . .	.4
WIN	142	Wine Business – Winery Operations . . . . .	.4
WIN	143	Wine Business-Distribution Network and Suppliers . . . . .	.4
WIN	145	Wine Business – Entrepreneurship and Innovation . . . . .	.4
WIN	150	Winery Compliance: Taxes and Legal Issues . . . . .	.2
WIN	151	Introduction to Food and Wine Pairing . . . . .	.4
WIN	152	Advanced Food and Wine Pairing . . . . .	.4



WIN	160	Sommelier Service and Beverage Management . . . . .	4
WIN	170	Food & Wine Pairing: Other Ferments . . . . .	4
WIN	233	Advanced Wines of the World – France & Spain. . . . .	4
WIN	235	Advanced Wines of the World: New World . . . . .	3
WIN	257	Advanced Food and Wine Pairing Dessert . . . . .	4

**RELATED INSTRUCTION**

ENGL&	101	English Composition I . . . . .	5
MATH&	107	Math in Society . . . . .	5
PSYC&	100	General Psychology. . . . .	5
Visual, Literary and Performing Arts. . . . .			5
Following can be substituted:			
Individuals, Cultures, and Societies (5) or			
The Natural World (5)			

TOTAL PROGRAM CREDITS	94
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For more information on the wine industry program, visit South Seattle's Wine Studies page at: [southseattle.edu/programs/wine-studies](http://southseattle.edu/programs/wine-studies).

## Wine Industry: Wine Business Entrepreneurship Short-Term Certificate

**Culinary Arts Department**

This certificate prepares students for a career in a wine related business through understanding the components of successful related business practices and decisions faced by entrepreneurs. Concepts of financial management and business plan development, compliance and government regulations, branding, marketing, and advertising processes and techniques, and the importing, exporting, and distribution and selling of wines throughout the world. This program prepares students for employment in careers such as Direct Sales Manager, Wine Distributor Sales, Sales Representative Wholesale, Marketing Coordinator, Compliance Manager, Wine Steward Retail, Wine Merchandiser, Tasting Room Manager, Marketing and Office Management.

**TECHNICAL SPECIALTY COURSES**

WIN	133	Introduction to Wines of the World . . . . .	4
WIN	141	Wine Marketing and Sales. . . . .	4
WIN	142	Wine Business -Winery Operations. . . . .	4
WIN	143	Wine Business-Distribution Network and Suppliers. . . . .	4
WIN	145	Wine Business – Entrepreneurship and Innovation . . . . .	4

TOTAL PROGRAM CREDITS	17
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## Wine Industry: Wine Production Certificate

**Culinary Arts Department**

The program provides introductory and professional development classes relating to the wine industry, including certificates, Associate of Arts and Associate of Arts-T degrees in these areas: Wine Making (learning to produce quality wines and develop an individual style of wine); Wine Marketing and Sales; and Food and Wine Pairing (the intricacies of bridging food and wine). The program prepares individuals for careers in the wine industry, and provides advanced skill training for those already employed in the industry.

**PROGRAM PREREQUISITE**

Must be 21 years or older to apply.

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

**TECHNICAL SPECIALTY COURSES**

HDM	171	Lift Truck Operator . . . . .	2
WIN	101	Introduction to Enology & Viticulture . . . . .	4
WIN	103	Elements of Wine Production . . . . .	4
WIN	104	Elements of Wine Production II. . . . .	4
WIN	105	Elements of Wine Production III . . . . .	4
WIN	112	Wine Science . . . . .	5
WIN	122	Wine Chemistry and Microbiology. . . . .	4
WIN	123	Sensory Evaluation. . . . .	4
WIN	142	Wine Business – Winery Operations . . . . .	4

**RELATED INSTRUCTION**

ENGL	107	Applied Composition. . . . .	5
MATH	102	College Algebra . . . . .	5
PSYC	240	Psychology of Human Relations . . . . .	3
Following can be substituted:			
BUS 113 – Diversity of Issues in Business (3)			

TOTAL PROGRAM CREDITS	48
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For more information on the wine industry program, visit South Seattle's Wine Studies page at: [southseattle.edu/programs/wine-studies](http://southseattle.edu/programs/wine-studies).

## Wine Industry: Wine Production Associate of Applied Science Degree (A.A.S.)

**Culinary Arts Department**

The program provides introductory and professional development classes relating to the wine industry, including certificates, Associate of Arts and Associate of Arts-T degrees in these areas: Wine Making (learning to produce quality wines and develop an individual style of wine); Wine Marketing and Sales; and Food and Wine Pairing (the intricacies of bridging food and wine). The program prepares individuals for careers in the wine industry, and provides advanced skill training for those already employed in the industry.

**PROGRAM PREREQUISITE**

Must be 21 years or older to apply.

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

**TECHNICAL SPECIALTY COURSES**

HDM	171	Lift Truck Operator . . . . .	2
WIN	101	Introduction to Enology & Viticulture . . . . .	4
WIN	103	Elements of Wine Production . . . . .	4
WIN	104	Elements of Wine Production II . . . . .	4
WIN	105	Elements of Wine Production III . . . . .	4
WIN	107	Winery Production I . . . . .	1
WIN	108	Winery Production II . . . . .	1
WIN	109	Winery Production III . . . . .	1
WIN	112	Wine Science . . . . .	5
WIN	122	Wine Chemistry and Microbiology . . . . .	4
WIN	123	Sensory Evaluation . . . . .	4
WIN	131	Introduction to Washington Wines . . . . .	4
WIN	133	Introduction to Wines of the World . . . . .	4
WIN	140	Tasting Room Management . . . . .	4
WIN	141	Wine Marketing and Sales . . . . .	4
WIN	142	Wine Business -Winery Operations . . . . .	4
WIN	143	Wine Business-Distribution Network and Suppliers . . . . .	4
WIN	145	Wine Business – Entrepreneurship and Innovation . . . . .	4
WIN	150	Winery Compliance: Taxes and Legal Issues . . . . .	2

**RELATED INSTRUCTION**

ENGL	107	Applied Composition . . . . .	5
MATH	102	College Algebra . . . . .	5
		Following can be substituted: equivalent or higher level MATH course	
PSYC	240	Psychology of Human Relations . . . . .	3
		Following can be substituted: BUS 113 – Diversity Issues in Business (3)	
		Visual, Literary and Performing Arts . . . . .	5
		Following can be substituted: Individuals, Cultures and Societies (5) or Natural World (5)	

**TOTAL PROGRAM CREDITS** 92

For more information on the wine industry program, visit South Seattle's Wine Studies page at: [southseattle.edu/programs/wine-studies](https://southseattle.edu/programs/wine-studies).

## Wine Industry: Wine Production Associate of Applied Science–Transfer Degree (A.A.S.-T)

**Culinary Arts Department**

The program provides introductory and professional development classes relating to the wine industry, including certificates, Associate of Arts and Associate of Arts-T degrees in these areas: Wine Making (learning to produce quality wines and develop an individual style of wine); Wine Marketing and Sales; and Food and Wine Pairing (the intricacies of bridging food and wine). The program prepares individuals for careers in the wine industry, and provides advanced skill training for those already employed in the industry.

**PROGRAM PREREQUISITE**

Must be 21 years or older to apply.

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

**TECHNICAL SPECIALTY COURSES**

HDM	171	Lift Truck Operator . . . . .	2
WIN	101	Introduction to Enology & Viticulture . . . . .	4
WIN	103	Elements of Wine Production . . . . .	4
WIN	104	Elements of Wine Production II . . . . .	4
WIN	105	Elements of Wine Production III . . . . .	4
WIN	107	Winery Production I . . . . .	1
WIN	108	Winery Production II . . . . .	1
WIN	109	Winery Production III . . . . .	1
WIN	112	Wine Science . . . . .	5
WIN	122	Wine Chemistry and Microbiology . . . . .	4
WIN	123	Sensory Evaluation . . . . .	4
WIN	131	Introduction to Washington Wines . . . . .	4
WIN	133	Introduction to Wines of the World . . . . .	4
WIN	140	Tasting Room Management . . . . .	4
WIN	141	Wine Marketing and Sales . . . . .	4
WIN	142	Wine Business – Winery Operations . . . . .	4
WIN	143	Wine Business – Distribution Network and Suppliers . . . . .	4
WIN	145	Wine Business – Entrepreneurship and Innovation . . . . .	4
WIN	150	Winery Compliance: Taxes and Legal Issues . . . . .	2

**RELATED INSTRUCTION**

ENGL&	101	English Composition I . . . . .	5
MATH	102	College Algebra . . . . .	5
PSYC&	100	General Psychology . . . . .	5
		Visual, Literary and Performing Arts . . . . .	5
		Following can be substituted: Individuals, Cultures, and Societies (5) or The Natural World (5)	

**TOTAL PROGRAM CREDITS** 94

For more information on the wine industry program, visit South Seattle's Wine Studies page at: [southseattle.edu/programs/wine-studies](https://southseattle.edu/programs/wine-studies).

## EDUCATION AND HUMAN SERVICES

### Career and Technical Education and Instructional Design Bachelor of Applied Science Degree (BAS)

#### Technical Education

The Bachelor of Applied Science (BAS) degree in Professional Technical Education & Instructional Design (PTEID) is a 90-credit program that offers industry professionals a pathway to becoming a skilled Technical Education Teacher.

The PTEID BAS is intended for students who (1) have completed a two-year associate of applied science-transfer (AAS-T) degree or another approved associate-transfer degree and; (2) have at least two years of industry specific work experience.

The program emphasizes upper-division coursework that focuses on the complexities of the adult learner, the role of community colleges in society, and issues of equity. Students will learn how to shift their focus from teaching purely for content mastery to student-centered learning and leadership.

AAS-T degree with minimum of 25 generalized credits

#### PREREQUISITES

Courses taken a part of transfer degree can be used to meet requirements below:

ENGL& 101	English Composition I	5
Can be used to meet Electives requirement.		
MATH& 107	Math in Society	5
Following can be substituted: higher level MATH course		
Can be used to meet Electives requirement.		
PSYC& 100	General Psychology	5
Can be used to meet Electives requirement.		
Visual, Literary and Performing Arts		5
Can be used to meet Electives requirement.		
Natural World, the		5
Can be used to meet Electives requirement.		
General Education course(s)		25

#### TECHNICAL SPECIALTY COURSES

PTE	301	Workforce Instructional Methods and Materials	3
PTE	302	Course Development Design	3
PTE	310	Managing the Learning Environment	3
PTE	311	Technology in Learning	3
PTE	313	Online Teaching Methods	3
PTE	314	Professional Portfolio	3
PTE	315	Workforce Experience Practicum	10
PTE	345	Adult Learning	5
PTE	401	Student Support and Guidance	3
PTE	402	Assessment of Learning Performance	3
PTE	420	Legal Issues and Ethics in Education	3
PTE	460	Diversity and Globalism in Education	3
PTE	468	Program Management and Recruitment	3
PTE	489	Professional Development Certification	1
PTE	490	Teaching Internship	10
The 10 internships credits are taken over course of four quarters, beginning in second quarter of study Quarter 2 (1) / Quarter 3 (1) / Quarter 4 (3) Quarter 5 (5)			

PTE	495	Capstone	3
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#### GENERAL EDUCATION COURSES

CMST& 220	Public Speaking	5
ENGL& 102	Composition II	5
Visual, Literary and Performing Arts		5
Individual, Cultures and Societies		10
General Education Elective		10
Credits from AAS-T degree can be used to fulfill this requirement.		
Lab Science		5
See Advising for list of approved courses.		
General Education course(s)		20
Credits from AAS-T degree can be used to fulfill this requirement.		

#### ELECTIVES

ENGL& 101	English Composition I	5
Credits from AAS-T degree can be used to fulfill this course.		
MATH& 107	Math in Society	5
Credits from AAS-T degree can be used to fulfill this course.		
PSYC& 100	General Psychology	5
Credits from AAS-T degree can be used to fulfill this course.		
Visual, Literary and Performing Arts		5
Credits from AAS-T degree can be used to fulfill this course.		
Natural World, the		5
Credits from AAS-T degree can be used to fulfill this course.		
Elective		33
See Advising for list of approved courses.		

TOTAL PROGRAM CREDITS			180
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## HEALTH AND MEDICAL

### Home Care Aide Short-Term Certificate

#### Workforce Education

This is a full-time course designed to prepare students for success in passing the State of Washington Department of Health Home Care Aide examination, and as a step in continuing to Nursing Assistant Certified and other nursing or health-related courses. It covers the 85 hours of learning and skills objectives mandated by Washington State for Home Care Aide. It also includes context-related basic skills, such as reading and study strategies, math, and oral communication.

#### TECHNICAL SPECIALTY COURSES

AHE	135	Home Care Aide . . . . .	15
TOTAL PROGRAM CREDITS			15

### Nursing: Nursing Assistant Short-Term Certificate

#### Nursing

The Nursing Assistant program instruction emphasizes competence in skills for providing safe and accurate care. Students will acquire a basic understanding of the emotional as well as the physical needs of a patient. Upon successfully completing the program students are eligible to take the WA State Certified Exam.

#### TECHNICAL SPECIALTY COURSES

NUR	170	Na-C Basic Health Care . . . . .	12
TOTAL PROGRAM CREDITS			12

### Nutrition Science (A.A.)

This two-year program is designed for students that wish to obtain an Associate of Arts (AA) degree with an emphasis in nutrition science. Nutrition science is a cross-disciplinary field, encompassing chemistry, biology, physiology, and public health. Students in this program will learn how nutrients and food components influence growth, metabolism, health, and disease, as well as studying human behavior as it relates to food choices.

Completion of this program prepares students to transfer at the junior-level into a food science, nutrition science, or related program at a four-year college or university, as well as opening doors to entry-level positions in traditional health settings such as hospitals, private medical offices, and public health agencies, as well as integrative health and wellness organizations and companies.

### Pre-Nursing for Transfer to BSN Program (AA-DTA) (A.A.)

This transfer program is designed for students who wish to transfer to a Bachelor of Science in Nursing (BSN) program at a four-year college or university by taking their science and general education classes at South to prepare to begin their nursing classes and earn a Bachelor of Science in Nursing (BSN) degree.

Students in this pathway develop skills in applying and communicating fundamental concepts/principles of science to one's daily life, demonstrating the process of scientific inquiry, solving problems analytically, and thinking critically. In addition, students will learn verbal communication, and group communication and collaboration, and awareness of human behavior and thinking. Completion of this AA-DTA degree prepares students to complete a Bachelor of Science in Nursing (BSN) or related degree at a four-year college or university, or a Bachelor of Applied Science (BAS) degree in a healthcare field at one of the Seattle Colleges.

### Public Health (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts degree with an emphasis on Public Health. Students in this program will study methods of preserving health on a large scale through education, prevention, and community initiatives that range from local to global.

Completion of this program prepares students to transfer to a public health, health administration, or a related field at a four-year college or university, as well as opening doors to careers that concentrate on human health, illnesses, disease prevention and the environment.

## SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH

### Biology (A.S.)

This two-year program is designed for students who wish to complete an Associate of Science degree with an emphasis on Biology. Students in this program develop skills in applying and communicating fundamental concepts/principles of biology to one's daily life, demonstrating the process of scientific inquiry, and solving problems analytically.

Completion of this program opens doors to a variety of careers in sectors including research, healthcare, education, non-profit, technology and government. It also allows you to transfer at the junior level into a Biology program such as Botany, Zoology, Microbiology, Genetics, Marine Biology, Environmental Science, or a related field at a four-year college or university, or to a Bachelor of Applied Science (BAS) at one of the Seattle Colleges.

### Chemistry (A.S.)

This two-year program is designed for students who wish to complete an Associate of Science degree with an emphasis on Chemistry. Students in this program learn about matter and energy down to the molecular level. Courses build a solid foundation in general chemistry and develop students' understanding of the scientific method of experimentation, observation and analysis of results. Students will also gain hands-on experiences in the lab.

Completion of this program opens doors to a variety of academic, industry, and medical careers in research & development, manufacturing, and more across the public and private sectors. It also allows you to transfer into a chemistry or related major at a four-year college or university, or to a Bachelor of Applied Science (BAS) at one of the Seattle Colleges.

## CAD Mechanical Concentration (Computer-Aided Drafting) Certificate

### Academic Programs

This program provides training for employment in civil, architectural, and mechanical drafting positions. Instruction includes a combination of technical knowledge and skill development in areas such as orthographic projection, descriptive geometry, sections, dimensions, auxiliaries, materials and processes, presentation graphics, design models, and surveying, culminating in a comprehensive design/drafting project. Training in computer-aided design (CAD) is an integral part of the program.

### TECHNICAL SPECIALTY COURSES

INT	100	Overview of Manufacturing Processes . . . . .	3
TDR	105	Technical Employment Preparation . . . . .	1
TDR	121	Drafting Technology I . . . . .	4
TDR	123	Drafting Technology II . . . . .	4
TDR	125	Drafting Technology III . . . . .	4
TDR	126	Space Geometry . . . . .	4
TDR	129	Industrial Blueprint Reading . . . . .	3
TDR	131	Introduction to CAD 2-D . . . . .	4
TDR	133	Intermediate CAD 2-D . . . . .	4
TDR	135	AutoCAD 3-D Modeling . . . . .	4
TDR	179	CAD — Mechanical . . . . .	4
TDR	197	Internship . . . . .	5
Credit Range: 1-5/Total Required Credits: 3			
TDR	228	CAD Sheet Metal/HVAC . . . . .	4
TDR	230	CAD 3-D Parametric Solid Design I . . . . .	4
TDR	236	Design Project Management . . . . .	1
TDR	280	Geometric Dimensioning & Tolerancing . . . . .	4

### RELATED INSTRUCTION

ENGL	105	Applied Composition . . . . .	3
Admission only via instructor permission, or by passing a prerequisite test.			
ICT	103	Computer Applications I . . . . .	2
MATH	111	Applied Mathematics I . . . . .	5
MATH& 141 – Pre-Calculus I (5) and MATH& 142 – Pre-Calculus II (5) together can be substituted for MATH 111 – Applied Mathematics I (5) and MATH 112 – Applied Mathematics II (5) together			
MATH	112	Applied Mathematics II . . . . .	5
MATH& 141 – Pre-Calculus I (5) and MATH& 142 – Pre-Calculus II (5) together can be substituted for MATH 111 – Applied Mathematics I (5) and MATH 112 – Applied Mathematics II (5) together			
PSYC	240	Psychology of Human Relations . . . . .	3

TOTAL PROGRAM CREDITS

73



## Computer Technology Virtualization Short-Term Certificate

### Computing Technology

This certificate is a total of 15 credits and a supplement to the Network Administration Associate of Applied Science Degree. Qualifications: Network Administration AAS degree or equivalent degree within the last two years or have equivalent IT industry experience within the last two years.

### TECHNICAL SPECIALTY COURSES

CTN	276	Virtualization and the Cloud 1	5
CTN	286	Virtualization and the Cloud 2	5
CTN	287	Cloud Computing	5
TOTAL PROGRAM CREDITS			15

## Engineering Graphics and Design Technology Associate of Applied Science Degree (A.A.S.)

### Academic Programs

This program provides training for employment in civil, architectural and mechanical drafting positions. Instruction includes a combination of technical knowledge and skill development in areas such as orthographic projection, descriptive geometry, sections, dimensions, auxiliaries, materials and processes, presentation graphics, design models and surveying, culminating in a comprehensive design/drafting project. Training in computer-aided design (CAD) is an integral part of the program.

### TECHNICAL SPECIALTY COURSES

INT	100	Overview of Manufacturing Processes	3
MET	102	Creative Technical Problem Solving	4
TDR	105	Technical Employment Preparation	1
TDR	121	Drafting Technology I	4
TDR	123	Drafting Technology II	4
TDR	125	Drafting Technology III	4
TDR	126	Space Geometry	4
TDR	129	Industrial Blueprint Reading	3
TDR	131	Introduction to CAD 2-D	4
TDR	133	Intermediate CAD 2-D	4
TDR	135	AutoCAD 3-D Modeling	4
TDR	169	CAD – Electrical	4
TDR	179	CAD – Mechanical	4
TDR	197	Internship	5
Credit range: 1-5/Total required credits: 3			
TDR	230	CAD 3-D Parametric Solid Design I	4
TDR	231	CAD 3-D Parametric Solid Design II	4
TDR	236	Design Project Management	1
TDR	237	Design Project I	2
TDR	238	Design Project II	2
TDR	263	Applied Mechanics I	4
TDR	272	Applied Mechanics II	4

### MAJOR AREA OF STUDY

Areas of Study: Architectural, Civil, and Mechanical

Select a minimum of 16 credits from the following list of courses. Selection should be made based on faculty advisor recommendation

CET	230	Construction Tech.	3
TDR	160	Surveying/CAD Civil	5
TDR	228	CAD Sheet Metal/HVAC	4
TDR	240	Introduction to CATIA	4
TDR	241	Intermediate CATIA	4
TDR	243	Basic Tool Design	4
TDR	245	Design of Machine Elements	4
TDR	268	Architectural/Structural	4
TDR	280	Geometric Dimensioning & Tolerancing	4

### RELATED INSTRUCTION

ENGL	105	Applied Composition	3
ICT	103	Computer Applications I	2
MATH	111	Applied Mathematics I	5
MATH& 141 – Pre-Calculus I (5) and MATH& 142 – Pre-Calculus II (5) together can be substituted for MATH 111 – Applied Mathematics I (5) and MATH 112 – Applied Mathematics II (5) together			
MATH	112	Applied Mathematics II	5
MATH& 141 – Pre-Calculus I (5) and MATH& 142 – Pre-Calculus II (5) together can be substituted for MATH 111 – Applied Mathematics I (5) and MATH 112 – Applied Mathematics II (5) together			
PSYC	240	Psychology of Human Relations	3

### ELECTIVES

Students must select from courses that support their overall technical objectives.

Requires signed approval from Dean of Technology or his designee.

A minimum of 5 credits in two of the following areas:

Visual, Literary and Performing Arts	5
Individual, Cultures and Societies	5
Natural World, the	5
TOTAL PROGRAM CREDITS	110

## Engineering Graphics and Design Technology Associate of Applied Science –Transfer Degree (A.A.S.-T)

### Academic Programs

This program provides training for employment in civil, architectural and mechanical drafting positions. Instruction includes a combination of technical knowledge and skill development in areas such as orthographic projection, descriptive geometry, sections, dimensions, auxiliaries, materials and processes, presentation graphics, design models and surveying, culminating in a comprehensive design/drafting project. Training in computer-aided design (CAD) is an integral part of the program.

**TECHNICAL SPECIALTY COURSES**

INT	100	Overview of Manufacturing Processes. . . . .	3
MET	102	Creative Technical Problem Solving. . . . .	4
TDR	105	Technical Employment Preparation. . . . .	1
TDR	121	Drafting Technology I. . . . .	4
TDR	123	Drafting Technology II. . . . .	4
TDR	125	Drafting Technology III. . . . .	4
TDR	126	Space Geometry. . . . .	4
TDR	129	Industrial Blueprint Reading. . . . .	3
TDR	131	Introduction to CAD 2-D. . . . .	4
TDR	133	Intermediate CAD 2-D. . . . .	4
TDR	135	AutoCAD 3-D Modeling. . . . .	4
TDR	169	CAD – Electrical. . . . .	4
TDR	179	CAD – Mechanical. . . . .	4
TDR	197	Internship. . . . .	5
		Credit range: 1-5/Total required credits: 3	
TDR	230	CAD 3-D Parametric Solid Design I. . . . .	4
TDR	231	CAD 3-D Parametric Solid Design II. . . . .	4
TDR	236	Design Project Management. . . . .	1
TDR	237	Design Project I. . . . .	2
TDR	238	Design Project II. . . . .	2
TDR	263	Applied Mechanics I. . . . .	4
TDR	272	Applied Mechanics II. . . . .	4

**MAJOR AREA OF STUDY**

Areas of Study: Architecture, Civil, and Mechanical

Select a minimum of 16 credits from the following list of courses. Selection should be made based on faculty advisor recommendation.

CET	230	Construction Tech. . . . .	3
TDR	160	Surveying/CAD Civil. . . . .	5
TDR	228	CAD Sheet Metal/HVAC. . . . .	4
TDR	240	Introduction to CATIA. . . . .	4
TDR	241	Intermediate CATIA. . . . .	4
TDR	243	Basic Tool Design. . . . .	4
TDR	245	Design of Machine Elements. . . . .	4
TDR	268	Architectural/Structural. . . . .	4
TDR	280	Geometric Dimensioning & Tolerancing. . . . .	4

**RELATED INSTRUCTION**

ENGL&	101	English Composition I. . . . .	5
MATH&	141	Precalculus I. . . . .	5
MATH&	142	Precalculus II. . . . .	5
PSYC&	100	General Psychology. . . . .	5

**ELECTIVES**

A minimum of 5 credits in two of the following areas:

Visual, Literary and Performing Arts. . . . .	5
Individual, Cultures and Societies. . . . .	5
Natural World, the. . . . .	5
<b>TOTAL PROGRAM CREDITS</b>	<b>112</b>

## Engineering Technology Associate of Applied Science Degree (A.A.S.)

**Academic Programs**

Engineering technicians play a key role in implementing designed solutions to technical problems. These tasks are accomplished with a solid background in mathematics, physics, and applied engineering, as well as skills in problem-solving and creative thinking. Successful graduates of the engineering technology program are qualified to seek employment as engineering technicians or may transfer to a four-year college to pursue a degree in Engineering or Engineering Technology.

**TECHNICAL SPECIALTY COURSES**

ENGR	110	Engineering Orientation. . . . .	2
ENGR	142	Computer Programming. . . . .	5
ENGR&	214	Statics. . . . .	5
ENGR&	225	Mechanics of Materials. . . . .	5
ENGR	298	Special Topics. . . . .	5
		Credit range: 1-5/Total required internship credits: 4	
ENGR	299	Independent Study. . . . .	5
		Credit range: 1-5/Total required internship credits: 4	
INT	100	Overview of Manufacturing Processes. . . . .	3
TDR	126	Space Geometry. . . . .	4
TDR	131	Introduction to CAD 2-D. . . . .	4
TDR	133	Intermediate CAD 2-D. . . . .	4
TDR	236	Design Project Management. . . . .	1
TDR	237	Design Project I. . . . .	2
TDR	238	Design Project II. . . . .	2

**RELATED INSTRUCTION**

ENGL&	101	English Composition I. . . . .	5
ENGL	108	Technical Report Writing. . . . .	3
MATH&	142	Precalculus II. . . . .	5
MATH&	151	Calculus I. . . . .	5
MATH&	152	Calculus II. . . . .	5
PHYS&	221	Engineering Physics I. . . . .	5
PHYS&	222	Engineering Physics II. . . . .	5
PSYC	240	Psychology of Human Relations. . . . .	3

**ELECTIVE COURSES**

Minimum of 6 credits in the following areas:

Visual, Literary and Performing Arts. . . . .	6
Individual, Cultures and Societies. . . . .	6
<b>TOTAL PROGRAM CREDITS</b>	<b>95</b>

## Environmental Science (A.S.)

This two-year program is designed for students who wish to complete an Associate of Science degree with an emphasis on Environmental Science. Students in this program develop interdisciplinary skills related to the environment and will incorporate fundamental concepts and principles of environmental science to daily life. Students will utilize the process of scientific inquiry, apply awareness of current affairs to environmental issues, and solve problems using critical thinking.

Completion of this program opens doors to a variety of careers in sectors including research, education, health and safety, non-profit, sustainable development, sustainable business, technology, and government. It also allows students to transfer at the junior level into an Environmental Science program at a four-year college or university or continue on to a Bachelor of Applied Science (BAS) from a Washington state community college.

## Environmental Studies (A.A.)

This two-year program is designed for students who wish to complete an Associate of Science degree with an emphasis on Environmental Studies. Environmental studies students receive a foundation in the natural sciences but focus more of their studies on the social sciences, policy studies, environmental design, and the humanities. This program provides a broadly integrated understanding that includes, among others, the business, economic, social, and political facets of environmental challenges with a focus on policy, law, and sociality aspect of these challenges.

Completion of this program prepares students to transfer at the junior level to an environmental studies program or related field at a four-year college or university. This program also prepares students for careers in the non-profit sector, government agencies, environmental planning, sustainability advising, green business, environmental education, environmental journalism, and related areas.

## Integrated Pest Management Short-Term Certificate

### Landscape Horticulture

A short-term training program primarily for horticultural professionals wanting to update and expand their skill set. In the broad sense, integrated pest management pertains to all pests of our landscapes, whether they are insect, fungal, bacterial, or weed pests. Knowledge of integrated pest management principles and practices is especially beneficial to those who manage landscapes and those who consult about landscape problems. Skill at diagnosing plant problems and developing integrated strategies for managing those problems is a valuable asset, whether you are self-employed or an employee. Completing this certificate will help one prepare for the Washington State Department of Agriculture pesticide license exams.

### TECHNICAL SPECIALTY COURSES

LHO	108	Weed Identification and Management . . . . .	3
LHO	109	Integrated Pest Management . . . . .	3
LHO	210	Plant Problem Diagnostics . . . . .	4
TOTAL PROGRAM CREDITS			9

## Introduction to Green Manufacturing Short-Term Certificate

### Georgetown Campus

The Introduction to Green Manufacturing Processes is a work-training program designed to give adults training, certifications and internship experience in Green manufacturing. Graduates are trained to be competitive for entry level employment in manufacturing and the program is designed to provide a framework for instruction in the following topics.

### TECHNICAL SPECIALTY COURSES

GMF	100	Introduction to Green Manufacturing Processes . . . . .	15
TOTAL PROGRAM CREDITS			15

## IT Systems Specialist Associate of Applied Science Degree (A.A.S.)

### Technical Education Division

The IT Systems Specialist program is for students who enjoy solving PC hardware, operating systems, common applications and network problems. Students learn to diagnose, document and correct problems. Graduates can continue at South to earn the Network Administration AAS or AAS-T degree and/or can seek employment as technical support personnel in retail stores, communication companies, IT support/installation companies, education institutions, health care facilities and others.

### TECHNICAL SPECIALTY COURSES

CSC	100	Beginning Computers	5
CTN	101	Introduction to Computing Technology	5
CTN	120	Databases I	5
CTN	131	Introduction to Computer Programming	5
CTN	142	Operating Systems II	5
CTN	143	Operating Systems III	5
CTN	160	Web Production I	5
CTN	170	PC Hardware I	5
CTN	171	PC Hardware II	5
CTN	197	Computing Internship	15
Credit range: 1-15/Total internship credits required: 3			
CTN	270	Local Area Networks I	5
CTN	274	Local Area Networks III	5
CTN	277	Network Security 1	5
CTN	278	Wireless Communication I	3
CTN	295	Research and Customer Service	5

### TECHNICAL ELECTIVES

Of the 30 technical elective credits required, minimum of 10 credits must be selected from the following (or other approved computer-related coursework.)

CTN	121	Database II	5
CTN	224	Web Server Configuration and Management	5
CTN	276	Virtualization and the Cloud 1	5
CTN	281	Security+ Certification	5
CTN	282	CISCO I	5
CTN	283	CISCO II	5

### RELATED INSTRUCTION

BUS	116	Business Math/Spreadsheets	5
BUS	169	Using Computers in Business	5
ENGL	105	Applied Composition	3
ENGL	106	Technical Writing	3
PSYC	240	Psychology of Human Relations	3

### GENERAL EDUCATION ELECTIVES

Select 5 credits from one of these areas:

Visual, Literary and Performing Arts	5
Individual, Cultures and Societies	5

TOTAL PROGRAM CREDITS 105

## IT Systems Specialist Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Technical Education Division

The IT Systems Specialist program is for students who enjoy solving PC hardware, operating systems, common applications and network problems. Students learn to diagnose, document and correct problems. Graduates can continue at South to earn the Network Administration AAS or AAS-T degree and/or can seek employment as technical support personnel in retail stores, communication companies, IT support/installation companies, education institutions, health care facilities and others.

### TECHNICAL SPECIALTY COURSES

CSC	100	Beginning Computers	5
CTN	101	Introduction to Computing Technology	5
CTN	120	Databases I	5
CTN	131	Introduction to Computer Programming	5
CTN	142	Operating Systems II	5
CTN	143	Operating Systems III	5
CTN	160	Web Production I	5
CTN	170	PC Hardware I	5
CTN	171	PC Hardware II	5
CTN	197	Computing Internship	15
Credit range: 1-15/Total required internship credits: 3			
CTN	270	Local Area Networks I	5
CTN	274	Local Area Networks III	5
CTN	277	Network Security 1	5
CTN	278	Wireless Communication I	3
CTN	295	Research and Customer Service	5

### TECHNICAL ELECTIVES

Minimum of 10 credits must be selected from the following (or other approved computer-related coursework.)

CTN	121	Database II	5
CTN	224	Web Server Configuration and Management	5
CTN	276	Virtualization and the Cloud 1	5
CTN	281	Security+ Certification	5
CTN	282	CISCO I	5
CTN	283	CISCO II	5

### RELATED INSTRUCTION

ENGL&	101	English Composition I	5
MATH	102	College Algebra	5
PHYS&	114	General Physics I with Lab	5
or other Science course			
PSYC&	100	General Psychology	5

### GENERAL EDUCATION ELECTIVES

Minimum of 5 credits from one of these areas:

Visual, Literary and Performing Arts	5
Individual, Cultures and Societies	5

TOTAL PROGRAM CREDITS 111

## Kinesiology, Sports, and Exercise Science (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts degree with an emphasis in kinesiology, sports, & exercise science. Students in this program will take courses in the multidisciplinary study of human movement and function, and will develop a greater understanding of anatomy, physiology, motor function, and overall wellness. Students will also take courses on subjects such as biomechanics, pathology and nutrition.

Completion of this program prepares students to transfer at the junior-level into a kinesiology, sport medicine, exercise science, or related program at a four-year college or university. This program also opens doors for a wide range of careers, from physical therapy, sports medicine, athletic training and coaching to physical education, occupational therapy, and rehabilitation.

## Landscape Horticulture Ecological Restoration Short-Term Certificate

### Landscape Horticulture

A short-term training program primarily for horticultural professionals wanting to update and expand their skill set. In recent years, there has been an increasing number of projects involving the restoration of native vegetation and ecosystem health. This could be helpful to professional horticulturists who want to bid on public projects, create native plant landscapes for private property owners, or install native plant gardens in residential landscapes.

### TECHNICAL SPECIALTY COURSES

LHO	119	Native Plants for Northwest Landscapes . . . .	3
LHO	240	Ecological Restoration: An Introduction . . . . .	3
LHO	241	Ecological Restoration Project Planning Implemen . . . . .	3
TOTAL PROGRAM CREDITS			9

## Math (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts degree with an emphasis on Mathematics. Students in this program will learn how to use mathematical concepts to break down complicated problems into manageable pieces. Students will use creative, exploratory, and lateral thinking in problem-solving as well as strong reasoning and analytical-thinking skills through math courses ranging from basic arithmetic to differential equations.

Completion of this program opens doors to a variety of careers in sectors such as research, finance, accounting, academia and more. It also allows students to transfer at the junior level into a Mathematics program at a four-year college or university, or to a Bachelor of Applied Science (BAS) at one of the Seattle Colleges.

## Network Security Administration Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Technical Education Division

This program is for students who want to specialize in the design, implementation, security and management of networks, workstations, virtualization, and Cloud computing. Areas covered also include hardware, operating systems, databases, local and wide area networks and wireless environments. Graduates can continue at South to earn a BAS degree, seek employment as IT administrative support, start their own business, or be a support specialist in one of these in-demand technologies.

### TECHNICAL SPECIALTY COURSES

IT	115	Networking 1: Networking Fundamentals . . . .	5
IT	118	Hardware 1: Hardware Fundamentals . . . . .	5
IT	122	Installing and Configuring Windows Server . . .	5
IT	131	Linux Fundamentals . . . . .	5
IT	142	Network 2 – Interconnecting CISCO Network Device 2 . . . . .	5
IT	143	Network 3: Interconnect CISCO Network Device 3 . . . . .	8
IT	212	Introduction to Programing . . . . .	5
IT	233	Administration Windows Server – Active Directory . . . . .	5
IT	251	Security 1: Information Security Fundamentals. .	5
IT	252	Security 2: Network Security Fundamental . . .	5
IT	254	Security 3: Ethical Hacking & System Defense . . . . .	5
IT	255	Security 4: Network Forensic & Incident Response . . . . .	5
IT	276	Virtualization and Cloud Technologies . . . . .	5
IT	291	Network Security Practicum . . . . .	3



IT	295	Internship Network Security Administration . . .	2
IT	296	Certification Test PREP Net+ . . . . .	2
IT	297	Certification Test PREP Icnd 1 . . . . .	2
IT	298	Certification Test PREP Icnd 2 . . . . .	2
IT	299	Certification Test PREP Security +. . . . .	2

**RELATED INSTRUCTION**

ENGL& 101	English Composition I . . . . .	5
MATH& 146	Introduction to Statistics . . . . .	5
PSYC& 100	General Psychology. . . . .	5
Natural Science Elective. . . . .		5
Following can be substituted: Individuals, Cultures and Societies (5) or Visual, Literary and Performing Arts (5)		

TOTAL PROGRAM CREDITS	101
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**Physics and Astronomy (A.A.)**

This program is designed for students who wish to complete an Associate of Science (AS) degree with an emphasis in physics and astronomy. In this program students will explore Newton's Laws of Motion, conservation of energy and momentum, and other principles that help explain the physical world. Students will develop strong skills in problem solving, analytical abilities, mathematical modeling, design and interpretation of experiments, research experience, and communication skills.

Completion of this program prepares students to transfer at the junior level into a physics, astronomy, applied physics, engineering, computer science or a related program at a four-year college or university.

**Sustainable Building Science Technology Bachelor of Applied Science Degree (BAS)****Technical Education Division**

The Bachelor of Applied Science (BAS) in Sustainable Building Science Technology (SBST) program will prepare you to apply expertise and systems knowledge to support highly technical building operations. The SBST degree, which builds on your prior education and work experience, positions you to launch a career where you understand building functions and finance in order to manage structures that are healthier and more durable, efficient, economical, and sustainable.

This degree program offers you a pathway to becoming a skilled Building Science Professional. SBST emphasizes upper-division coursework that focuses on the complexities of building science, energy codes, building codes, and facility management.

**AAS-T DEGREE WITH MINIMUM OF 25 GENERALIZED CREDITS****PREREQUISITES**

Courses taken a part of transfer degree can be used to meet requirements below:

ENGL& 101	English Composition I . . . . .	5
Can be used to meet Electives requirement.		
MATH& 107	Math in Society . . . . .	5
Following can be substituted: higher level MATH course		
Can be used to meet Electives requirement.		
PSYC& 100	General Psychology. . . . .	5
Can be used to meet Electives requirement.		
Visual, Literary and Performing Arts. . . . .		10
Can be used to meet Electives requirement.		
General Education course(s). . . . .		25

**TECHNICAL SPECIALTY COURSES**

SBST 301	Building . . . . .	3
SBST 302	Building Components and Systems . . . . .	2
SBST 314	Professional Portfolio . . . . .	2
SBST 315	Work Experience Practicum . . . . .	10
SBST 321	Building and Energy Codes in Washington State . . . . .	2
SBST 322	Energy Analysis and Auditing . . . . .	3
SBST 325	Sustainable Building Science Technology Internsh . . . . .	9
The 9 internships credits are taken over course of four quarters, beginning in second quarter of study		
Quarter 2 (1) / Quarter 3 (1) / Quarter 4 (3) / Quarter 5 (4)		
SBST 331	Financing Energy Efficiency and Renewable Energy . . . . .	2
SBST 333	Building Controls for Energy Efficiency. . . . .	4
SBST 401	Utility Rates Regulations and Economics. . . . .	2
SBST 402	Lighting . . . . .	3
SBST 421	Energy Policy . . . . .	3
SBST 422	Facility Management . . . . .	4
SBST 431	Professional Communication . . . . .	4
SBST 432	Fiscal Management for Facility Managers . . . . .	3
SBST 489	Sustainable Building Science Technology Capstone . . . . .	4

**GENERAL EDUCATION**

BUS 210	Business and Economic Statistics . . . . .	5
CMST& 220	Public Speaking . . . . .	5
ENGL& 102	Composition II . . . . .	5
PHYS& 100	Physics for Non-Science Majors . . . . .	5
Visual, Literary and Performing Arts. . . . .		5
Individual, Cultures and Societies . . . . .		5
General Education course(s). . . . .		25
Credits from AAS-T degree can be used to fulfill this requirement.		

**ELECTIVES**

ENGL& 101	English Composition I . . . . .	5
	Credits from AAS-T degree can be used to fulfill this course.	
MATH& 107	Math in Society . . . . .	5
	Credits from AAS-T degree can be used to fulfill this course.	
PSYC& 100	General Psychology. . . . .	5
	Credits from AAS-T degree can be used to fulfill this course.	
Visual, Literary and Performing Arts.	. . . . .	10
	Credits from AAS-T degree can be used to fulfill this course.	
Elective	. . . . .	35
	See Advising for list of approved courses.	
<b>TOTAL PROGRAM CREDITS</b>		<b>180</b>

**Urban Forestry Short-Term Certificate****Landscape Horticulture**

A short-term training program primarily for horticultural professionals wanting to update and expand their skill set. Urban forestry is about the cultivation and maintenance of trees in urban areas. This includes individual landscape trees, street trees, park trees, and trees in natural areas. Knowledge in urban forestry can be valuable to those who work in parks, public gardens, residential landscape design/construction/maintenance, commercial landscape management, and street tree maintenance. Completing this certificate will help one prepare for the International Society of Arboriculture's "Certified Arborist" exam.

**TECHNICAL SPECIALTY COURSES**

LHO 140	Introduction to Arboriculture. . . . .	4
LHO 155	Pruning . . . . .	4
LHO 210	Plant Problem Diagnostics. . . . .	4
<b>TOTAL PROGRAM CREDITS</b>		<b>9</b>

**Web Assistant Certificate****Technical Education Division**

This new program will specialize in underlying aspects of effective web design and development. The program prepares students to design and create websites that display appropriately on all devices and platforms. The program prepares students to integrate databases, social media, and content management systems.

A student can progress from a one year Web Assistant certificate to a two year Web Development Associate of Applied Science Degree (AAS) degree or Web Development Associate of Applied Science-T Degree (AAS-T).

**TECHNICAL SPECIALTY COURSES**

ART 210	Digital & Graphic Art – Photoshop + Illustrator .	5
CSC 100	Beginning Computers . . . . .	5
CTN 101	Introduction to Computing Technology. . . . .	5
CTN 120	Databases I . . . . .	5
CTN 121	Database II . . . . .	5
CTN 131	Introduction to Computer Programming. . . . .	5
CTN 160	Web Production I. . . . .	5
CTN 161	Web Production II . . . . .	5
CTN 165	Usability Design . . . . .	5

**RELATED INSTRUCTION**

ENGL 105	Applied Composition . . . . .	3
	Following can be substituted:	
	ENGL& 101 – English Composition (5)	
PHIL& 120	Symbolic Logic . . . . .	5
	Following can be substituted:	
	MATH 102 – Algebra (5) or Higher MATH course	
PSYC 240	Psychology of Human Relations . . . . .	3
	Following can be substituted:	
	PSYC& 100 – General Psychology (5)	

<b>TOTAL PROGRAM CREDITS</b>	<b>56-60</b>
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**Web Development Associate of Applied Science Degree (A.A.S.)****Technical Education Division**

This new program will specialize in underlying aspects of effective web design and development. The program prepares students to design and create websites that display appropriately on all devices and platforms. The program prepares students to integrate databases, social media, and content management systems.

A student can progress from a one-year Web Assistant certificate to a two-year Web Development Associate of Applied Science Degree (AAS) degree or Web Development Associate of Applied Science-T Degree (AAS-T).

**TECHNICAL SPECIALTY COURSES**

ART 210	Digital & Graphic Art – Photoshop + Illustrator	5
CSC 100	Beginning Computers . . . . .	5
CTN 101	Introduction to Computing Technology. . . . .	5
CTN 120	Databases I . . . . .	5
CTN 121	Database II . . . . .	5
CTN 131	Introduction to Computer Programming. . . . .	5
CTN 160	Web Production I. . . . .	5
CTN 161	Web Production II . . . . .	5
CTN 165	Usability Design . . . . .	5
CTN 173	Content Management Systems (CMS) Wordpress . . . . .	5
CTN 197	Computing Internship . . . . .	3
	Credit range: 1-15/Total required internship credits: 3	
CTN 202	Web Scripting. . . . .	5
CTN 203	PHP/MySQL . . . . .	5

CTN	224	Web Server Configuration and Management	.5
CTN	230	Licensing, Copyright & Law	.5
CTN	269	Capstone	.5
CTN	295	Research and Customer Service	.5

**TECHNICAL SPECIALTY ELECTIVE**

Select 5 credits from one of the following areas: (see advisor)

CSC course	.5
CTN Course	.5

**RELATED INSTRUCTION**

ENGL	105	Applied Composition	.3
ENGL	106	Technical Writing	.3
PHIL&	120	Symbolic Logic	.5
PSYC	240	Psychology of Human Relations	.3

**GENERAL EDUCATION ELECTIVE**

Choose minimum of 5 credits from any of the following areas:

Visual, Literary and Performing Arts	.5
Individual, Cultures and Societies	.5
Natural World, the	.5
Science & Mathematics	.5
<b>TOTAL PROGRAM CREDITS</b>	<b>107</b>

This degree incorporates the one-year Web Assistant certificate (both are earned).

## Web Development Associate of Applied Science–Transfer Degree (A.A.S.-T)

**Technical Education Division**

This new program will specialize in underlying aspects of effective web design and development. The program prepares students to design and create websites that display appropriately on all devices and platforms. The program prepares students to integrate databases, social media, and content management systems.

A student can progress from a one-year Web Assistant certificate to a two-year Web Development Associate of Applied Science Degree (AAS) degree or Web Development Associate of Applied Science-T Degree (AAS-T).

**TECHNICAL SPECIALTY COURSES**

ART	210	Digital & Graphic Art – Photoshop + Illustrator	.5
CSC	100	Beginning Computers	.5
CTN	101	Introduction to Computing Technology	.5
CTN	120	Databases I	.5
CTN	121	Database II	.5
CTN	131	Introduction to Computer Programming	.5
CTN	160	Web Production I	.5
CTN	161	Web Production II	.5
CTN	165	Usability Design	.5
CTN	173	Content Management Systems (CMS) Wordpress	.5
CTN	197	Computing Internship	.3
Credit range: 1-15/Total Required Credits: 3			
CTN	202	Web Scripting	.5

CTN	203	PHP/MySQL	.5
CTN	224	Web Server Configuration and Management	.5
CTN	230	Licensing, Copyright & Law	.5
CTN	269	Capstone	.5
CTN	295	Research and Customer Service	.5

**TECHNICAL SPECIALTY ELECTIVE**

Select 5 credits from one of the following: (see advisor)

CSC course	.5
CTN Course	.5

**RELATED INSTRUCTION**

ENGL&	101	English Composition I	.5
PHIL&	120	Symbolic Logic	.5

Following can be substituted:

MATH 102 – College Algebra (5) or higher MATH course

PSYC&	100	General Psychology	.5
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**GENERAL EDUCATION**

Choose minimum of 5 credits from any of the following areas:

Visual, Literary and Performing Arts	.5
Individual, Cultures and Societies	.5
Natural World, the	.5
Science & Mathematics	.5
<b>TOTAL PROGRAM CREDITS</b>	<b>108</b>

This degree incorporates the 1-year Web Assistant certificate (both are earned).

## SKILLED TRADES AND TECHNICAL TRAINING

### Aeronautical Technology Associate of Applied Science Degree (A.A.S.)

#### Aviation Maintenance Division

South offers both certificate and degree programs in Aviation Maintenance and Aeronautical Technology. Check with the department for short-term certificate offerings relating to General Aviation for Composite and Aviation Composites Lab.

The Aviation Maintenance certificate program offers a preparatory program for airframe and powerplant (A&P) mechanics. The two-year (8 quarters) curriculum provides training on current aviation airframes and powerplants.

Students who successfully complete the curriculum are awarded a certificate of completion qualifying them to take the Federal Aviation Administration examination for the airframe and powerplant mechanic license.

Either the airframe or the powerplant component may be taken separately. Completion of both components is highly recommended for increased employment opportunities. The aviation maintenance airframe and powerplant curriculum is approved by the F.A.A. (Air Agency Certificate # HQ6T596N).

The A.A.S. and A.A.S.-T degree programs provide graduates of recognized airframe and powerplant programs and experienced F.A.A.-certified mechanics the opportunity to expand their knowledge and training, and earn an Associate of Applied Science degree.

Completion of Certificate Requirements in Aviation Maintenance Airframe & Powerplant Programs: 147 credits

#### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

#### TECHNICAL SPECIALTY COURSES

AMT	111	Basic Science for Aviation . . . . .	17
AMT	112	Basic Electricity for Aviation . . . . .	17
AMT	113	Airframe Structure and Repair . . . . .	17
AMT	133	Powerplant Theory and Maintenance . . . . .	17
AMT	214	Airframe Systems . . . . .	17
AMT	215	Advanced Airframe . . . . .	17
AMT	234	Powerplant Systems and Components . . . . .	17
AMT	235	Advanced Powerplant . . . . .	17

#### RELATED INSTRUCTION

ENGL	107	Applied Composition . . . . .	5
PSYC	240	Psychology of Human Relations . . . . .	3

TOTAL PROGRAM CREDITS 144

### Aeronautical Technology Associate of Applied Science–Transfer Degree (A.A.S.-T)

#### Aviation Maintenance Division

South offers both certificate and degree programs in Aviation Maintenance and Aeronautical Technology. Check with the department for short-term certificate offerings relating to General Aviation for Composite and Aviation Composites Lab.

The Aviation Maintenance certificate program offers a preparatory program in airframe and powerplant (A&P) mechanics. The two-year (8 quarters) curriculum provides training on current aviation airframes and powerplants.

Students who successfully complete the curriculum are awarded a certificate of completion qualifying them to take the Federal Aviation Administration examination for the airframe and powerplant mechanic license.

Either the airframe or the powerplant component may be taken separately. Completion of both components is highly recommended for increased employment opportunities. Students may qualify for advanced program placement if they provide acceptable documentation from any F.A.A. certified airframe and powerplant program and meet the course challenge requirements.

The aviation maintenance airframe and powerplant curriculum is approved by the F.A.A. (Air Agency Certificate #HQ6T596N).

The A.A.S. and A.A.S.-T degree programs provide graduates of recognized airframe and powerplant programs and experienced F.A.A.-certified mechanics the opportunity to expand their knowledge and training, and earn an Associate of Applied Science degree.

#### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to assure language and computational skills are sufficient to assure program success.

Special requirements for admission:

Satisfactory completion of a minimum of 240 prescribed clock-hours of instruction per quarter and a 2.0 minimum grade point average (70%) on each class assignment and exam.

#### TECHNICAL SPECIALTY COURSES

AMT	111	Basic Science for Aviation . . . . .	17
AMT	112	Basic Electricity for Aviation . . . . .	17
AMT	113	Airframe Structure and Repair . . . . .	17
AMT	133	Powerplant Theory and Maintenance . . . . .	17
AMT	214	Airframe Systems . . . . .	17
AMT	215	Advanced Airframe . . . . .	17
AMT	234	Powerplant Systems and Components . . . . .	17
AMT	235	Advanced Powerplant . . . . .	17

**RELATED INSTRUCTION**

ENGL& 101	English Composition I . . . . .	5
MATH& 107	Math in Society . . . . .	5
	Following can be substituted:	
	Equivalent or higher level MATH course	
PSYC& 100	General Psychology. . . . .	5
	Following can be substituted:	
	SOC& 101 – Introduction to Sociology (5) or higher level PSYC or SOC course	
Natural World, the	. . . . .	5
	Following can be substituted:	
	Visual, Literary, and Performing Arts course	
TOTAL PROGRAM CREDITS		156

## Aeronautical Technology: Aviation Airframe Mechanic Certificate

**Aviation Maintenance Division**

South offers both certificate and degree programs in Aviation Maintenance and Aeronautical Technology. Check with the department for short-term certificate offerings relating to General Aviation for Composite and Aviation Composites Lab.

The Aviation Maintenance certificate program offers a preparatory program in airframe and powerplant (A&P) mechanics. The aviation maintenance airframe and powerplant curriculum is approved by the F.A.A. (Air Agency Certificate #HQ6T596N). The two-year (8 quarters) curriculum provides training on current aviation airframes and powerplants.

Students who successfully complete the curriculum are awarded a certificate of completion qualifying them to take the Federal Aviation Administration examination for the airframe and powerplant mechanic license.

Either the airframe or the powerplant component may be taken separately. Completion of both components is highly recommended for increased employment opportunities.

The A.A.S. and A.A.S.-T degree programs provide graduates of recognized airframe and powerplant programs and experienced F.A.A.-certified mechanics the opportunity to expand their knowledge and training, and earn an Associate of Applied Science degree.

**REQUIREMENTS**

Satisfactory completion of a minimum of 240 prescribed clock-hours of instruction per quarter and a minimum 2.0 grade point average (70%) on each class assignment.

**PREREQUISITES**

Students must meet with an advisor for entry into this program. A placement test is required to assure language and computational skills are sufficient to assure program success.

**TECHNICAL SPECIALTY COURSES**

AMT	111	Basic Science for Aviation . . . . .	17
AMT	112	Basic Electricity for Aviation . . . . .	17
AMT	113	Airframe Structure and Repair . . . . .	17
AMT	214	Airframe Systems . . . . .	17
AMT	215	Advanced Airframe . . . . .	17

**RELATED INSTRUCTION**

ENGL	105	Applied Composition . . . . .	3
ENGL	106	Technical Writing. . . . .	3
ICT	103	Computer Applications I . . . . .	2
PSYC	240	Psychology of Human Relations . . . . .	3
TOTAL PROGRAM CREDITS			96

## Aeronautical Technology: Aviation Maintenance Airframe & Powerplant Certificate

**Aviation Maintenance Division**

South offers both certificate and degree programs in Aviation Maintenance and Aeronautical Technology. Check with the department for short-term certificate offerings relating to General Aviation for Composite and Aviation Composites Lab.

The Aviation Maintenance certificate program offers a preparatory program in airframe and powerplant (A&P) mechanics. The aviation maintenance airframe and powerplant curriculum is approved by the F.A.A. (Air Agency Certificate # HQ6T596N). The two-year (8 quarters) curriculum provides training on current aviation airframes and powerplants.

Students who successfully complete the curriculum are awarded a certificate of completion qualifying them to take the Federal Aviation Administration examination for the airframe and powerplant mechanic license.

Either the airframe or the powerplant component may be taken separately. Completion of both components is highly recommended for increased employment opportunities.

The A.A.S. and A.A.S.-T degree programs provide graduates of recognized airframe and powerplant programs and experienced F.A.A.-certified mechanics the opportunity to expand their knowledge and training, and earn an Associate of Applied Science degree.

**PREREQUISITES**

Students must meet with an advisor for entry into this program. A placement test is required to assure language and computational skills are sufficient to assure program success.

**REQUIREMENTS**

Satisfactory completion of a minimum of 240 prescribed clock-hours of instruction per quarter and a minimum 2.0 grade point average (70%) on each class assignment.



**TECHNICAL SPECIALTY COURSES**

AMT	111	Basic Science for Aviation . . . . .	17
AMT	112	Basic Electricity for Aviation . . . . .	17
AMT	113	Airframe Structure and Repair . . . . .	17
AMT	133	Powerplant Theory and Maintenance . . . . .	17
AMT	214	Airframe Systems . . . . .	17
AMT	215	Advanced Airframe . . . . .	17
AMT	234	Powerplant Systems and Components . . . . .	17
AMT	235	Advanced Powerplant . . . . .	17

**RELATED INSTRUCTION**

ENGL	105	Applied Composition . . . . .	3
ENGL	106	Technical Writing. . . . .	3
ICT	103	Computer Applications I . . . . .	2
PSYC	240	Psychology of Human Relations . . . . .	3

TOTAL PROGRAM CREDITS			147
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## Aeronautical Technology: Aviation Powerplant Mechanic Certificate

**Aviation Maintenance Division**

South offers both certificate and degree programs in Aviation Maintenance and Aeronautical Technology. Check with the department for short-term certificate offerings relating to General Aviation for Composite and Aviation Composites Lab.

The Aviation Maintenance certificate program offers a preparatory program in airframe and powerplant (A&P) mechanics. The aviation maintenance airframe and powerplant curriculum is approved by the F.A.A. (Air Agency Certificate # HQ6T596N). The two-year (8 quarters) curriculum provides training on current aviation airframes and powerplants.

Students who successfully complete the curriculum are awarded a certificate of completion qualifying them to take the Federal Aviation Administration examination for the airframe and powerplant mechanic licenses.

Either the airframe or the powerplant component may be taken separately. Completion of both components is highly recommended for increased employment opportunities.

The A.A.S. and A.A.S.-T degree programs provide graduates of recognized airframe and powerplant programs and experienced F.A.A.-certified mechanics the opportunity to expand their knowledge and training, and earn an Associate of Applied Science degree.

**REQUIREMENTS**

Satisfactory completion of a minimum of 240 prescribed clock-hours of instruction per quarter and a minimum 2.0 grade point average (70%) on each class assignment.

**PREREQUISITES**

Students must meet with an advisor for entry into this program. A placement test is required to assure language and computational skills are sufficient to assure program success.

**TECHNICAL SPECIALTY COURSES**

AMT	111	Basic Science for Aviation . . . . .	17
AMT	112	Basic Electricity for Aviation . . . . .	17
AMT	133	Powerplant Theory and Maintenance . . . . .	17
AMT	234	Powerplant Systems and Components . . . . .	17
AMT	235	Advanced Powerplant . . . . .	17

**RELATED INSTRUCTION**

ENGL	105	Applied Composition . . . . .	3
ENGL	106	Technical Writing. . . . .	3
ICT	103	Computer Applications I . . . . .	2
PSYC	240	Psychology of Human Relations . . . . .	3

TOTAL PROGRAM CREDITS			96
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## Aerospace Composite Technician Certificate

**Composites Technology**

The Aerospace Composite Technician Program trains individuals in the knowledge and skills necessary for skilled entry-level positions in the areas of fabrication, assembly and repair of mixed and composite materials. Potential employment sectors include aerospace, marine, ground transportation, construction, energy, sporting equipment and medical devices. It consists of two short-term technical certificates (General Aviation, and Composite Aviation) and related instruction courses to receive a Certificate of Proficiency.

**REQUIREMENTS**

Satisfactory completion of a minimum of 240 prescribed clock-hours of instruction per quarter and a minimum 2.0 grade point average (70%) on each class assignment.

**PREREQUISITES**

Students must meet with an advisor for entry into this program. A placement test is required to assure language and computational skills are sufficient to assure program success.

**TECHNICAL SPECIALTY COURSES**

ACM	101	Intro to Aviation Industrial Hygiene . . . . .	3
ACM	102	Measurement and Drawings – Aviation . . . . .	3
ACM	103	Materials: Properties, Choice and Application . . . . .	6
ACM	104	Composites Lab a – General Aviation . . . . .	6
ACM	111	Composite Fabrication & Tooling . . . . .	4
ACM	112	Composite Inspection & Repair . . . . .	2
ACM	114	Composite Lab B – Advanced Composites. . . . .	9
ACM	198	Capstone A – Aerospace Comp Tech. . . . .	1
ACM	199	Capstone B – Aerospace Comp Tech. . . . .	2

**RELATED INSTRUCTION**

College transfer or equivalent courses may be substituted.

ENGL	105	Applied Composition . . . . .	3
MATH	111	Applied Mathematics I. . . . .	5
MATH	112	Applied Mathematics II . . . . .	5
PSYC	240	Psychology of Human Relations . . . . .	3

TOTAL PROGRAM CREDITS			51
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## Airframe & Powerplant Seminar Short-Term Certificate

### Aviation Maintenance Division

This intensive seminar is for those with an approved 8610-2 FAA rating application. It provides a review of General, Airframe and Powerplant sections of the written, oral and practical FAA-licensing exams with special focus on those areas of civilian aviation not typically encountered during military service. It provides the student with the skills, knowledge and abilities to pursue a career as an Aviation Maintenance Technician.

### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

AMT	295	Airframe & Powerplant Master Class. . . . .	16
AMT	296	Amt Professional Portfolio . . . . .	2
TOTAL PROGRAM CREDITS			18

## Automotive Technology Associate of Applied Science Degree (A.A.S.)

### Automotive Technology Training Center

The Automotive Technology program provides students with training in the automotive repair industry, including maintaining, diagnosing and repairing all kinds of automobiles. Eighty to ninety percent of our students go to work at independent repair shops or dealerships around the Puget Sound area, and some have opened their own shops. The A.A.S-T provides skills in leadership and communication as well as automotive technology.

The program's advisory committee includes industry professionals who provide insight into industry trends, allowing students to learn what will be expected of them in the workplace. Students also have the opportunity to study towards ASE certification, increasing their employability. The Automotive Program is a NATEF/ASE certified training program. All of the instructors are ASE master certified and have over 80 years combined industry experience. For more information, come visit one of the instructors.

In addition to tuition, there are other costs to participate in the program including books, coveralls, hard toed shoes and a minimum of \$300 in tools.

### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

AUT	100	Introduction to Electricity . . . . .	6
AUT	102	Advanced Electrical Systems . . . . .	4
AUT	104	Automotive Electronics . . . . .	3
AUT	106	Basic Power Accessories . . . . .	3
AUT	112	Manual Transaxles and Clutches . . . . .	3
AUT	114	Manual Transmissions, Transfer Cases & Drive Axl . . . . .	3
AUT	116	Air Conditioning and Heating . . . . .	6
AUT	118	Automatic Transmission Diagnosis and Service . . . . .	4
AUT	120	Advanced Automatic Transmission Service . . . . .	6
AUT	122	Steering and Suspension . . . . .	4
AUT	124	Tires and Wheel Alignment . . . . .	4
AUT	126	Basic Brake Systems . . . . .	3
AUT	127	Advanced Brake Systems . . . . .	4
AUT	128	Automotive Engine Diagnose/Remove and Replace. . . . .	4
AUT	130	Automotive Engine Rebuild . . . . .	8
AUT	134	Introduction to Engine Performance. . . . .	3
AUT	138	Advanced Drivability and Fuel Systems . . . . .	4
AUT	140	Engine Computers . . . . .	4
AUT	142	Emission Controls and Diagnostic Test Equipment . . . . .	6
MVM	100	Introduction to Automotive Technology I . . . . .	3
MVM	102	Introduction to Automotive Technology II . . . . .	6

### RELATED INSTRUCTION

ENGL	107	Applied Composition . . . . .	5
MATH	110	Applied Math for Technicians . . . . .	3
Following can be substituted:			
MATH 102 – College Algebra (5) or MATH& 141 – PreCalculus I (5) or MATH& 142 – PreCalculus II (5) or any other MATH course with MATH 098 as a prerequisite			
Psychology or Sociology		course. . . . .	3
Following can be substituted:			
3 credit class: PSYC 240 – Psychology of Human Relations or 5 credits classes: Psychology courses: PSYC& 100, PSYC 120, PSYC 160, PSYC& 200, PSYC 207, PSYC 210, PSYC& 220, PSYC 222, PSYC 230, PSYC 245, PSYC 250 or Sociology courses: SOC& 101, SOC 230, SOC 245, SOC 253 Course taken must be college transferable.			

TOTAL PROGRAM CREDITS			104
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When the AAS sequence is followed, student will have achieved NATEF GST Certification, NATEF Minor Certification, and NATEF Major Certification as well.

## Automotive Technology Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Automotive Technology Training Center

The Automotive Technology program provides students with training in the automotive repair industry, including maintaining, diagnosing and repairing all kinds of automobiles. Eighty to ninety percent of our students go to work at independent repair shops or dealerships around the Puget Sound area, and some have opened their own shops. The A.A.S.-T provides skills in leadership and communication as well as automotive technology.

The program's advisory committee includes industry professionals who provide insight into industry trends, allowing students to learn what will be expected of them in the workplace. Students also have the opportunity to study towards ASE certification, increasing their employability. The Automotive Program is a NATEF/ASE certified training program. All of the instructors are ASE master certified and have over 80 years combined industry experience. For more information, come visit one of the instructors.

In addition to tuition, there are other costs to participate in the program including books, coveralls, hard toed shoes and a minimum of \$300.00 in tools.

### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

AUT	100	Introduction to Electricity . . . . .	6
AUT	102	Advanced Electrical Systems . . . . .	4
AUT	104	Automotive Electronics . . . . .	3
AUT	106	Basic Power Accessories . . . . .	3
AUT	112	Manual Transaxles and Clutches . . . . .	3
AUT	114	Manual Transmissions, Transfer Cases & Drive Axl . . . . .	3
AUT	116	Air Conditioning and Heating . . . . .	6
AUT	118	Automatic Transmission Diagnosis and Service .	4
AUT	120	Advanced Automatic Transmission Service . .	6
AUT	122	Steering and Suspension . . . . .	4
AUT	124	Tires and Wheel Alignment . . . . .	4
AUT	126	Basic Brake Systems . . . . .	3
AUT	127	Advanced Brake Systems . . . . .	4
AUT	128	Automotive Engine Diagnose/Remove and Replace . . . . .	4
AUT	130	Automotive Engine Rebuild . . . . .	8
AUT	134	Introduction to Engine Performance . . . . .	3
AUT	138	Advanced Drivability and Fuel Systems . . . .	4
AUT	140	Engine Computers . . . . .	4
AUT	142	Emission Controls and Diagnostic Test Equipment . . . . .	6
MVM	100	Introduction to Automotive Technology I . . . .	3
MVM	102	Introduction to Automotive Technology II . . . .	6

### RELATED INSTRUCTION

ENGL& 101	English Composition I . . . . .	5
MATH& 107	Math in Society . . . . .	5

Following can be substituted:

Any higher level college transferable MATH course.

See Advising for list of approved courses.

PSYC& 100	General Psychology . . . . .	5
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Following can be substituted:

PSYC& 200 – Lifespan Psychology (5) or

Any PSYC course which is college transferable.

See Advising for list of approved courses.

Elective	. . . . .	5
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Following can be substituted:

Visual, Literary, and Performing Arts (5) or

Individuals, Cultures, and Societies course (5) or

the Natural World course (5)

TOTAL PROGRAM CREDITS	113
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When the AAS sequence is followed, students will have achieved NATEF GST Certification, NATEF Minor Certification and NATEF Major Certification as well.

## Certificate in Automatic Transmission/Transaxle Short-Term Certificate

### Automotive Technology Training Center

Certificate covers disassemble, clean, inspect, overhaul (this will include replacement of bands, clutches, bushings, seals and various other components to make the transmission serviceable); and reassemble of automatic transmission. In addition the function and construction of each component, as well as their diagnosis and service procedures will be covered. Instruction in safety, environmental awareness, human relations and leadership are taught as an integral part of this unit of study.

### TECHNICAL SPECIALTY COURSES

AUT	118	Automatic Transmission Diagnosis and Service .	4
AUT	120	Advanced Automatic Transmission Service . .	6

TOTAL PROGRAM CREDITS	10
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## Certificate in Brakes Short-Term Certificate

### Automotive Technology Training Center

Certificate covers brake theory, diagnosing brake problems, master cylinders, wheel cylinders, hydraulic valves, brake hoses, brake lines, brake shoes, brake drums, parking brakes as well as removal and installation of brakes from vehicles. In addition, the function and construction of each component, and their diagnosis and service procedures will be covered. Instruction in safety, environmental awareness, human relations and leadership are taught as an integral part of this unit.

**TECHNICAL SPECIALTY COURSES**

AUT	126	Basic Brake Systems . . . . .	3
AUT	127	Advanced Brake Systems . . . . .	4
TOTAL PROGRAM CREDITS			7

## Certificate in Electrical/Electronic Systems Short-Term Certificate

**Automotive Technology Training Center**

Certificate covers safety, electrical theory, and types of current, types of circuits, semiconductors, magnetism, EMI suppression, circuit protection, reading electrical schematics, circuit defects and using test equipment. Components covered are starting systems, charging systems, as well as removal and installation of electrical components from vehicles. In addition the function and construction of each component, and their diagnosis and service procedures will be covered. Instruction in safety, environmental awareness, human relations and leadership are taught as an integral part of this unit.

**TECHNICAL SPECIALTY COURSES**

AUT	102	Advanced Electrical Systems . . . . .	4
AUT	104	Automotive Electronics . . . . .	3
AUT	106	Basic Power Accessories . . . . .	3
TOTAL PROGRAM CREDITS			10

## Certificate in Engine Performance Short-Term Certificate

**Automotive Technology Training Center**

Certificate covers gasoline ignition and fuel systems. Included are distributor waste spark and coil on plug ignition systems also fuel pumps both electric and mechanical, fuel injection throttle body, port fuel sequential and gasoline direct injection systems. Certificate also covers the automotive engine computer, it's multiple power and ground supplies, and how these affect the running of the vehicle. It covers the inputs and outputs of the PCM, how each contributes to the running of the engine, and how to diagnose each one.

**TECHNICAL SPECIALTY COURSES**

AUT	138	Advanced Drivability and Fuel Systems . . . . .	4
AUT	140	Engine Computers . . . . .	4
AUT	142	Emission Controls and Diagnostic Test Equipment . . . . .	6
TOTAL PROGRAM CREDITS			16

## Certificate in Engine Repair Short-Term Certificate

**Automotive Technology Training Center**

Certificate covers Contents engine theory, diagnosing engine problems, engine lubrication, cooling systems, and removal and installation of engines from vehicles. In addition the function and construction of each component, and their diagnosis and service procedures will be covered. Instruction in safety, environmental awareness, human relations and leadership are taught as an integral part of this unit. Other topics are automotive drivability theory, diagnosing drivability problems, as well as removal, repair and installation of drivability components from vehicles. In addition, the function and construction of each component, as well as their diagnosis and service procedures will be covered. Instruction in safety, environmental awareness, human relations and leadership are taught as an integral part of this unit of study

**TECHNICAL SPECIALTY COURSES**

AUT	128	Automotive Engine Diagnose/Remove and Replace . . . . .	4
AUT	130	Automotive Engine Rebuild . . . . .	8
AUT	134	Introduction to Engine Performance . . . . .	3
TOTAL PROGRAM CREDITS			15

## Certificate in Heating and Air Conditioning Short-Term Certificate

**Automotive Technology Training Center**

Certificate covers basic principles involving air conditioning and heating systems; troubleshooting and diagnosing of air conditioning and heating systems; removal and reinstalling of air conditioning and heating components in vehicles. In addition, the function and construction of each component, as well as their diagnosis and service procedures will be covered. Instruction in safety, environmental awareness, human relations and leadership are taught as an integral part of this unit.

**TECHNICAL SPECIALTY COURSES**

AUT	116	Air Conditioning and Heating . . . . .	6
TOTAL PROGRAM CREDITS			6

## Certificate in Manual Drive Train and Axles Short-Term Certificate

### Automotive Technology Training Center

Certificate covers power flow and principles involving manual transmissions, transfer cases and drive axles; troubleshooting and diagnosing manual transmissions, transfer cases and drive axles; removal of manual transmission, transfer cases and drive axles from vehicle; disassemble, clean, inspect, overhaul and reassemble of manual transmission, transfer cases and drive axles; reinstall manual transmission, transfer case and drive axle in vehicle. In addition the function and construction of each component, as well as their diagnosis and service procedures will be covered. Instruction in safety, environmental awareness, human relations and leadership are taught as an integral part of this unit of study.

#### TECHNICAL SPECIALTY COURSES

AUT	112	Manual Transaxles and Clutches . . . . .	3
AUT	114	Manual Transmissions, Transfer Cases & Drive Axl . . . . .	3
TOTAL PROGRAM CREDITS			6

## Certificate in Steering and Suspension Short-Term Certificate

### Automotive Technology Training Center

Certificate covers steering and suspension theory, diagnosing steering and suspension problems, chassis design, wheel bearings, steering and suspension components, as well as removal, repair and installation of steering and suspension components from vehicles. In addition the function and construction of each component, and their diagnosis and service procedures will be covered. Instruction in safety, environmental awareness, human relations and leadership are taught as an integral part of this unit.

#### TECHNICAL SPECIALTY COURSES

AUT	122	Steering and Suspension . . . . .	4
AUT	124	Tires and Wheel Alignment . . . . .	4
TOTAL PROGRAM CREDITS			8

## Composite Aviation Short-Term Certificate

### Georgetown Campus

Prepares technicians to fabricate, assemble and repair composite materials on aircraft at an entry level.

#### TECHNICAL SPECIALTY COURSES

ACM	111	Composite Fabrication & Tooling . . . . .	4
ACM	112	Composite Inspection & Repair . . . . .	2
ACM	114	Composite Lab B – Advanced Composites. . . . .	9
ACM	199	Capstone B – Aerospace Comp Tech. . . . .	2
TOTAL PROGRAM CREDITS			17

## Diesel & Heavy Equipment Technician Certificate

### Diesel Technology Training Center

Graduates of this program find career opportunities in trucking, heavy equipment, construction, industrial machinery, marine diesel, and materials handling. Additional and more advanced opportunities may be available as shop service representatives, service managers, foremen and construction equipment superintendents.

The certificate program can be completed in six quarters. Advanced standing may be granted for work experience and/or related training. The Associate of Applied Science degree builds upon previously acquired knowledge and skills to develop leadership and communication abilities.

There are additional costs for books and supplies. Students are responsible for getting required tools before instruction begins.

#### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

#### TECHNICAL SPECIALTY COURSES

BUS	159	Introduction to Computing for Technical Programs . . . . .	5
HDM	100	Preventive Maintenance and Inspection . . . . .	8
HDM	108	Heavy Duty Diesel Welding. . . . .	8
HDM	110	Introduction to Electrical . . . . .	8
HDM	115	Advanced Electrical. . . . .	8
HDM	120	Tires, Alignment, Steering and Suspension . . . . .	8
HDM	125	Hydraulic and Air Brakes . . . . .	8
HDM	171	Lift Truck Operator . . . . .	2
MVM	101	Introduction to Motor Vehicle Maint Technology I . . . . .	8

#### RELATED INSTRUCTION

ENGL	105	Applied Composition . . . . .	3
Admission via passing testing requirement/permission only.			
MATH	110	Applied Math for Technicians . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3
TOTAL PROGRAM CREDITS			72



## Diesel & Heavy Equipment Technician Associate of Applied Science Degree (A.A.S.)

### Diesel Technology Training Center

Graduates of this program find career opportunities in trucking, heavy equipment, construction, industrial machinery, marine diesel, and materials handling. Additional and more advanced opportunities may be available as shop service representatives, service managers, foremen and construction equipment superintendents.

The certificate program can be completed in six quarters. Advanced standing may be granted for work experience and/or related training. The Associate of Applied Science degree builds upon previously acquired knowledge and skills to develop leadership and communication abilities.

There are additional costs for books and supplies. Students are responsible for getting required tools before instruction begins.

Completion of Certificate Requirements: 56 credits

### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

BUS	159	Introduction to Computing for Technical Programs . . . . .	5
HDM	100	Preventive Maintenance and Inspection . . . . .	8
HDM	108	Heavy Duty Diesel Welding. . . . .	8
HDM	110	Introduction to Electrical . . . . .	8
HDM	115	Advanced Electrical. . . . .	8
HDM	120	Tires, Alignment, Steering and Suspension . . . . .	8
HDM	125	Hydraulic and Air Brakes . . . . .	8
HDM	130	Hydraulics & Pneumatics. . . . .	8
HDM	135	Drive Train . . . . .	8
HDM	140	Heating, Ventilation and Air Conditioning. . . . .	8
HDM	145	Gasoline Engines . . . . .	8
HDM	150	Diesel Engine Diagnos/Remove and Replace . . . . .	8
HDM	155	Diesel Engine Rebuild . . . . .	8
HDM	171	Lift Truck Operator . . . . .	2
HDM	197	Internship – Heavy Duty Diesel. . . . .	7
Credit range: 1-7			
Total required credits for HDM 197: 1-6			
Requires program advising. See a program advisor or counselor for details.			
MVM	101	Introduction to Motor Vehicle Maint Technology I . . . . .	8

### RELATED INSTRUCTION

ENGL	105	Applied Composition . . . . .	3
MATH	110	Applied Math for Technicians . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3
TOTAL PROGRAM CREDITS			121-126

## Diesel & Heavy Equipment Technician Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Diesel Technology Training Center

Graduates of this program find career opportunities in trucking, heavy equipment, construction, industrial machinery, marine diesel, and materials handling. Additional and more advanced opportunities may be available as shop service representatives, service managers, foremen and construction equipment superintendents.

The certificate program can be completed in six quarters. Advanced standing may be granted for work experience and/or related training. The Associate of Applied Science degree builds upon previously acquired knowledge and skills to develop leadership and communication abilities.

There are additional costs for books and supplies. Students are responsible for getting required tools before instruction begins.

### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

BUS	159	Introduction to Computing for Technical Programs . . . . .	5
HDM	100	Preventive Maintenance and Inspection . . . . .	8
HDM	108	Heavy Duty Diesel Welding. . . . .	8
HDM	110	Introduction to Electrical . . . . .	8
HDM	115	Advanced Electrical. . . . .	8
HDM	120	Tires, Alignment, Steering and Suspension . . . . .	8
HDM	125	Hydraulic and Air Brakes . . . . .	8
HDM	130	Hydraulics & Pneumatics. . . . .	8
HDM	135	Drive Train . . . . .	8
HDM	140	Heating, Ventilation and Air Conditioning. . . . .	8
HDM	145	Gasoline Engines . . . . .	8
HDM	150	Diesel Engine Diagnos/Remove and Replace . . . . .	8
HDM	155	Diesel Engine Rebuild . . . . .	8
HDM	171	Lift Truck Operator . . . . .	2
HDM	197	Internship – Heavy Duty Diesel. . . . .	7
Credit range: 1-7			
Total required credits for HDM 197: 1-7			
Requires program advising. See a program advisor or counselor for details.			
MVM	101	Introduction to Motor Vehicle Maint Technology I . . . . .	8

### RELATED INSTRUCTION

Minimum of 10 credits from any two (2) of the following categories:

Visual, Literary and Performing Arts. . . . .	5
Individual, Cultures and Societies . . . . .	5
Natural World, the . . . . .	5
Science & Mathematics . . . . .	5
Business & Office . . . . .	5
Supervision & Management . . . . .	5
Technical Specialty course . . . . .	5

**RELATED INSTRUCTION**

ENGL& 101	English Composition I . . . . .	5
MATH 102	College Algebra . . . . .	5
PSYC& 100	General Psychology. . . . .	5
<b>TOTAL PROGRAM CREDITS</b>		<b>137-143</b>

## Flagging (non-credit) Short-Term Certificate

**Georgetown Campus**

The course covers all the material and work practices which a person needs in order to qualify as an entry level licensed flagger in the State of Washington. Federal, State and Local Guidelines and the Manual on Uniform Traffic Control Devices (MUTCD) are also covered.

**TECHNICAL SPECIALTY COURSES**

CSS 123	Flagging and Traffic Control . . . . .	0
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## General Aviation Short-Term Certificate

**Aviation Maintenance Division**

Provides foundational instruction in the field of aviation maintenance.

**TECHNICAL SPECIALTY COURSES**

ACM 101	Intro to Aviation Industrial Hygiene . . . . .	3
ACM 102	Measurement and Drawings – Aviation . . . . .	3
ACM 103	Materials: Properties, Choice and Application . . . . .	5
ACM 104	Composites Lab A – General Aviation . . . . .	6
ACM 198	Capstone A – Aerospace Comp Tech. . . . .	1
<b>TOTAL PROGRAM CREDITS</b>		<b>18</b>

## Industrial Maintenance Mechanic (AJAC) Certificate

**Apprenticeship Division**

The Industrial Maintenance Mechanic Program is an Apprenticeship Program offered through the Aerospace Joint Apprenticeship Committee at the Georgetown Campus. This program is a two-year Aerospace/aircraft oriented program. Students must have successfully completed the first two years of aircraft mechanic airframe machinist program and have their FAA airframe license. For more information please contact the Aerospace Joint Apprenticeship Committee at 206-764-7940 or info@AJACtraining.org

**TECHNICAL SPECIALTY COURSES**

IMMA 101	Mechanical Drawings AJAC . . . . .	5
IMMA 102	Lifting & Rigging AJAC . . . . .	5
IMMA 103	Precision Machining . . . . .	5
IMMA 121	Welding for Maintenance Technicians . . . . .	5
IMMA 122	Electrical Systems . . . . .	5
IMMA 123	Machine Automation Theory . . . . .	5
IMMA 201	Math for Maintenance Technicians . . . . .	5
IMMA 202	Maintenance Machining . . . . .	5
IMMA 203	Mechanical Systems. . . . .	5
IMMA 221	Fluid Power Systems . . . . .	5
IMMA 222	Materials Processes & References. . . . .	5
IMMA 223	Mechatronics Capstone . . . . .	10
<b>On-the-Job Training credits</b>		<b>10</b>
<b>TOTAL PROGRAM CREDITS</b>		<b>70</b>

## Industrial Maintenance Mechanic (AJAC) Associate of Applied Science–Transfer Degree (A.A.S.-T)

**Apprenticeship Division**

The Industrial Maintenance Mechanic Program is an Apprenticeship Program offered through the Aerospace Joint Apprenticeship Committee at the Georgetown Campus. This program is a two-year Aerospace/aircraft oriented program. Students must have successfully completed the first two years of aircraft mechanic airframe machinist program and have their FAA airframe license. For more information please contact the Aerospace Joint Apprenticeship Committee at 206-764-7940 or info@AJACtraining.org

**TECHNICAL SPECIALTY COURSES**

IMMA 101	Mechanical Drawings AJAC . . . . .	5
IMMA 102	Lifting & Rigging AJAC . . . . .	5
IMMA 103	Precision Machining . . . . .	5
IMMA 121	Welding for Maintenance Technicians . . . . .	5
IMMA 122	Electrical Systems . . . . .	5
IMMA 123	Machine Automation Theory . . . . .	5
IMMA 201	Math for Maintenance Technicians . . . . .	5
IMMA 202	Maintenance Machining . . . . .	5
IMMA 203	Mechanical Systems. . . . .	5
IMMA 222	Materials Processes & References. . . . .	5
IMMA 223	Mechatronics Capstone . . . . .	5

**RELATED INSTRUCTION**

BUS 235	Oral Communications in Business . . . . .	5
Following can be substituted:		
CMST& 220 – Public Speaking (5)		
ENGL& 101	English Composition I . . . . .	5
MATH& 107	Math in Society . . . . .	5
PSYC& 100	General Psychology. . . . .	5
Following can be substituted:		
SOC& 101 – Intro to Sociology (5)		
<b>TOTAL PROGRAM CREDITS</b>		<b>90</b>

## Industrial Manufacturing Advanced Short-Term Certificate

### Georgetown Campus

A short-term training program primarily for entry-level and reentering professionals wanting to update and expand their skill set in the world of diversified and advanced manufacturing. In recent years, the manufacturing industry has been a staple, living wage job for many residents in the Puget Sound. With manufacturing on the rise this short-term career and technical certificate supports introductory skill building in new and traditional manufacturing techniques including industry certifications in: Electronics, Blueprint Writing, CPR/First Aid, Flagging, OSHA 30, LEAN Manufacturing, Composites and Welding.

Graduates have the opportunity to be hired directly by employers that support the program and interview candidates. The result from this program is a skilled pipeline of entry level workers to support the growing number of industrial manufacturing jobs in the region. The Academy provides students a pathway to enter into an apprenticeship or continue their education with the Seattle College District. Credits earned in this program may transfer into other industrial educational pathways at South Seattle College or in the district. Successful completion of the Manufacturing Academy may satisfy the minimum requirements for entry into the Aerospace Joint Apprenticeship Council program. This program is one of two certificates that make up the Industrial Manufacturing Academy.

### TECHNICAL SPECIALTY COURSES

INT	112	Manufacturing Tools and Trades . . . . .	5
INT	115	Introduction to Lean Manufacturing . . . . .	3
INT	165	OSHA 30 General Safety . . . . .	3
INT	180	Introduction to Composites . . . . .	3
TOTAL PROGRAM CREDITS			14

## Industrial Manufacturing Basics Short-Term Certificate

### Georgetown Campus

A short-term training program primarily for entry-level and reentering professionals wanting to update and expand their skill set in the world of diversified and advanced manufacturing. In recent years, the manufacturing industry has been a staple, living wage job for many residents in the Puget Sound. With manufacturing on the rise this short-term career and technical certificate supports introductory skill building in new and traditional manufacturing techniques including industry certifications in: Electronics, Blueprint Writing, CPR/First Aid, Flagging, OSHA 30, LEAN Manufacturing, Composites and Welding.

Graduates have the opportunity to be hired directly by employers that support the program and interview candidates. The result from this program is a skilled pipeline of entry level workers to support the growing number of industrial manufacturing jobs in the region. The Academy provides students a pathway to enter into an apprenticeship or continue their education with the Seattle College District. Credits earned in this program may transfer into other industrial educational pathways at South Seattle College or in the district. Successful completion of the Manufacturing Academy may satisfy the minimum requirements for entry into the Aerospace Joint Apprenticeship Council program.

This program is one of two certificates that make up the Industrial Manufacturing Academy.

### TECHNICAL SPECIALTY COURSES

IFS	105	Ind 1st Aid/CPR-AED Bloodborne Pathogens . . .	1
INT	101	Manufacturing Basics I . . . . .	3
INT	108	Intro to Blueprint Reading for Construction . . .	3
INT	115	Introduction to Lean Manufacturing . . . . .	3
INT	160	Introduction to Safety and Health OSHA 10 . . .	1
MATH	110	Applied Math for Technicians . . . . .	3
TOTAL PROGRAM CREDITS			14

## Industrial Vehicles Basics Short-Term Certificate

### Georgetown Campus

This certificate is designed to prepare students to enter the warehouse and logistics industries and to prepare students for Washington State's Commercial Driver's License (CDL) knowledge examination. With a growing need in logistics and transportation and the graying of the local workforce, employers and partners require a qualified pipeline of students prepared to enter the workplace. Industry-recognized credentials, job preparation, and test preparation comprise the course.

Certificate completion outcomes:

- OSHA 10 certification
- Flagging and Traffic Control certification
- Forklift and Scissorlift certifications
- Prepared to take Washington State's CDL knowledge examination

### TECHNICAL SPECIALTY COURSES

HDM	171	Lift Truck Operator . . . . .	2
INT	109	Flagging and Traffic Control . . . . .	1
INT	160	Introduction to Safety and Health OSHA 10 . . .	1
Credit Range: 1-3/Total Required Credits: 1			
IVP	100	CDL Knowledge Test Preparation . . . . .	2
WET	100	Employment and Education Preparation . . . .	1
Credit Range: 1-5/Total Required Credits: 1			
TOTAL PROGRAM CREDITS			7

## Industrial Vehicles Basics Advanced Short-Term Certificate

### Georgetown Campus

This certificate is designed to pass their Washington State's Commercial Driver's License (CDL) class A driving examination. With a growing need in logistics and transportation, employers and partners require a qualified pipeline of students prepared to enter the workplace. Nationally, the American Trucking Association estimates a current shortage of 35 to 40 thousand drivers, projected to reach 240,000 by 2022. According to EMSI, from 2015 to 2020 there will be 985 annual openings in Washington for tractor-trailer truck drivers. This program will prepare students for industry with a focus on safety, trip inspection, street driving, and test preparation.

#### Certificate Outcomes:

- Be prepared to take Washington State's Commercial Driver's License Class A driving test.
- Drive class A vehicles on the street and highway.
- Couple and uncouple a tractor from a trailer.
- Chain up a commercial vehicle.
- Back up class A vehicle in a straight line, angled, and blind sided.
- Scale loads.

#### TECHNICAL SPECIALTY COURSES

IVP	101	Fundamentals of Commercial Truck Driving . . .	6
IVP	102	Class a Street Driving . . . . .	2
IVP	103	Class a Backing and Maneuvering . . . . .	2
IVP	104	Class a Trip Inspection . . . . .	2
IVP	105	Class a Lab Range and Observation . . . . .	7
TOTAL PROGRAM CREDITS			19

## Landscape Horticulture Irrigation Technician Short-Term Certificate

### Landscape Horticulture

This is a short-term training program for landscape and horticultural professionals wanting to update and expand their skill set or students interesting in water resource management. Water resource management requires understanding for managing programs designed to protect landscapes, habitats and natural resources. This will be helpful to the professional Landscape Contractor who wants to bid on public, commercial or residential landscapes projects that include irrigation systems.

Completing the certificate would prepare one for design, installation, operation, maintenance, management, and service for landscape, and irrigation systems.

#### TECHNICAL SPECIALTY COURSES

LHO	135	Introduction to Drainage & Irrigation Systems .3
LHO	197	Internship in Landscape Horticulture . . . . .2
LHO	236	Advanced Irrigation System Design. . . . .5
LHO	237	Advanced Irrigation Diagnostics and Repair. . .5
TOTAL PROGRAM CREDITS		15

## Level 1 Welding Short-Term Certificate

### Technical Education

This certificate is a one quarter certificate in welding that includes courses in welding process and application, power tools, print reading, layout skills, oxy/acetylene, air carbon arc cutting, and punching and shearing. It may be used as the first quarter of a multi quarter certificate that must be taken in progression. Level I Certificate gives the successful completer an overview of the welding field and basic skills in welding and cutting. This certificate could be used to obtain an entry level job or continue with more training.

#### TECHNICAL SPECIALTY COURSES

WFT	100	Welding Theory. . . . .	5
WFT	120	Intro to Welding Oxyacetylene/Shielded Metal Arc . . . . .	6
WFT	121	SMAW Shielded Metal Arc Welding . . . . .	6
TOTAL PROGRAM CREDITS			17

## Level 2 Welding Short-Term Certificate

### Technical Education

This certificate lists the courses required for the second quarter of study for the Level 2 Certificate. Courses required include advanced layout, press brake operation, shielded metal arc welding, welding symbols, flame shaping, and maintenance and repair welding. Successful completion of Level I is required to enroll in Level 2 courses. Level 2 Certificate gives the successful completer a more in-depth study of general welding and fabricating principles, and will qualify students for employment in an entry level welding job or continue with more training.

#### TECHNICAL SPECIALTY COURSES

WFT	105	Print Reading and Welding Symbols . . . . .	5
WFT	124	Gas Metal Arc Welding . . . . .	6
WFT	125	FCAW Flux Core Arc Welding. . . . .	6
TOTAL PROGRAM CREDITS			17

## Level 3 Welding Short-Term Certificate

### Technical Education

This certificate lists the courses required for the third quarter of study for the Level 3 Certificate. Courses required include Gas Metal Arc Welding, Gas Tungsten Arc Welding, and Weld Inspection. Level 3 Welding Certificate gives the successful completer more advanced skills in welding and fabricating principles, and will qualify students for employment in entry level welding jobs or continue with more training.

### TECHNICAL SPECIALTY COURSES

WFT	111	Materials and Testing . . . . .	5
WFT	127	Gas Tungsten Arc Welding . . . . .	6
WFT	128	Fabrication Carbon Arc/Plasma Arc Cutting . . . . .	6
TOTAL PROGRAM CREDITS			17

## Level 4 Welding Short-Term Certificate

### Technical Education

This certificate lists the courses required for the fourth quarter of study for the Level 4 Certificate. Courses required include Welding Certification, Salvage and Reconstruction, Heat Treat, Employee Rights and Responsibilities. Level 4 Welding Certificate gives the successful completer more advanced skills in welding and fabricating principles, and will qualify students for employment in entry level welding jobs or continue with more training.

### TECHNICAL SPECIALTY COURSES

WFT	220	Pipe Shielded Metal Arc (SMAW) . . . . .	8
WFT	227	Advanced Fabrication I . . . . .	7
TOTAL PROGRAM CREDITS			15

## Level 5 Welding Short-Term Certificate

### Technical Education

This certificate lists the courses required for the fifth quarter of study for the Level 5 Certificate. Courses required include Estimating and Layout, Development of Welding Process, Aluminum Weldments, Material Handling, Construction of Jigs and Fixtures. Level 5 Welding Certificate gives the successful completer more advanced skills in welding and fabricating principles, and will qualify students for employment in entry level welding jobs or continue with more training.

### TECHNICAL SPECIALTY COURSES

WFT	228	Pipe Gas Tungsten Arc Welding (GTAW) . . . . .	8
WFT	238	Advanced Fabrication II . . . . .	7
TOTAL PROGRAM CREDITS			15

## LHO: Landscape Horticulture Certificate

### Technical Education

The Landscape Horticulture program offers training in landscape design and construction, greenhouse and nursery operations, irrigation systems, plant problem diagnostics, pruning, plant identification, soil science and much more. Students may choose between a certificate program, an Associate of Applied Science degree or individual courses to meet specific needs. Graduates typically find employment in landscape construction firms, pest management services, tree care companies, garden centers, wholesale nurseries, park maintenance departments and greenhouses. There are many opportunities for self-employment in this field.

### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

LHO	110	Integrated Pest and Weed Management . . . . .	5
LHO	111	Greenhouse Operations . . . . .	4
LHO	115	Fall Plant Identification . . . . .	4
LHO	116	Winter Plant Identification . . . . .	4
LHO	117	Spring Plant Identification . . . . .	4
LHO	139	Landscape Maintenance . . . . .	4
LHO	140	Introduction to Arboriculture . . . . .	4
LHO	155	Pruning . . . . .	4
LHO	197	Internship in Landscape Horticulture . . . . .	1
LHO	198	Greenhouse and Nursery Practicum . . . . .	3

### RELATED INSTRUCTION

BUS	116	Business Math/Spreadsheets . . . . .	5
ENGL	107	Applied Composition . . . . .	5
PSYC	240	Psychology of Human Relations . . . . .	3
Following can be substituted:			
BUS 113 – Diversity Issues in Business (3)			

TOTAL PROGRAM CREDITS 51

## LHO: Landscape Horticulture Associate of Applied Science Degree (A.A.S.)

### Technical Education

The Landscape Horticulture program offers training in landscape design and construction, greenhouse and nursery operations, irrigation systems, plant problem diagnostics, pruning, plant identification, soil science and much more. Students may choose between a certificate program, an Associate of Applied Science degree or individual courses to meet specific needs. Graduates typically find employment in landscape construction firms, pest management services, tree care companies, garden centers, wholesale nurseries, park maintenance departments and greenhouses. There are many opportunities for self-employment in this field.



**PROGRAM PREREQUISITE**

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

**TECHNICAL SPECIALTY COURSES**

LHO	110	Integrated Pest and Weed Management	5
LHO	111	Greenhouse Operations	4
LHO	115	Fall Plant Identification	4
LHO	116	Winter Plant Identification	4
LHO	117	Spring Plant Identification	4
LHO	123	Residential Landscape Design	5
LHO	136	Irrigation and Drainage	5
LHO	139	Landscape Maintenance	4
LHO	140	Introduction to Arboriculture	4
LHO	155	Pruning	4
LHO	189	Introduction to Landscape Construction	4
LHO	196	Capstone: Planning and Design	4
LHO	197	Internship in Landscape Horticulture	2
LHO	198	Greenhouse and Nursery Practicum	3
LHO	210	Plant Problem Diagnostics	4
LHO	215	Plant Propagation	4
LHO	250	Small Business for Horticulture	5
LHO	255	Edible Trees Shrubs and Vines	3
LHO	296	Capstone: Implementation	5

**RELATED INSTRUCTION**

BUS	116	Business Math/Spreadsheets	5
ENGL	107	Applied Composition	5
PSYC	240	Psychology of Human Relations	3
Following can be substituted:			
BUS 113 – Diversity Issues in Business (3)			

TOTAL PROGRAM CREDITS	92
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## LHO: Landscape Horticulture Associate of Applied Science–Transfer Degree (A.A.S.-T)

**Technical Education**

The Landscape Horticulture program offers training in landscape design and construction, greenhouse and nursery operations, irrigation systems, plant problem diagnostics, pruning, plant identification, soil science and much more. Students may choose between a certificate program, an Associate of Applied Science degree or individual courses to meet specific needs. Graduates typically find employment in landscape construction firms, pest management services, tree care companies, garden centers, wholesale nurseries, park maintenance departments and greenhouses. There are many opportunities for self-employment in this field.

**PROGRAM PREREQUISITE**

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

**TECHNICAL SPECIALTY COURSES**

LHO	110	Integrated Pest and Weed Management	5
LHO	111	Greenhouse Operations	4
LHO	115	Fall Plant Identification	4
LHO	116	Winter Plant Identification	4
LHO	117	Spring Plant Identification	4
LHO	123	Residential Landscape Design	5
LHO	136	Irrigation and Drainage	5
LHO	139	Landscape Maintenance	4
LHO	140	Introduction to Arboriculture	4
LHO	155	Pruning	4
LHO	189	Introduction to Landscape Construction	4
LHO	196	Capstone: Planning and Design	4
LHO	197	Internship in Landscape Horticulture	2
LHO	198	Greenhouse and Nursery Practicum	3
LHO	210	Plant Problem Diagnostics	4
LHO	215	Plant Propagation	4
LHO	250	Small Business for Horticulture	5
LHO	255	Edible Trees Shrubs and Vines	3
LHO	296	Capstone: Implementation	5

**RELATED INSTRUCTION**

ENGL&	101	English Composition I	5
MATH&	107	Math in Society	5

Following can be substituted:

Other Quantitative/Symbolic Reasoning course

See Advising for list of approved courses.

PSYC&	100	General Psychology	5
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TOTAL PROGRAM CREDITS	93
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## Maintenance and Light Repair 1 Year Certificate (MLR) Certificate

**Automotive Technology Training Center**

The automotive technology program qualifies students for employment in auto maintenance and related fields. Career opportunities include advancement to auto shop supervisor, service department head, auto service advisor, sales representative, and shop owner.

Meets NATEF General Service Technician (GST) requirements.

Students completing this program are qualified for entry level work in the automotive industry.

**PROGRAM PREREQUISITE**

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

**TECHNICAL SPECIALTY COURSES**

AUT	100	Introduction to Electricity	6
AUT	122	Steering and Suspension	4
AUT	124	Tires and Wheel Alignment	4
AUT	126	Basic Brake Systems	3
AUT	127	Advanced Brake Systems	4

AUT	128	Automotive Engine Diagnose/Remove and Replace . . . . .	4
AUT	130	Automotive Engine Rebuild . . . . .	8
AUT	134	Introduction to Engine Performance . . . . .	3
MVM	100	Introduction to Automotive Technology I . . . . .	3
MVM	102	Introduction to Automotive Technology II . . . . .	6
<b>RELATED INSTRUCTION</b>			
ENGL	105	Applied Composition . . . . .	3
MATH	110	Applied Math for Technicians . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3
TOTAL PROGRAM CREDITS			54

## Manufacturing/Machinist Technology Certificate of Proficiency

### Georgetown Campus

The CNC Machinist Program is an intensive program designed to prepare qualified individuals for entry into the job market as a CNC Machinist (Computer Numerical Control). Students will be involved in the production and machining of industry parts.

The Basic Manufacturing Certificate of Completion is a one quarter (3 month) course of study that provides students with entry-level manufacturing skills and a foundation for certificates and two year degrees in other manufacturing specialty areas. Students interested in advanced knowledge and skills are encouraged to enroll in a longer course of study to complete an Associate in Applied Arts and Sciences (AAAS) degree in Manufacturing at partner colleges.

The Principles of Precision Machining Certificate of Completion is a two quarter (6 month) course of study that provides students with entry level manufacturing skills and a foundation to pursue other certificates and two year degrees in other manufacturing specialty areas.

The Manufacturing/Machinist Technology Certificate of Proficiency is a three quarter (9 month) course of study to prepare students for entry into the job market as a Manufacturing Technician.

This program is part of a collaboration program with Shoreline Community College. Upon completion of the Certificate of Proficiency, it can be applied towards an AAAS in Manufacturing/Machinist Technology completed at Shoreline Community College.

### TECHNICAL SPECIALTY COURSES

MFGT	105	Basic Manufacturing . . . . .	20
MFGT	106	Intermediate Manufacturing . . . . .	20
MFGT	120	Advanced Manufacturing . . . . .	20
TOTAL PROGRAM CREDITS			60

## Maritime Shipyard Welding Certificate

### Georgetown Campus

This training program introduces welding theory, process and application understanding in the context specific to the marine industry. Focus includes Shielded Metal Arc Welding (SMW), tack welding, SMAW-1F/2F-horizontal/3F-vertical/4F-overhead fillet weld positions, joint fit-up, back-gouging and other skills applied to a shipyard work environment. Other competencies include welds in vertical and overhead positions for marine operations and accomplishing welds out of doors in all weather conditions and in areas not easily accessible. Students will test for a range of maritime recognized certifications including NAVSEA and American Welding Society (AWS) certifications.

### TECHNICAL SPECIALTY COURSES

WFT	100	Welding Theory . . . . .	5
WFT	105	Print Reading and Welding Symbols . . . . .	5
WFT	120	Intro to Welding Oxyacetylene/Shielded Metal Arc . . . . .	6
WFT	121	SMAW Shielded Metal Arc Welding . . . . .	6
WFT	125	FCAW Flux Core Arc Welding . . . . .	6
WFT	144	Shipyard Intensive Welding . . . . .	6

### RELATED INSTRUCTION

MATH	110	Applied Math for Technicians . . . . .	3
TOTAL PROGRAM CREDITS			37

## MechaReady Short-Term Certificate

### Apprenticeship Division

### TECHNICAL SPECIALTY COURSES

INT	126	Introduction to Mechatronics . . . . .	8
MFGT	104	Introduction to Lasers and Optics . . . . .	2
TOTAL PROGRAM CREDITS			10

All courses are taken concurrently.

## Multi-Occupation in Engineering and Technology Associate of Applied Science –Transfer Degree (A.A.S.-T)

### Apprenticeship Division

This program is composed of a combination of the technical skills obtained 1) in an apprenticeship on-the-job training (OJT) program of at least 6,000 clock hours and the completion of a minimum of 450 clock hours of apprenticeship related supplemental instruction (RSI) certified by the Joint Apprenticeship & Training Committee (JATC), under the jurisdiction of the Washington State Department of Labor and Industries and the Washington State Apprenticeship and Training Council (WASTC); or 2) through employment of at least 6,000 clock hours and the completion of a minimum of 450 clock hours of related instruction certified by an employer, recognized corporate education provider (e.g., NIMS), or the military.

This program prepares students both for employment and promotion in organizational settings as well as for entry into applied baccalaureate degree programs. This structure provides incumbent workers with the flexibility to grow their skills in their current field, while increasing their earnings potential and preparing them for baccalaureate-level work if desired. Industry analysis demonstrates continuing high demand in the Seattle metro area for STEM fields, occupations accessible to graduates of the Multi-Occupation in Engineering and Technology program.

### TECHNICAL SPECIALTY COURSES

On-the-Job Training credits . . . . .	20
20 career and technical credit block validated by records evaluator using certified letter from apprenticeship program (Completion of at least 6,000 hours of on-the-job (OJT) training certified by a JATC, employer, recognized corporate education provider (e.g., NIMS), or the military.)	
Related Supplemental Instruction . . . . .	45
45 career and technical credit block validated by records evaluator using certified letter from apprenticeship program (Completion of at least 450 hours of related training (RSI) certified by a JATC, employer, recognized corporate education provider (e.g., NIMS), or the military)	

### GENERAL EDUCATION COURSES

BUS 235 Oral Communications in Business . . . . .	5
Following can be substituted: CMST& 220 – Public Speaking (5)	
ENGL& 101 English Composition I . . . . .	5
MATH& 107 Math in Society . . . . .	5
PSYC& 100 General Psychology . . . . .	5
Following can be substituted: SOC& 101 – Intro to Sociology (5)	
Natural World, the . . . . .	5
<b>TOTAL PROGRAM CREDITS</b>	<b>90</b>

## Multi-Occupation Trades Associate of Applied Science Degree (A.A.S.)

### Apprenticeship Division

This program is composed of a combination of the technical skills obtained 1) in a registered apprenticeship on-the-job training (OJT) program of at least 6,000 clock hours and the completion of a minimum of 450 clock hours of registered apprenticeship related supplemental instruction (RSI) certified by a Joint Apprenticeship & Training Committee (JATC), under the jurisdiction of the Washington State Department of Labor and Industries and the Washington State Apprenticeship and Training Council (WASTC); or under the jurisdiction of a State Approving Agency (SAA) or the US Department of Labor. The OJT and RSI hours must be certified by the program through a letter to the credential evaluator.

This program prepares students both for employment and promotion in STEM fields as well as for entry into applied baccalaureate degree programs. This structure provides incumbent workers with the flexibility to grow their skills in their current field, while increasing their earnings potential and preparing them for baccalaureate-level work if desired. Industry analysis demonstrates continuing high demand in the Seattle metro area for STEM fields, occupations accessible to graduates of the Multi-Occupational Trades program.

### TECHNICAL SPECIALTY COURSES

On-the-Job Training credits . . . . .	25
25 career and technical credit block validated by records evaluator using certified letter from his/her apprenticeship program (Completion of at least 6,000 hours of on-the-job (OJT) training certified by a JATC)	
Related Supplemental Instruction . . . . .	45
45 career and technical credit block validated by records evaluator using certified letter from his/her apprenticeship program (Completion of at least 450 hours of related training (RSI) certified by a JATC)	

### GENERAL EDUCATION COURSES

ENGL 107 Applied Composition . . . . .	5
Following can be substituted: Any transferrable composition course. See Advising for list of approved courses.	
MATH 110 Applied Math for Technicians . . . . .	3
Following can be substituted: BUS 116 – Business Math/Spreadsheets (5) or any higher level MATH course	
SOC 253 Organizational Behavior . . . . .	5
Following can be substituted: Any transferrable psychology or sociology course. See Advising for list of approved courses.	

<b>TOTAL PROGRAM CREDITS</b>	<b>83-85</b>
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## Multi-Occupation Trades Associate of Applied Science–Transfer Degree (A.A.S.-T)

### Apprenticeship Division

This program is composed of a combination of the technical skills obtained 1) in a registered apprenticeship on-the-job training (OJT) program of at least 6,000 clock hours and the completion of a minimum of 450 clock hours of registered apprenticeship related supplemental instruction (RSI) certified by a Joint Apprenticeship & Training Committee (JATC), under the jurisdiction of the Washington State Department of Labor and Industries and the Washington State Apprenticeship and Training Council (WASTC); or under the jurisdiction of a State Approving Agency (SAA) or the US Department of Labor. The OJT and RSI hours must be certified by the program through a letter to the credential evaluator.

This program prepares students both for employment and promotion in STEM fields as well as for entry into applied baccalaureate degree programs. This structure provides incumbent workers with the flexibility to grow their skills in their current field, while increasing their earnings potential and preparing them for baccalaureate-level work if desired. Industry analysis demonstrates continuing high demand in the Seattle metro area for STEM fields, occupations accessible to graduates of the Multi-Occupational Trades program.

### TECHNICAL SPECIALTY COURSES

On-the-Job Training credits	25
25 career and technical credit block validated by records evaluator using certified letter from his/her apprenticeship program (Completion of at least 6,000 hours of on-the-job (OJT) training certified by a JATC)	
Related Supplemental Instruction	45
45 career and technical credit block validated by records evaluator using certified letter from his/her apprenticeship program (Completion of at least 450 hours of related training (RSI) certified by a JATC)	

### GENERAL EDUCATION COURSES

CMST& 101 Introduction to Communication	5
Following can be substituted:	
CMST& 220 – Public Speaking (5)	
ENGL& 101 English Composition I	5
MATH& 107 Math in Society	5
PSYC& 100 General Psychology	5
Following can be substituted:	
SOC& 101 – Intro to Sociology (5)	

TOTAL PROGRAM CREDITS 90

## NATEF Master 2-Year Certificate

### Automotive Technology Training Center

The automotive technology program qualifies students for employment in auto maintenance and related fields. Career opportunities include advancement to auto shop supervisor, service department head, auto service advisor, sales representative, and shop owner.

Students completing this program are qualified for entry-level work in the automotive industry.

### PREREQUISITES

NATEF General Service Technician (GST) Certificate or instructor permission.

Completion of the NATEF Minor Certification is required to earn the Master Certification, but the Minor and Master courses may be taken out of sequence.

### TECHNICAL SPECIALTY COURSES

AUT 100	Introduction to Electricity	6
AUT 102	Advanced Electrical Systems	4
AUT 104	Automotive Electronics	3
AUT 106	Basic Power Accessories	3
AUT 112	Manual Transaxles and Clutches	3
AUT 114	Manual Transmissions, Transfer Cases & Drive Axl	3
AUT 116	Air Conditioning and Heating	6
AUT 118	Automatic Transmission Diagnosis and Service	4
AUT 120	Advanced Automatic Transmission Service	6
AUT 122	Steering and Suspension	4
AUT 124	Tires and Wheel Alignment	4
AUT 126	Basic Brake Systems	3
AUT 127	Advanced Brake Systems	4
AUT 128	Automotive Engine Diagnose/Remove and Replace	4
AUT 130	Automotive Engine Rebuild	8
AUT 134	Introduction to Engine Performance	3
AUT 138	Advanced Drivability and Fuel Systems	4
AUT 140	Engine Computers	4
AUT 142	Emission Controls and Diagnostic Test Equipment	6
MVM 100	Introduction to Automotive Technology I	3
MVM 102	Introduction to Automotive Technology II	6

### RELATED INSTRUCTION

ENGL 105	Applied Composition	3
MATH 110	Applied Math for Technicians	3
PSYC 240	Psychology of Human Relations	3

TOTAL PROGRAM CREDITS 102

## Trades Rotation Program Short-Term Certificate

Trades Rotation Program is a short-term pre-apprenticeship certificate program that will provide skills and knowledge in basic construction.

### TECHNICAL SPECIALTY COURSES

WTL	100	Construction Trades Preparation . . . . .	18
TOTAL PROGRAM CREDITS			18

## Welding Fabrication Technology Certificate

### Technical Education

Metal fabrication and welding are important components of many trades and the demand for trained welders and fabricators continues to rise. Job opportunities and skill needs are diverse, including general and production welding, blueprint reading, layout, cutting and fitting, finishing and materials handling.

Training includes all aspects of welding and fabrication operations including blueprint reading, planning operation sequence, applying geometry, heat effects and metal properties, layout, positioning, fitting, welding and material handling. Special projects are also offered for the journey-level welding fabricator desiring to update skills and certification.

Graduates are prepared for positions such as welders, fabricators, shop supervisors, estimators and shop owners in boatbuilding, automotive, machine fabrication, commercial fishing gear, piping systems, and building construction and maintenance. This program prepares students to pass welder certification tests through the Washington Association of Building Officials (WABO). Welding also offers a short-term certificate in Electronic Assembly.

### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

HDM	171	Lift Truck Operator . . . . .	2
WFT	100	Welding Theory . . . . .	5
WFT	105	Print Reading and Welding Symbols . . . . .	5
WFT	111	Materials and Testing . . . . .	5
WFT	120	Intro to Welding Oxyacetylene/Shielded Metal Arc . . . . .	6
WFT	121	SMAW Shielded Metal Arc Welding . . . . .	6
WFT	124	Gas Metal Arc Welding . . . . .	6
WFT	125	FCAW Flux Core Arc Welding . . . . .	6
WFT	127	Gas Tungsten Arc Welding . . . . .	6
WFT	128	Fabrication Carbon Arc/Plasma Arc Cutting . . . . .	6

### RELATED INSTRUCTION

ENGL&	101	English Composition I . . . . .	5
Following can be substituted:			
		ENGL 107 – Applied Composition (5)	
MATH	110	Applied Math for Technicians . . . . .	3
PSYC	240	Psychology of Human Relations . . . . .	3
Following can be substituted:			
		PSYC& 100 – General Psychology (5)	

TOTAL PROGRAM CREDITS			64-66
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## Welding Fabrication Technology Associate of Applied Science Degree (A.A.S.)

### Technical Education

Metal fabrication and welding are important components of many trades and the demand for trained welders and fabricators continues to rise. Job opportunities and skill needs are diverse, including general and production welding, blueprint reading, layout, cutting and fitting, finishing and materials handling.

Training includes all aspects of welding and fabrication operations including blueprint reading, planning operation sequence, applying geometry, heat effects and metal properties, layout, positioning, fitting, welding and material handling. Special projects are also offered for the journey-level welding fabricator desiring to update skills and certification.

Graduates are prepared for positions such as welders, fabricators, shop supervisors, estimators and shop owners in boatbuilding, automotive, machine fabrication, commercial fishing gear, piping systems, and building construction and maintenance. This program prepares students to pass welder certification tests through the Washington Association of Building Officials (WABO). Welding also offers a short-term certificate in Electronic Assembly.

### PROGRAM PREREQUISITE

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

### TECHNICAL SPECIALTY COURSES

HDM	171	Lift Truck Operator . . . . .	2
WFT	100	Welding Theory . . . . .	5
WFT	105	Print Reading and Welding Symbols . . . . .	5
WFT	111	Materials and Testing . . . . .	5
WFT	120	Intro to Welding Oxyacetylene/Shielded Metal Arc . . . . .	6
WFT	121	SMAW Shielded Metal Arc Welding . . . . .	6
WFT	124	Gas Metal Arc Welding . . . . .	6
WFT	125	FCAW Flux Core Arc Welding . . . . .	6
WFT	127	Gas Tungsten Arc Welding . . . . .	6
WFT	128	Fabrication Carbon Arc/Plasma Arc Cutting . . . . .	6



**TECHNICAL SPECIALTY ELECTIVES**

Select four (4) courses from those listed below:

WFT	220	Pipe Shielded Metal Arc (SMAW)	. . . . .6
WFT	227	Advanced Fabrication I	. . . . .6
WFT	228	Pipe Gas Tungsten Arc Welding (GTAW)	. . . . .6
WFT	238	Advanced Fabrication II	. . . . .6
WFT	241	Wabo Test PREP SMAW Plate	. . . . .6
WFT	242	Wabo Test PREP GMAW Plate	. . . . .6
WFT	243	Wabo Test PREP FCAW Plate	. . . . .6
WFT	244	Wabo Test PREP GTAW Plate	. . . . .6
WFT	245	Wabo Test PREP SMAW Pipe	. . . . .6
WFT	246	Wabo Test PREP GTAW Pipe	. . . . .6

**RELATED INSTRUCTION**

ENGL	107	Applied Composition	. . . . .5
MATH	110	Applied Math for Technicians	. . . . .3
Following can be substituted: Higher level MATH class (5)			
PSYC	240	Psychology of Human Relations	. . . . .3
Following can be substituted:			
PSYC& 100 – General Psychology (5)			
TDR	131	Introduction to CAD 2-D	. . . . .4
TOTAL PROGRAM CREDITS			92-96

## Welding Fabrication Technology Associate of Applied Science – Transfer Degree (A.A.S.-T)

**Technical Education**

Metal fabrication and welding are important components of many trades and the demand for trained welders and fabricators continues to rise. Job opportunities and skill needs are diverse, including general and production welding, blueprint reading, layout, cutting and fitting, finishing and materials handling.

Training includes all aspects of welding and fabrication operations including blueprint reading, planning operation sequence, applying geometry, heat effects and metal properties, layout, positioning, fitting, welding and material handling. Special projects are also offered for the journey-level welding fabricator desiring to update skills and certification.

Graduates are prepared for positions such as welders, fabricators, shop supervisors, estimators and shop owners in boatbuilding, automotive, machine fabrication, commercial fishing gear, piping systems, and building construction and maintenance. This program prepares students to pass welder certification tests through the Washington Association of Building Officials (WABO). Welding also offers a short-term certificate in Electronic Assembly.

**PROGRAM PREREQUISITE**

Students must meet with an advisor for entry into this program. A placement test is required to ensure language and computational skills are sufficient for program success.

**TECHNICAL SPECIALTY COURSES**

HDM	171	Lift Truck Operator	. . . . .2
WFT	100	Welding Theory	. . . . .5
WFT	105	Print Reading and Welding Symbols	. . . . .5
WFT	111	Materials and Testing	. . . . .5
WFT	120	Intro to Welding Oxyacetylene/Shielded Metal Arc	. . . . .6
WFT	121	SMAW Shielded Metal Arc Welding	. . . . .6
WFT	124	Gas Metal Arc Welding	. . . . .6
WFT	125	FCAW Flux Core Arc Welding	. . . . .6
WFT	127	Gas Tungsten Arc Welding	. . . . .6
WFT	128	Fabrication Carbon Arc/Plasma Arc Cutting	. . . . .6

**TECHNICAL SPECIALTY ELECTIVES**

WFT	220	Pipe Shielded Metal Arc (SMAW)	. . . . .6
WFT	227	Advanced Fabrication I	. . . . .6
WFT	228	Pipe Gas Tungsten Arc Welding (GTAW)	. . . . .6
WFT	238	Advanced Fabrication II	. . . . .6
WFT	241	Wabo Test PREP SMAW Plate	. . . . .6
WFT	242	Wabo Test PREP GMAW Plate	. . . . .6
WFT	243	Wabo Test PREP FCAW Plate	. . . . .6
WFT	244	Wabo Test PREP GTAW Plate	. . . . .6
WFT	245	Wabo Test PREP SMAW Pipe	. . . . .6
WFT	246	Wabo Test PREP GTAW Pipe	. . . . .6

**RELATED INSTRUCTION**

ENGL&	101	English Composition I	. . . . .5
MATH&	107	Math in Society	. . . . .5
PSYC&	100	General Psychology	. . . . .5
TDR	131	Introduction to CAD 2-D	. . . . .4
Visual, Literary and Performing Arts			. . . . .5
TOTAL PROGRAM CREDITS			101

## Welding for Shipyard Careers–General Welding Certificate Level II Short-Term Certificate

**Georgetown Campus**

The training course provides opportunities leading to direct employment at several of the largest marine companies in the state of Washington. The certificate will provide the student with the necessary skills to be qualified to the American Society Mechanical Engineers (ASME) Section IX structural steel welding code for production steel FCAW Flux Cored Arc Welding applications.

**TECHNICAL SPECIALTY COURSES**

MATH	110	Applied Math for Technicians	. . . . .3
WFT	105	Print Reading and Welding Symbols	. . . . .5
WFT	125	FCAW Flux Core Arc Welding	. . . . .6
WFT	144	Shipyard Intensive Welding	. . . . .6
TOTAL PROGRAM CREDITS			19

## YouthBuild Construction and Leadership Advanced Short-Term Certificate

### TECHNICAL SPECIALTY COURSES

Note: All courses taken concurrently

HDC	171	Forklift . . . . .	2
INT	109	Flagging and Traffic Control . . . . .	1
MATH	298	Special Topics in Math . . . . .	1
YBLD	102	Intro to Construction Trades – Advanced . . . . .	9
YBLD	103	Professional Leadership Skills for the Trades . . . . .	6
TOTAL PROGRAM CREDITS			19

## YouthBuild Construction and Leadership Basic Short-Term Certificate

### TECHNICAL SPECIALTY COURSES

Note: All courses taken concurrently

IFS	105	Ind 1st Aid/CPR-AED Bloodborne Pathogens . . . . .	1
INT	108	Intro to Blueprint Reading for Construction . . . . .	3
INT	160	Introduction to Safety and Health OSHA 10 . . . . .	1
MATH	110	Applied Math for Technicians . . . . .	3
WET	100	Employment and Education Preparation . . . . .	1
YBLD	100	Introduction to Construction Trades . . . . .	9
TOTAL PROGRAM CREDITS			18

## SOCIAL SCIENCES, HUMANITIES, AND LANGUAGE

### Communication Studies (A.A.–DTA)

This two-year program is designed for students who wish to complete an Associate of Arts – Direct Transfer Agreement (AA-DTA) degree with an emphasis in Communication Studies. Students in this program develop skills in verbal communication, analysis and research, multicultural awareness, computer and technical literacy, audience analysis, group communication and collaboration, interpersonal communication, leadership and facilitation.

Completion of this program allows students to transfer at the junior level into a Communication Studies, Media & Communications, Journalism, or a related program at a four-year college or university. It also opens doors to a variety of careers in sectors including non-profit, business, government, entertainment, and education.

### English, Literature, and Writing Studies (A.A.–DTA)

This two-year program is designed for students who wish to complete an Associate of Arts – Direct Transfer Agreement (AA-DTA) degree with an emphasis in English. Students in this program will develop skills in written communication, information literacy, analysis and research, multicultural awareness, metacognition/critical self-reflection, problem-solving, audience awareness, group communication and collaboration, and interpersonal communication.

Completion of this program allows students to transfer at the junior level into an English, Media & Communications, Journalism or a related field at a four-year college or university. It also opens doors to a variety of careers in sectors including education, media/entertainment, publishing, law, government, non-profit, and business.

### History (A.A.–DTA)

This two-year program is designed for students who wish to complete an Associate of Arts direct transfer (AA-DTA) degree with an emphasis in History. Students in the program learn how to think historically, hone their written and verbal communication skills, acquire research methods and analytical tools, develop information literacy, and better comprehend how events in the past influence our present.

Completion of this degree allows students to transfer at the junior level into several fields of study at a four-year college or university, including History, American Ethnic Studies, LGBTQIA+/Queer Studies, Archeology, Anthropology and more. Completion of this program also opens doors to a variety of careers in museums, government, research, park service, political activism, nonprofits, policy, and education.

### Humanities and Cultural Studies (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts (AA) degree with an emphasis in humanities & cultural studies. Students pursuing this degree combine the study of language, film and media studies, popular culture, literatures, multicultural and diversity studies, and philosophy. Students will analyze issues such as race, gender, and class in relation to popular culture, global movements, and social justice, and gain the ability to reason critically, research and communicate effectively.

Completion of this degree allows students to transfer at the junior level into several fields of study such as comparative literature, cinema, communications, film studies, comparative history of ideas, English, women/gender/sexuality studies or a related field at a four-year college or university.

### Political Science (A.A.)

This two-year program is designed for students who wish to complete an Associate of Arts (AA) degree with an emphasis in Political Science. Students in this pathway develop skills in critical analysis, research, multicultural awareness, communication, information literacy, audience analysis, networking, and leadership. Students will build foundational knowledge of political institutions, policy, American systems, globalization, and political theory.

Completion of this degree allows students to transfer at the junior level to a Political Science, Economics, Media & Communications, or a related program at a four-year college or university with core Political Science classes completed. Completion of this degree also opens doors to a variety of careers in fields including public service, government, interest groups, sustainability, businesses, social media, and education.

### Psychology (A.A.–DTA)

This two-year program is designed for students who wish to complete an Associate of Arts-Direct Transfer Agreement (AA-DTA) degree with an emphasis in Psychology. Students in this program develop an awareness of human behavior and thinking that will serve them in both personal and professional capacities. Students will also develop skill in critical thinking, research, interpersonal awareness, group communication and collaboration, problem solving, information-finding, and time management.

Completion of this degree allows students to transfer at the junior level to a Psychology program at a four-year college or university, as well as opening doors to entry level employment in many sectors including non-profit, social work, healthcare, education, business, and government.

# Enrollment and Funding

## Five Steps to Enrolling

1. Apply
2. Plan your Funding
3. Placement for Classes
4. Registration
5. Pay and Prepare

## 1. Apply

Seattle Colleges operates on an open-door admission policy (District Policy 305). Consistent with available space and resources, each campus admits those students who:

- Are competent to profit from the curriculum offerings of Seattle Colleges; and
- Would not, by their presence or conduct, create a disruptive atmosphere within Seattle Colleges inconsistent with its purpose; and
- Are 18 years of age or older; or
- Are high school graduates; or
- Have applied for admission under the provisions and qualifications of student enrollment options programs, such as Running Start or a successor program, or through other local student enrollment option programs. However, an applicant transferring from another institution of higher education who meets the above criteria but is not in good standing at the time of his or her transfer may be conditionally admitted on a probationary status as determined by the chief administrative officer or his or her designee;

OR

- Are students age 16 and over who meet the provisions of Title III of the Workforce Investment Act who may then enroll in certain adult basic education classes. Individuals admitted into such classes will be allowed to continue as long as they are able to demonstrate, through measurable academic progress, an ability to benefit from the curriculum offerings.
- If not qualified under subsections above, are students who have filed an appropriate written release from the public, private, or home school they are attending or last attended, provided they are 16 years of age or older.

## Admissions Exception

The college does not desire to replace or duplicate the functions of the local public schools; however, people under the age of 18 may request special admission on a course-by-course basis, provided they have attained at least high school junior standing. Criteria for granting admission: competency at an appropriate academic, artistic, and/or technical talent level and the ability to participate in an adult learning environment.

Specific admissions procedures are available in the Registrar's Office at each campus and/or on each college's website.

## New Student Admission

To apply, students have two options:

1. Complete and submit an online admissions application. The online form is available at [seattlecolleges.edu](http://seattlecolleges.edu) click on Prospective Students/Getting Started.

Additional application information is also available at each of the college websites:

- **Central:** [seattlecentral.edu/getstarted](http://seattlecentral.edu/getstarted)
- **North:** [northseattle.edu/enroll-now](http://northseattle.edu/enroll-now)
- **South:** [southseattle.edu/steps-enroll](http://southseattle.edu/steps-enroll)

-OR-

2. Complete the online admission application in person at the college.

For those intending to transfer in credits from another college or university for evaluation, submit official copies of transcripts from any community colleges, universities, or technical schools attended.

*Note: For some programs, high school transcripts may be required. Check with your campus for more information.*

## Enrolling at More Than One of the Seattle Colleges

### Intradistrict Registration/Concurrent Enrollment

Students may enroll at more than one of the colleges without paying more than the maximum tuition at any one college; however, additional class or college fees may be incurred.

*Note: Financial aid recipients may receive aid through only one college. See the Financial Aid Office at your home college four weeks prior to the beginning of the quarter if you plan to enroll in more than one college at Seattle Colleges.*

## Readmission of Former Students

Students who were not enrolled for the most recent quarter but were previously enrolled within the last two years at Seattle Colleges may enroll during open registration. Students should update their personal information when registering.

Students who were dismissed for disciplinary or for academic reasons will be referred by Registration to the appropriate office.

Students who stop out for a quarter or more and are interested in graduating may choose to fulfill requirements in effect from an earlier catalog. With approval of the dean, students may elect to graduate either under the catalog in effect at the time they complete the graduation requirements or under the provisions of an earlier official catalog, provided that (a) not more than five years have elapsed since the student first enrolled under that earlier catalog, and (b) the courses required for completion are still offered. The dean may make suitable substitutions in cases where courses are no longer offered. Students are advised that if they graduate under an earlier catalog, some current transfer requirements of four-year institutions may not be satisfied. Students are advised to contact the transfer institution for current requirements.

Students called to active duty during a period of enrollment, have the right to be readmitted as defined in RCW 28B.10.270. See Financial Assistance for Veterans and Military Personnel on page 217 for more information.

## Residency Requirements

### Residents – U.S. Citizens, U.S. Permanent Residents, Deferred Action for Childhood Arrival (DACA), or Qualifying Visas

To qualify for resident tuition, applicants must reside in Washington state for reasons other than educational purposes for one full year prior to the first day of the quarter in which resident fees are requested. A financially dependent student may also be eligible for resident tuition if either parent or a legally appointed guardian has maintained a domicile in Washington for one full year prior to the first day of the quarter. Establishing permanent state residency includes compliance with Washington state laws, vehicle and driver license registration, and registration to vote in this state, if applicable. U.S. permanent resident card holders and DACA recipients must hold their status for one full year prior to the start of the quarter in which resident fees are requested. Visa holders should contact the Registration Office for additional information at their respective campuses.

An applicant may qualify for in-state tuition rates without establishing residency if they:

- Hold a graduate service appointment, designated as such by an institution, involving not less than 20 hours per week.
- Reside in the state of Washington and are an employee, spouse, or dependent child of an employee, not less than half time with a state institution.

- Are on active military duty stationed in Washington or a member of the Washington National Guard.
- Are an immigrant refugee/asylee/parolee or the spouse or dependent child of an immigrant refugee/asylee/parolee.
- Are a dependent of a congressional member representing the state of Washington.
- Are a veteran who has separated from the uniformed services with any period of active duty service, with other than dishonorable discharge, is eligible for federal veterans' education assistance benefits, and enters an institution of higher education in Washington within three years of separation.
- Are a spouse, former spouse, or child entitled to Veterans Affairs education assistance benefits based on their relationship to a veteran as defined in (f).

Contact the Registration Office at your campus for information on additional legal requirements to qualify for these exemptions.

## Non-Resident Tuition Waiver

Those who do not meet the residency requirements or eligibility for exemption may be eligible for the Nonresident Tuition Waiver. Students must be U.S. citizens or permanent residents and are charged a tuition rate very close to resident tuition. There is no one-year wait requirement. However, once students have met the one-year domicile requirement and are in compliance with Washington state laws to establish permanent state residency, they may submit a Residence Questionnaire with supporting documentation for review for reclassification to resident for tuition-paying purposes. Students who do not meet resident requirements or are not eligible for the Nonresident Tuition Waiver are assessed tuition and fees based on "nonresidency" status.

## Residents – Non-U.S. Citizens

Effective July 1, 2003, Washington state law changed the definition of "resident student" so that certain students who are not permanent residents or citizens of the United States are eligible for resident student status – and eligible to pay resident tuition rates – when they attend public colleges and universities in this state. To qualify for resident status, students must complete an affidavit/declaration/certification if they are not permanent residents or citizens of the United States but have met the following conditions:

- Completed the full senior year of high school and obtained a high school diploma at a Washington public or private high school or received the equivalent of a diploma.
- Lived in Washington for at least three calendar years (36 months) immediately prior to receiving the diploma or its equivalent.
- Continuously lived in the state of Washington after receiving the diploma or its equivalent until being admitted to an institution of higher education.



A student who meets the above conditions must also certify that they will be filing an application to become a permanent resident of the United States as soon as they are eligible to apply. Students must also certify that they are willing to engage in activities designed to prepare them for citizenship, including citizenship and civics review courses. Contact the Registration Office at your campus for more information.

<b>North</b>	<b>(206) 934-3663</b> <b>northseattle.edu</b>
<b>Central</b>	<b>(206) 934-6918</b> <b>seattlecentral.edu</b>
<b>South</b>	<b>(206) 934-7938</b> <b>southseattle.edu</b>

## International Student Admission

*See page 28 for information on International Student Admission and Guidelines.*

## 2. Plan Your Funding

There are several funding options for students at Seattle Colleges. Students may apply for federal and state financial aid, apply for tuition assistance through our Workforce Education programs, and receive veterans' educational benefits. Students are not limited to just one funding source; they can apply for multiple funding options.

### Federal, State, and Institutional Financial Aid

Financial aid assistance is offered in a variety of forms: federal grants, Washington state grant aid, institutional grants and tuition waivers, work-study employment, and federal student loans. The Financial Aid Office at each campus can assist students in the application process for scholarships, employer tuition assistance programs, and alternative educational loans as well. They also provide information on eligibility requirements, student rights and responsibilities in receiving aid, requirements for maintaining aid, planning a budget, and other financial concerns.

**Seattle Central College**  
**(206) 934-3844**  
**seattlecentral.edu/finaid**

**North Seattle College**  
**(206) 934-3688**  
**northseattle.edu/financial-aid**

**South Seattle College**  
**(206) 934-5317**  
**southseattle.edu/financial-aid**

### Determination of Financial Aid & Cost of Attendance

The Financial Aid programs at Seattle Colleges are administered in accordance with established state and federal regulations and policies. The basic formula to determine financial need for funding begins with the student's Cost of Attendance (COA) and subtracts the Estimated Family Contribution (EFC), resulting in the financial need. Financial need is the maximum amount of financial aid a student can receive from all sources.

Student expenses include estimates of all school and basic college living expenses for the academic year (Fall, Winter, and Spring quarters). Information on the Financial Aid COA budgets is in the Conditions of Award or Consumer Information brochure available in the Financial Aid Office at each campus and on the financial aid websites listed above.

Using the information provided on the Free Application for Federal Student Aid (FAFSA) or the Washington Application for State Financial Aid (WASFA), each student's EFC is calculated.

### Types of Financial Aid/Opportunity Pathways

Three basic kinds of financial aid are available for students. Financial aid may consist of one or more of:

1. **Grants, Scholarships & Waivers:** Students do not repay grants, scholarships, and waivers if satisfactory academic progress is maintained. Grants include Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (SEOG), Washington State Need Grants (SNG), College Bound Scholarship, Passport to College, and Institutional Grants and Waivers.
2. **Employment:** Work-study programs provide part-time employment opportunities for students both on campus and off campus.
3. **Loans:** Student loans are always optional. No student is required to apply for loans. Students are encouraged to pursue Federal Direct Loans or Federal Preparatory Coursework Loans before looking into Private Educational Alternative Loans. Students must complete the institutional request form and all federal requirements.

### The Financial Aid Application Steps

- Apply for admissions to your desired campus within Seattle Colleges.
- Complete either the online FAFSA or WASFA application:
  - Free Application for Federal Student Aid (FAFSA) – FAFSA.ed.gov (U.S. citizens or eligible noncitizens)
  - Washington Application for State Financial Aid (WASFA) – readysetgrad.org/WASFA (undocumented Washington state residents or DACA recipients)
- Submit all required supplemental documentation. May include tax documents, income information, citizenship documentation, etc.

**To be eligible for financial aid, a student must:**

- Be a U.S. citizen or eligible noncitizen (U.S. permanent resident, refugee, asylum granted, etc.) complete list available at [studentaid.ed.gov/sa/eligibility/non-us-citizens](http://studentaid.ed.gov/sa/eligibility/non-us-citizens)
- OR-
- Meet WASFA eligibility, DACA Standard, or 1079 Standard, available at [readyssetgrad.wa.gov/wasfa](http://readyssetgrad.wa.gov/wasfa)
- Have a high school diploma or GED certificate or meet the Ability to Benefit requirements
- Demonstrate financial need as determined by the Financial Aid Office after completion of the FAFSA or WASFA and all application materials
- Enroll in an approved certificate or degree program and take required coursework
- Not owe a refund or repayment on prior financial aid received or have a student loan in default at these or prior colleges attended
- Make satisfactory academic progress as defined by each campus Financial Aid policy

**Maintaining Eligibility**

Students are required to make satisfactory academic progress in their chosen program of study. Students are advised to check with the campus Financial Aid Office or Financial Aid website at their college for requirements.

**Notification**

Students are emailed or mailed a financial aid notification letter indicating award types and amount per quarter. It is important to read the notice carefully, following all instructions. Students are also notified if they are ineligible for financial aid.

**Disbursement of Funds**

Financial aid is first applied to tuition and fees charged at the time of registration. Any remaining balance is issued to the student. The Seattle Colleges are partnered with BankMobile, a Division of Customers Bank, a financial service company serving higher education, for students to receive their financial aid and other credit balances. Detailed disbursement information, including helpful videos, can be found at [bankmobiledisbursements.com/refundchoices](http://bankmobiledisbursements.com/refundchoices). To view the institution's contract with BankMobile and FAQ visit [seattlecolleges.edu/about/seattle-colleges-financial-aid-refund](http://seattlecolleges.edu/about/seattle-colleges-financial-aid-refund).

**Withdrawal Penalties**

If a student withdraws from school or drops more than the required credits to maintain aid, financial aid eligibility may be impacted. Tuition/fee refunds are returned to financial aid programs first. In the case of official withdrawal, students may be required to repay a percentage of their refund disbursement and/or tuition and fees. If a student drops without notifying the school, they may be billed for the entire amount of financial aid funds received. Repayment may be required before receiving financial aid funds for a future quarter or registering for future quarters. Students should contact the campus Financial Aid Office for details.

**Financial Aid Information Changes**

Information in this publication regarding financial aid is subject to change without notice and does not constitute an agreement between the colleges and the students.

**Workforce Education Programs**

The Workforce Education Office assists students enrolled in Career and Technical Education (a.k.a. career and technical) who need financial assistance. Eligible students may receive funding for tuition and fees, textbooks, required supplies, student ID card, and parking permit or ORCA transit pass. Workforce Education also assists students enrolled in English as Second Language (ESL) classes or completing their GED or high school diploma. Workforce Education staff are here to help you obtain the assistance you need to succeed in school. Funding programs include the Opportunity Grant Scholarship, Worker Retraining, Basic Food Employment & Training (BFET), and WorkFirst.

**Eligibility Determination – Start Next Quarter**

[startnextquarter.org](http://startnextquarter.org)

Seattle Colleges offers hundreds of students free and reduced tuition, books, and fees every quarter through Start Next Quarter (SNQ). Interested students can see if they prequalify for Opportunity Grants, Worker Retraining, Basic Food Employment and Training, and WorkFirst funds by visiting this website. Students who prequalify for funding are invited to an SNQ workshop, where their eligibility for funding is confirmed. Funding is limited and may be restricted to certain courses of study.

**Workforce Education Office contact information****Central****(206) 934-3854****[seattlecentral.edu/enrollment-and-funding/financial-aid-and-funding/workforce-services](http://seattlecentral.edu/enrollment-and-funding/financial-aid-and-funding/workforce-services)****North****(206) 934-3787****[northseattle.edu/workforce-education](http://northseattle.edu/workforce-education)****South****(206) 934-5835****[southseattle.edu/programs/workforce-education](http://southseattle.edu/programs/workforce-education)****Opportunity Grant Scholarship**

The Opportunity Grant (OG) Scholarship provides education grants for low-income students who have not yet earned a degree and are studying an eligible program. OG provides up to 45 credits of tuition and \$1,000 per year for books.

Eligibility (must meet all of the following)

- Washington state resident
- No prior degree (A.A. or higher)
- Enroll in an approved pathway of study\*\*
- Complete the FAFSA (Free Application for Federal Student Aid) or WASFA (Washington Application for State Financial Aid) before the second quarter of enrollment
- Meet family income limits for the program and have financial need as determined by the Financial Aid Office

*\*\* See "opportunity grants" on college websites for a list of approved programs. For additional grant information, visit [sbctc.ctc.edu/s\\_opportunitygrants.aspx](http://sbctc.ctc.edu/s_opportunitygrants.aspx).*

**Worker Retraining Program**

The Worker Retraining program provides funding for laid-off and dislocated workers who need training in order to return to the workforce. Training options include career training programs (certificates and A.A.S. degrees), GED, high school completion, and ESL classes. If you qualify, you may receive funding for your tuition. Textbook assistance may also be available.

**Worker Retraining Expanded Eligibility for Vulnerable Workers**

You may be eligible for Worker Retraining if you are currently working and meet two of the three criteria below:

- You are employed in an occupation that is "not in demand" according to the demand/decline list for your county. To check the demand/decline lists, go to [fortress.wa.gov/esd/employmentdata/reports-publications/occupational-reports/occupations-in-demand](http://fortress.wa.gov/esd/employmentdata/reports-publications/occupational-reports/occupations-in-demand).
- You do not have a previous degree or certificate and have completed less than one year of college education (less than 45 college credits).
- You need to learn new skills in order to keep your job.
- If you believe you may be eligible for Worker Retraining as a Vulnerable Worker, please contact the Workforce Education Office on your campus.

**Basic Food Employment & Training**

The Basic Food Employment and Training (BFET) program assists recipients of federal basic food assistance by providing funding for career training, GED, high school completion, or ESL classes to increase their opportunities for employment. If you qualify, you may receive funding for tuition, textbooks, and a parking permit or ORCA transit pass if funding is available.

You may be eligible for the BFET program if you are receiving federal basic food assistance from DSHS and not receiving Temporary Assistance for Needy Families (TANF) cash assistance. Workforce Education will need to obtain DSHS approval before funding can be awarded.

**WorkFirst Program**

The WorkFirst program assists recipients of TANF cash assistance from DSHS who need training in order to enter the workforce. WorkFirst funding typically covers the career training programs that are one year in length or shorter as well as GED or high school completion. Your DSHS case manager will need to approve your program of study. If you qualify, you may receive funding for your tuition and textbooks.

You may be eligible for WorkFirst if you are receiving TANF cash assistance and have an electronic referral from your DSHS case manager.

**Financial Assistance for Veterans and Military Personnel****Veterans Services Office****Central (206) 934-4147****North (206) 934-7309****South (206) 934-5811**

The Veterans Services Office at each campus provides services to help veterans and eligible dependents receive and maintain VA educational benefits while in school. These benefits include the Montgomery G.I. Bill®, Post 9/11 G.I. Bill®, Reserve Education Assistance Program, Benefits Program for Dependents and Surviving Spouses, Selective Reserve Assistance Program, Vocational Rehabilitation Program, and others. The office monitors academic progress, assists eligible students in applying for tutorial and VA work-study benefits, and approves eligibility for tuition discounts for eligible veterans, their spouses, and/or their dependents.

Veterans, eligible dependents, and members of the military are eligible for priority registration each quarter. Students must provide documentation that verifies service and/or eligibility; documents such as DD-214 and DD-295 and military transcripts are acceptable. Veterans may submit documents to the Military and Veterans Services Office at their home campus.

To receive benefits, students must contact the Veterans Services Office at their home campus 30 days prior to the beginning of the academic quarter. If students are transferring from another school, they must contact the Veterans Services Office to ensure all required documentation has been received. All veterans must apply for a credentials evaluation as soon as possible and notify the office immediately of any changes in address, program of study, enrollment, etc.

It is important that students be aware of all requirements outlined by the college and the Department of Veterans Affairs to fulfill educational objectives. Veterans and eligible dependents receiving benefits are required to maintain satisfactory academic progress standards in order to retain benefits. Some classes or programs of study are not eligible for benefits. Seattle Colleges complies with the VA's 85/15 Rule (USC 3680A(d)(1)) for each program of study offered.

Selected programs of study at North Seattle College, Seattle Central College, and South Seattle College are approved by the Workforce Training and Education Coordinating Board's State Approving Agency (WTECB/SAA) for enrollment of those eligible to receive benefits under Title 38 and Title 10, USC.

North Seattle College, Seattle Central College, and South Seattle College do not and will not provide any commission, bonus, or other incentive payment based directly or indirectly on success in securing enrollment or financial aid to any person or entities engaged in any student recruiting or admissions activities or in making decisions regarding the award of student financial assistance.

"GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at [benefits.va.gov/gibill](https://benefits.va.gov/gibill)."

## Veteran Waivers

Subject to limitations, veterans, National Guard members, and reservists may qualify for tuition waivers. Basic eligibility requirements are that a student must be a Washington state resident and have an honorable discharge (DD214).

A child and the spouse or surviving spouse of an eligible veteran or National Guard member who became totally disabled, is determined by the federal government to be a prisoner of war or missing in action, or lost his or her life while engaged in active federal military or naval service may be eligible for a limited tuition waiver.

Students seeking to receive a Veteran Waiver should contact the Veterans Services Office at their home campus.

## Department of Defense Tuition Assistance for Active Duty Military

North Seattle College and South Seattle College are approved institutions in the DoD MOU program at [dodmou.com/institutionlist.aspx](https://dodmou.com/institutionlist.aspx). Students should let the Veterans Services Office know once they have registered for courses that they will be using a tuition assistance program. Approved TA vouchers can be submitted electronically or in person to the Veterans Services Office.

## Rights for those Called to Active Service (RCW 28B.10.270)

### Active Service for a Period Exceeding 30 Days

A member of the Washington national guard or any other military component who is a student at an institution of higher education and who is ordered for a period exceeding thirty days of either active state service or to federal active military service has the right to:

- Withdraw from one or more courses for which tuition & fees have been paid;
- Be given a grade of incomplete and be allowed to complete the course upon release from active duty under the institution's standard practice for the completion of incompletes; or
- Continue and complete the course for full credit

If the student chooses to withdraw, the student has the right to be readmitted and enrolled as a student at the institution, without penalty or redetermination of admission eligibility, within one year following release from the state or federal active military service.

### Active Service for a Period 30 Days or Less

If a member of the Washington National Guard or any other military reserve component is ordered to active federal service for a period of 30 days or less, and/or is scheduled for follow-up medical treatment for injury incurred during that service, and misses any of the following: class, test, examination, laboratory, class day on which a written or oral assignment is due, or other event upon which course grade or evaluation is based, the student veteran has the right to:

- Make up these events without prejudice to the final course grade or evaluation. The makeup must be scheduled after the member's return from service and after a reasonable time for the student to prepare for the event.
- If the faculty member teaching the course determines that the student has completed sufficient work and has demonstrated sufficient progress toward meeting course requirements to justify the grade without making up the class, test, examination, presentation, or other event, the grade may be awarded without makeup.

## 3. Placement for Classes

Contact the Testing and Assessment Office at your campus or college website for a complete list of exemptions, current assessments, fees, guidelines, and additional information.

### North Testing Center

(206) 934-3674

[northseattle.edu/testing](http://northseattle.edu/testing)

### Central Testing Office

(206) 934-6344

[seattlecentral.edu/testing](http://seattlecentral.edu/testing)

### South Student Assessment Services

(206) 934-6767

[southseattle.edu/student-assessment-services](http://southseattle.edu/student-assessment-services)

## 4. Registration

### New Student Orientation

New Student Orientation provides an overview of programs and services and the opportunity to meet with an advisor and register for courses.

### Advising

Seattle Colleges provides educational advising to new and enrolled students. Advising is available to help plan a course of study and select the appropriate classes. Advisors provide information on career and technical programs and academic transfer programs as well as admission requirements for four-year institutions. Advising centers maintain a broad collection of resources from colleges, universities and vocational schools. For more information, email or call:

#### North

[northseattle.edu/advising](http://northseattle.edu/advising)

[AdvisorNorth@seattlecolleges.edu](mailto:AdvisorNorth@seattlecolleges.edu)

(206) 934-3658

#### Central

[seattlecentral.edu/advising](http://seattlecentral.edu/advising)

[AdvisorCentral@seattlecolleges.edu](mailto:AdvisorCentral@seattlecolleges.edu)

(206) 934-4068

#### South

[southseattle.edu/advising](http://southseattle.edu/advising)

[AdvisorSouth@seattlecolleges.edu](mailto:AdvisorSouth@seattlecolleges.edu)

(206) 934-5387

### Registration

Seattle Colleges requires official enrollment before a student may enter any class. Official enrollment is the process of registering for classes and payment of tuition and fees. Students may register for classes by using campus online services (see below) or completing an enrollment form and then paying tuition.

Seattle Colleges operates on a quarter system. The course schedules are available online approximately six weeks before the start of each quarter. Registration information is available to all new and currently enrolled students. Check the academic calendar on the back inside cover of this catalog or at [seattlecolleges.edu/academics/calendars](http://seattlecolleges.edu/academics/calendars).

### Online Services

Online registration via the college websites is available for students seven days a week from 5 a.m. to 11 p.m. Students can use online services to register/add/drop classes, get quarterly grades, look up registration appointments, check financial status, change their PINs, or pay for classes by credit card or deferred payment plan. For more registration information, visit the campus website or contact the campus Registration Office. Registration websites can also be reached by selecting a college at [seattlecolleges.edu/getting-started/step-4-register](http://seattlecolleges.edu/getting-started/step-4-register).

**Email:** Email is the primary mode of communication with students at the three campuses. These emails may include information about admissions, deadline dates, registration, waitlist status updates, dropping for nonpayment, residency, transfer credit evaluation, and graduation. Students should keep their email addresses current with their college.

### Attendance Policy

Students may not attend any class unless they have officially registered and paid tuition and fees (exception: students who are enrolling using a space-available waiver). Instructors may not allow a student to attend their class if the student's name is not on the class roster. Students who are officially enrolled in credit classes must be in attendance or communicate with the instructor no later than the first scheduled class. Students who are absent without prior approval of the instructor or the division/departments chair may be withdrawn by the college.

Seattle Colleges will grant reasonable accommodation so that students who are absent for reasons of faith or conscience, or for an organized activity conducted under the auspices of a religious denomination, church, or religious organization will not have their grades or other learning opportunities from the class be negatively affected. Such absences must be requested in writing within the first two weeks of the quarter.



Faculty must include the approved language referencing this policy in their syllabi. This policy and the associated procedure will be posted on the institutional website. Students who have concerns about approval or a grade impact may utilize the student grievance procedure for concerns not directly related to grades, or to the grade appeal process in cases impacting a final grade (WAC 132F-121-090).

*Note: Students should not assume that they have been dropped if they have not attended class on the first day; instead, they should officially drop or withdraw. See "Dropping Classes."*

## Adding Classes

Once the quarter begins, students may add classes through the end of the 10th day of the quarter or the eighth day in Summer Quarter. Instructor permission is required after the designated online registration period ends during the first week of the quarter. Students may add classes online during designated time periods or may complete an enrollment form in person at the Registration Office.

In rare cases, students may petition for a late registration based on documentation demonstrating extenuating circumstances that may have led to their being dropped. Late registration petitions must include the instructor's permission and considered only for those students who attended classes prior to the 10th day of the quarter, or the eighth day for Summer Quarter. A per-credit late fee will be assessed.

## Dropping/Withdrawing Classes

To drop a course, students must complete the official withdrawal procedure, as outlined on campus websites:

1. During the first two weeks of the quarter, or by the eighth day of Summer Quarter, students may withdraw from a class and no record of the course will appear on the transcript.
2. From the third week through the eighth week of the quarter, the ninth day through the sixth week in Summer Quarter for regular summer courses, or the fourth day of the quarter for a four-week summer course, students may withdraw and a "W" will be recorded and will remain on the student's transcript. After a "W" is issued, the course may be repeated only one more time.
3. After the eighth week, or the sixth week for Summer Quarter, students may not officially withdraw from a class regardless of academic status.

*Note: Students cannot officially drop a class by simply informing the instructor of the withdrawal or by ceasing to attend class. Students must complete the add/drop process either through online services or at the Registration Office before the course withdrawal is considered official.*

## Current Contact Information

Students must maintain a current email address, telephone number, and mailing address with the college to receive correspondence regarding registration status, financial aid, grades, and other information. Updates may be made via web online student services at each of the college websites or at the Registration Office.

## 5. Pay and Prepare

Students can make payments in person at the Cashier's Office, pay using a secure online payment process on the college website, or mail payments to the college. Online payments may be made using Visa, Mastercard, American Express, and Discover credit cards. In addition to these credit cards, debit cards and checks for the exact amount of the tuition and fees owed are also accepted at the Cashier's window. Students not paid in full or enrolled in a college payment plan by the published tuition due dates will be administratively dropped from all courses and will have to re-register in open classes and pay the same day in order to enroll again for the upcoming term.

### North Seattle College

**(206) 934-3627**

**[nscccashier@seattlecolleges.edu](mailto:nscccashier@seattlecolleges.edu)**

### Seattle Central College

**(206) 934-4108**

**[cashier.central@seattlecolleges.edu](mailto:cashier.central@seattlecolleges.edu)**

### South Seattle College

**(206) 934-5388**

**[sscccashier@seattlecolleges.edu](mailto:sscccashier@seattlecolleges.edu)**

## Optional Payment Plan for Tuition

Each college offers a deferred payment service through a third-party sponsor. Enrollment in this program enables students to make automated monthly tuition payments from a bank account, debit card, or credit card. Students must have a tuition/fee balance of \$100 or more to be eligible for this option. Students taking Continuing Education classes and international students are not eligible for this option. For further information:

**North:** **[northseattle.edu/tuition-and-fees](http://northseattle.edu/tuition-and-fees)**

**Central:** **[seattlecentral.edu/enrollment-and-funding/enrollment-and-admissions/tuition-and-payment](http://seattlecentral.edu/enrollment-and-funding/enrollment-and-admissions/tuition-and-payment)**

**South:** **[southseattle.edu/tuition-and-fees](http://southseattle.edu/tuition-and-fees)**

### Fall 2021–Summer 2022 Tuition Rates Lower Division Courses

CREDITS	RESIDENT	NON-RESIDENT (U.S. CITIZEN)	INTERNATIONAL
1	\$ 116.05	\$ 131.27	\$ 299.12
2	232.10	262.54	598.24
3	348.15	393.81	897.36
4	464.20	525.08	1,196.48
5	580.25	656.35	1,495.60
6	696.30	787.62	1,794.72
7	812.35	918.89	2,093.84
8	928.40	1,050.16	2,392.96
9	1,044.45	1,181.43	2,692.08
10	1,160.50	1,312.70	2,991.20
11	1,217.96	1,370.96	3,056.12
12	1,275.42	1,429.22	3,121.04
13	1,332.88	1,487.48	3,185.96
14	1,390.34	1,545.74	3,250.88
15	1,447.80	1,604.00	3,315.80
16	1,505.26	1,662.26	3,380.72
17	1,562.72	1,720.52	3,445.64
18	1,620.18	1,778.78	3,510.56
19	1,724.30	1,882.90	3,797.75
20	1,828.42	1,987.02	4,084.94
21	1,932.54	2,091.14	4,372.13
22	2,036.66	2,195.26	4,659.32
23	2,140.78	2,299.38	4,946.51
24	2,244.90	2,403.50	5,233.70
25	2,349.02	2,507.62	5,520.89

*Students in career and technical programs that require more than 18 credits per quarter (e.g., Culinary Arts) pay a reduced rate for those credits. See the program website.*

*Note: Check current amounts at [seattlecolleges.edu/get-started/step-5-pay-and-prepare#collapse-accordion-516-2](https://seattlecolleges.edu/get-started/step-5-pay-and-prepare#collapse-accordion-516-2).*

## Tuition

[seattlecolleges.edu/getting-started/step-5-pay-and-prepare](https://seattlecolleges.edu/getting-started/step-5-pay-and-prepare)

Tuition at community and technical colleges in Washington state is charged by credits rather than by part-time or full-time status. International students are required to carry a credit load of 12 or more to maintain their status. In addition to credit load, tuition is also determined by residency (see Residency Requirements). Students in career and technical programs that require more than 18 credits per quarter (e.g., Culinary Arts) pay a reduced rate for those credits. Tuition for bachelor's degrees (B.A.S.) and Apprentice programs are calculated at different rates.

Tuition and fees are set by the Washington State Legislature and are subject to change. For current amounts, see your campus website.

## eLearning /Distance Education

For current eLearning/Distance Education tuition and fees, see [seattlecolleges.edu/programs/elearning](https://seattlecolleges.edu/programs/elearning).

## Tuition Changes

Tuition is subject to change by the Washington State Legislature and approval by the State Board for Community and Technical Colleges. Seattle Colleges reserves the right to change any of its fees or charges without notice.

## Nonpayment of Tuition and Fees

Costs and expenses that result from collecting unpaid tuition and fees will be added to the total owed to the colleges, according to state laws RCW 28B.10.293 and RCW 19.16.500.

## Student Fees

Student fees vary each year and are approved by the state Legislature or the Seattle Colleges Board of Trustees.

Students pay a variety of fees each quarter. Typical fees might include:

- **Technology Fee**
- **Class/lab fee** for some classes for equipment or materials
- **Transportation fee**, which allows reduced-fee ORCA passes
- **Student Activity Fee**
- **Noncredit & Community Service Program Fees**  
Refer to the website at each campus for fees associated with noncredit and community education programs.
- **Other Fees**  
Refer to campus websites for other fees, like GED fee, transcript fee, assessment or placement fee, work experience evaluation fee, or proctoring services.

## Refunds

### General Refunds

Refundable tuition and fees will be refunded if complete or partial withdrawal from classes is accomplished within the first 20 calendar days of the regular college quarter starting date (District Procedure 605.30.1). Fees and tuition refunds are returned automatically once students have officially dropped online or in person with the refund schedule below:

Withdrawal resulting from classes canceled by college	100%
During the first five instructional days of the college quarter*	100%
From the sixth instructional day through the 20th calendar day of the college quarter*	50%
No refunds after the first 20 calendar days of the college quarter.	0%

\*Subject to administrative fee of \$6.

There is no charge for dropping classes if no refund is involved. Allow at least two weeks from the time of payment for refund processing.

## Financial Aid Refunds

Refunds to financial aid recipients will be refunded to the appropriate financial aid account as required by federal and state regulations, including those students who are dismissed for disciplinary reasons. Students may be required to return financial aid funds to the college if federal or state regulations require the college to do so.

## International Refunds

International students who attend one of the colleges on a visa and make advance payments must have enrolled at the college in the quarter for which they are requesting a refund and must provide documentation establishing extenuating circumstances, such as visa denial or medical reasons.

## Intensive English Language Program Refunds

Withdrawal prior to first class . . . . .	100%
During the first five calendar days . . . . .	80%
From the sixth through the 14th calendar days . . . . .	50%
No refund after the 14th calendar day . . . . .	0%

## Continuing Education Programs and Community Education Classes

North Seattle College and South Seattle College Refund Policy:

Before 48 hours prior to first day of class\* . . . . . 100%  
*\*Subject to administrative fee of \$6.*

No refunds for cancellations within 48 hours of start of class or after class begins. . . . . 0%

Seattle Central College . . . . . varies

Due to the wide array of programs offered by Seattle Central's Continuing and Professional Education, refund policies are tailored to specific programs and courses. For specific refund information, call (206) 934-5476.

## Other Refunds

**Disciplinary Reasons:** No refund will be given to a student who is dismissed from Seattle Colleges for disciplinary reasons. (Policy 605.30.4)

**Failure to Follow Procedures:** No refund will be given to a student who fails to follow official withdrawal procedures. (Policy 605.30.4)

**Summer Quarter, Short or Irregular Courses:** Shorter courses, programs, and Summer Quarter will also be refunded, but on appropriately shortened time frames.

**Lab Fees:** Lab fees are based on consumption of supplies and materials. Those that are refundable will be refunded on the same schedule as tuition. (Policy 605.30.6)

**Parking Fees:** Parking fees will be refunded only in the case of 100 percent withdrawal from the college, in which case the fees will be refunded on the same schedule as tuition. (Policy 605.30.7)

## Tuition Waivers

Waivers can be grouped in three main categories: those required by law, those required by the State Board, and those that colleges are allowed but not required to offer (optional waivers). Seattle Colleges offers both required and optional waivers. Waivers may not be combined. Those used by Seattle Colleges include:

- Washington State Employee Space Available Waiver
- Senior Citizen – Audit/Credit Waiver
- Wrongfully Convicted Person Waiver
- Children and Spouses of Totally Disabled or POW/MIA or Deceased Eligible Veterans or National Guard Members
- Children and Spouses of Deceased or Disabled Law Enforcement Officers or Firefighters

For more information on waivers, visit [sbctc.edu/colleges-staff/programs-services/tuition-fees/tuition-waivers](http://sbctc.edu/colleges-staff/programs-services/tuition-fees/tuition-waivers) and your campus website.

## Waivers for Veterans

Contact the Veterans Affairs Office at each campus.

# Graduation Requirements and Academic Recognition

## Graduation Requirements

To earn a degree within Seattle Colleges, a student must complete at least 90 credits and have a minimum cumulative grade point average of 2.0. At least 15 credits must be earned at the college granting the degree.

## Graduation Process

Students apply to graduate during the quarter prior to the one in which the award requirements will be completed. Applications are available online and in the Registration Office, Advising Office, and division offices. Upon approval, the award will be issued.

**Transfer-In Credits and Graduation:** Students are strongly encouraged to apply to have their transfer credits evaluated before the end of their first quarter of enrollment and no later than one quarter prior to applying for graduation.

*Note: With approval of the dean, students may elect to graduate either under the catalog in effect at the time they complete the graduation requirements or under the provisions of an earlier official catalog, provided that (a) not more than five years have elapsed since the student first enrolled under that earlier catalog, and (b) the courses required for completion are still offered. The dean may make suitable substitutions in cases where courses are no longer offered. Students are advised that if they graduate under an earlier catalog, some current transfer requirements of four-year institutions may not be satisfied. Students are advised to contact the transfer institution for current requirements.*

## Academic Recognition

Students are recognized for outstanding academic achievements through the Dean's List or President's List awards at the college they are currently attending. These awards are posted to the student's official academic transcript.

**Dean's List:** Students must have 10 or more credits per quarter at the college they are currently attending and a 3.5 quarterly GPA.

**President's List:** Students must have accumulated 30 or more credits at the college they are currently attending and have a 3.8 or higher cumulative GPA.

## Phi Theta Kappa Academic Honor Society

Phi Theta Kappa International Academic Honor Society recognizes outstanding students who have achieved academic excellence at two-year public and private colleges. It offers students the chance to serve their campus and community while developing leadership skills. In addition, Phi Theta Kappa members have access to scholarship opportunities not available to nonmembers. Each college has a Phi Theta Kappa chapter and offers membership to students whose academic work meets the organization's standards. These awards are posted to the student's official academic transcript.

# Grading & Transcripts

Students are expected to make satisfactory academic progress while enrolled at Seattle Colleges. Academic progress is defined in terms of a student's GPA and how much time a student takes to complete a degree or certificate program.

**Minimum GPA:** A cumulative grade point average of 2.0 is required to remain in good standing.

## Grades and Credits

### Standard Grading System

Seattle Colleges uses numerical grades that may be considered equivalent to letter grades as follows:

<b>A</b>	<b>4.0–3.9</b>	<b>B</b>	<b>3.1–2.9</b>	<b>C</b>	<b>2.1–1.9</b>	<b>D</b>	<b>1.1–1.0</b>
<b>A-</b>	<b>3.8–3.5</b>	<b>B-</b>	<b>2.8–2.5</b>	<b>C-</b>	<b>1.8–1.5</b>	<b>F</b>	<b>0.9–0.0</b>
<b>B+</b>	<b>3.4–3.2</b>	<b>C+</b>	<b>2.4–2.2</b>	<b>D+</b>	<b>1.4–1.2</b>		

Many programs and individual course sequences require a minimum of a 2.0 grade in order to continue with additional courses or studies. Be sure to know the specific requirements for your courses, program, or college-transfer major. Consult with your advisor or counselor. GPA is determined by dividing total points earned by total credit hours attempted.

### Nontraditional Grading Options

The following letter grade options are not universally accepted by other institutions and could jeopardize the transferability of courses and financial aid status. See your advisor.

**I – Incomplete** Indicates that the student performed at a passing level, completed most of the course requirements, and intends to make up the missing work. An Incomplete is given only at the discretion of the instructor when the student has attended regularly, done satisfactory work, and furnished satisfactory proof to the instructor that the work cannot be completed because of illness or other circumstances beyond the student's control.

An Incomplete grade must be requested prior to the final examination. Coursework must be completed during the following quarter, excluding Summer Quarter. If the student fails to remove the "I" by completing the coursework in the specified time period, the "I" will remain on the transcript. The instructor must file a written statement of reasons for giving the Incomplete, listing a description of the work the student will need to do to remove it, with the dean of the division in which the course is offered. If the student elects to repeat a course rather than make up the work, the "I" will remain on the transcript. The grade earned will compute in the GPA; after receiving an "I" in a course, a student may repeat that course only once.

**S – Satisfactory/Credit** Used for individual progress, clinical, and skill development courses. This symbol is not used for college transfer courses numbered 100 and above, except designated pass/fail courses as approved by the Office of Instruction.

**N – Audit (no credit)** To audit a course means to register for and attend class without receiving a grade or credit. An "N" grade, rather than credit, is recorded on the transcript. Students must officially register to audit a course. Registration for an "N" may be made until the end of the second week of the quarter without the instructor's signature or the end of the eighth week (sixth week of Summer Quarter) with the instructor's approval and signature. Students are responsible for consulting with the instructor regarding class requirements. After an "N" is issued, the course may be repeated no more than one more time. If the instructor's requirements for an "N" are not satisfied by the student during the course, the instructor may issue an "NC" (No Credit) symbol.

Students changing their status from audit to credit or credit to audit must make official changes within specific deadlines.

**NC – Satisfactory/No Credit** Indicates that the student did not fulfill the requirements for receiving an "S" grade, an "N" grade, or a numerical grade in the course. A student in good standing may request an "NC" symbol from the instructor prior to the final examination, granted at the instructor's discretion. After an "NC" is issued, the course may be repeated no more than one more time. An "NC" does not affect a student's GPA.

**W – Official Withdrawal** This grade will be recorded and will remain on the student's transcript. After a "W" is issued, the course may be repeated no more than one more time. (See "Adding or Dropping Classes," page 219).

**Y – Ongoing Course** Used for a course that is two or more quarters in length. The final grade for the course will be reported at the last quarter.

**R – Repeat** (not computed in the GPA)

**U – Unsatisfactory**

**\* – Late or Missing Grade**

## Repeating a Course

There are two situations in which a student may repeat a course for grade replacement. To qualify for GPA improvement, both the initial course and repeated course must be taken at the same college.

1. GPA improvement. A credit course may be taken no more than three times total. Upon successful completion of a repeated course, the college will adjust the record to reflect the highest of the decimal grades used in the GPA computation. The student will be credited only once for the class. No more than two attempted grades may be selected for exclusion in the GPA computation.

*Note: Students planning to transfer to another institution should check with that institution to determine potential GPA impacts.*

2. Multiquarter continuous training courses use the same course number from quarter to quarter. In this situation, credits earned are cumulative and all grades are used to determine the GPA.



## Grade Errors or Changes

Report grade errors or grade changes immediately to the Registration Office. Grade errors or changes must be reported no later than the last day of the quarter that follows the quarter in which the grade was received, except a Spring Quarter grade may be reported through the last day of the following Fall Quarter. Students are encouraged to consult with their instructor before initiating a grade review process as outlined in the complaint procedure.

After a course grade has been assigned, supplemental or additional class work will not be accepted for the purpose of changing that grade except in the case of an "I" (Incomplete) grade.

## Transferring Credits from Other Colleges

For students pursuing a degree or certificate, an evaluation of incoming credits request may be submitted after transcripts from other institutions are received.

### Limitations on Transfer of Courses or Credits

Transfer credit is not awarded for the following types of study or coursework: (1) courses taken at colleges or universities that are not regionally accredited, (2) noncredit courses and workshops, (3) remedial or college preparatory courses, and (4) sectarian religious studies.

Also, see the Reciprocity Agreement for College Transfer Programs on page 17.

## Credit by Examination & Credit by Experiential Learning Portfolio

Colleges may award credit by examination to a student not formally enrolled in a class by requiring the student to pass a comprehensive examination on the subject matter of the course. Individual programs at individual colleges may offer credit for an experiential learning portfolio demonstrating learning gained outside the traditional classroom.

A student must be enrolled in or have completed at least one course at the college before applying for prior learning credits by examination or experiential learning portfolio.

The charge for Credit by Examination & Credit by Experiential Learning portfolio will be a \$100 base fee plus \$40 per credit. Credits earned by examination or portfolio will be noted as such on the transcript. Credits shall be graded, and each division or department will determine the minimum grade standards for granting credit by examination. Credits by examination may not exceed 50 percent of the necessary credits for a degree or certification. Credits by experiential learning portfolio may not exceed 25 percent of the necessary credits for a degree or certification. Credits awarded through prior learning options are not considered residence credits.

## Transcripts

Students can get an unofficial transcript at no cost via Student Online Services at the college website. Transcripts will not be released if students have not fulfilled all financial obligations to the college.

Official, sealed transcripts (a copy of a student's permanent academic record) are required by other institutions when students transfer. A fee is assessed for each official transcript requested and must be submitted in writing to the Registration Office of the college where the classes were taken or online at [studentclearinghouse.org](http://studentclearinghouse.org). Allow two working days for processing.

Testing Centers no longer have GED® records. Test scores must be requested from the GED® Testing Service directly at [gedtestingservice.com/testers/gedrequest-a-transcript](http://gedtestingservice.com/testers/gedrequest-a-transcript).

# Student Conduct, Rights, and Responsibilities

## Responsibilities & Right to Know

[seattlecolleges.edu/students-rights-and-rules](http://seattlecolleges.edu/students-rights-and-rules)

## Records

### Confidentiality of Records

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. & 1232g; 34 CFR Part 99) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. Information about Seattle Colleges' students is collected, maintained, and used to meet the college's educational objectives. Students are protected against improper disclosure of their records. These rights begin the first day of class and extend to all former students.

### Student Rights and Educational Records

FERPA affords students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student's education records within 45 days of the day the college receives a request for access. A student should submit a written request that identifies the record(s) the student wishes to inspect. The college official will arrange for access and notify the student of the time and place where the records may be inspected.  
  
If the records are not maintained by the college official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA. A student who wishes to ask the college to amend a record should write the college official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If the college decides not to amend the record as requested, the college will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of a right to a hearing.
3. The right to provide written consent before the college discloses personally identifiable information from the student's education records, except to the extent that FERPA authorizes disclosure with our consent. The college discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests.

A school official is a person employed by the college in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the college has contracted or is assigned to provide a service instead of using college employees or officials (such as an attorney, auditor, or collection agent, or a clinical, intern, or extern site); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the college. In addition, upon request, the college discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA. Following are the name and address of the office administering FERPA: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave. SW, Washington, DC 20202-5901

### Disclosure of Student Directory Information

The college may disclose a student's following directory information unless the student affirmatively submits a written notice to the Registrar's Office requesting that the directory information not be released. Directory information includes:

- Student's name
- The act of enrollment in the college
- Date(s) of enrollment
- Division or area of study
- Awards granted to the student by the college
- Participation in officially recognized activities in sports
- Weight and height of athletic team members
- Email address

### Exceptions

For more information on exceptions to the requirement, see Policies and Procedures 380. Student Records at [seattlecolleges.edu/about/policies-and-procedures/pol380](http://seattlecolleges.edu/about/policies-and-procedures/pol380).

### Additional Information

For more information regarding student rights, students should contact the Registration Office on each campus.

## Student Identification Numbers

Student identification (ID) numbers are used in college transactions. Each student is assigned a unique nine-digit ID number through ctcLink, the data system serving Washington's community and technical college system. A student's ctcLink ID number (also referred to as EMPLID) is used to access college records and conduct college business such as registration, tuition and fee payment, and other student services at Seattle Colleges. If students transfer in from or out to another public community or technical college in Washington state—including North Seattle, Seattle Central, and South Seattle Colleges—they continue to use their ctcLink ID to access their information.

To comply with federal laws, the colleges are required to ask for the student's Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN). Colleges use the SSN/ITIN to report American Opportunity Tax Credit or Lifetime Learning Tax Credit; to administer state/federal financial aid; to verify enrollment, degree, and academic transcript records; and to conduct institutional research. Pursuant to state law (RCW 28B.10.042) and federal law (Family Rights and Privacy Act), the college will protect a student's SSN from unauthorized use and/or disclosure. If a student does not submit an SSN/ITIN, the student will not be denied access to the college; however, the student may be subject to civil penalties (refer to Internal Revenue Service Treasury Regulation 1.6050S-1(e)(4) for more information).

## Behavior, Environment & Physical Safety

### Campus Security Offices

Students should use the same caution they would use in any public place in taking care of their personal safety and personal belongings. Campus safety/security offices provide helpful information for the campus community. Call 911 for serious emergencies.

<b>District (206) 934-5442</b>	<b>Central (206) 934-5442</b>
<b>North (206) 934-3636</b>	<b>South (206) 934-5157</b>

### Safety & Security

Students are obligated to respect the rights of others and to refrain from any actions endangering the health, safety, and welfare or property of others. Students are expected to comply with the policies, procedures, and regulations approved by the Board of Trustees and with Washington state and federal regulations. For additional information, refer to each college's student handbook.

### Campus Crime Data

Statistics on criminal incidents, as required by the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, are available at college safety/security offices as well as campus websites. For the last three years, campus crime data, along with general information, is provided by the Office of Postsecondary Education of the U.S. Department of Education, [ope.ed.gov/campusafety](https://ope.ed.gov/campusafety).

## Accidents

The students' well-being and safety are of the utmost importance. It is vital that everyone follow strict safety procedures recommended in all classes, particularly career and technical classes. In the event of an on-campus accident or injury, students and faculty should report the accident to the Security Office so the injury can be addressed and an accident report completed. Do not hesitate to immediately call 911 for serious injuries.

## Alcohol and Drugs

Alcohol and drugs are prohibited. Seattle Colleges prohibits the abuse of alcohol and the unlawful manufacture, distribution, possession, and use of illicit drugs. This policy applies to all employees and students of Seattle Colleges while they are on district property or while they are conducting college business, regardless of location. To provide a healthy, safe, and secure working and learning environment, each employee and student of Seattle Colleges is expected to be in an appropriate mental and physical condition to perform assigned duties and fully participate in the learning process. Seattle College District Policy 249 ("Drug-Free Environment") and resources for students and employees who need assistance with substance abuse problems are outlined in a brochure available on each campus and at [seattlecolleges.edu/about/policies-and-procedures](https://seattlecolleges.edu/about/policies-and-procedures).

National Institutes of Health provides a list of drugs and their dangers and effects: [drugabuse.gov/drugs-abuse](https://drugabuse.gov/drugs-abuse).

## Weapons

Seattle Colleges is committed to providing a safe and secure environment for the Seattle Colleges community and its guests. This policy sets forth restrictions on the ability to carry firearms or weapons, concealed or otherwise, on all Seattle Colleges properties.

Possession, holding, wearing, exhibiting, transporting, storage, or presence of any firearm, dagger, sword, knife, other cutting or stabbing instrument, club, explosive device, or any other weapon apparently capable of producing bodily harm is prohibited on the college campus, subject to the following exceptions:

- Commissioned law enforcement personnel or legally authorized military personnel may possess weapons while in performance of their duties.
- An individual with a valid concealed weapons permit may store a pistol in his or her vehicle parked on campus in accordance with RCW 9.41.050, provided the vehicle is locked and the weapon is concealed from view; or

The president or president's designee may grant permission to bring a weapon on campus upon a determination that the weapon is reasonably related to a legitimate pedagogical purpose. Such permission shall be in writing and shall be subject to such terms or conditions incorporated in the written permission.

This policy does not apply to the possession and/or use of disabling chemical sprays when possessed and/or used for self-defense.

## Workplace Violence/Hostile Work Environment

Workplace violence or a hostile work environment will not be tolerated at Seattle Colleges (District Policy 451).

## Discrimination and Harassment

Seattle Colleges has enacted policies prohibiting discrimination against and/or harassment of any student, employee, visitor, or member of a legally protected class. This includes sexual harassment, which is a form of discrimination consisting of unwelcome and gender-based verbal, written, electronic, and/or physical conduct. Further, Seattle Colleges is committed to ensuring that all employees and students work and learn in an environment that fosters mutual respect and professionalism, free from all forms of “bullying” behaviors, including “cyber-bullying,” as defined in Procedure 419. All employees and students are responsible for contributing to such an environment and are expected to treat other employees, students, and visitors with courtesy and respect.

## Smoking

Smoking is prohibited indoors and within 25 feet of the entrance to any public building, per Washington state law. North Seattle College is a tobacco-free campus. The use of tobacco products, chew, or e-cigarettes/vapor is prohibited on campus grounds.

## Traffic Laws

State motor vehicle laws and the Seattle traffic code apply to campus traffic. The campus speed limit is 15 miles per hour unless posted otherwise.

## Disciplinary Action

Disciplinary action will be taken against students who violate standards of conduct established by the college. If informal procedures do not resolve the issue, formal committee proceedings may be initiated. See your college's student handbook for more information.

## HIV/AIDS

### Transmission of HIV and Prevention of AIDS

To ensure the health and well-being of our college community, and to be in compliance with state codes, Seattle Colleges provides the following resources for information about transmission of the Human Immunodeficiency Virus (HIV), and the causative factor leading to Acquired Immune Deficiency Syndrome (AIDS). Complete and current information about specific risk factors for HIV/AIDS is available at the Seattle/King County Department of Health.

**HIV/AIDS Program , 400 Yesler Way, Third Floor, Seattle, WA 98104 (206) 296-4649**

Find information about HIV and AIDS at [kingcounty.gov/depts/health/communicable-diseases.aspx](http://kingcounty.gov/depts/health/communicable-diseases.aspx).

## Emergency Preparedness & Communications

The colleges work together to develop and share procedures and communications tools for use during unforeseen emergencies. Because the safety of students and staff is of greatest concern, a variety of systems are now available at each campus, and safety measures are reviewed and expanded on an ongoing basis.

Among resources available to students, faculty, and staff is SeattleColleges Alerts, which is powered by Rave Mobile Safety. These alerts allow the colleges to communicate quickly with students and employees during weather-related delays, closures, and other campus emergencies by sending alerts to computers and mobile devices via email and text message.

Learn more about SeattleColleges Alerts by visiting [seattlecolleges.edu/alerts](http://seattlecolleges.edu/alerts).

For more information about emergency communications and contacts, preparing for an emergency, and procedures for closure at Seattle Colleges, visit [seattlecolleges.edu/about/safety-and-security](http://seattlecolleges.edu/about/safety-and-security).

## Districtwide Information & Policies

### Equal Opportunity Statement and Accommodation for Seattle Colleges Students and Employees

Seattle Colleges does not discriminate on the basis of race or ethnicity, color, age, national origin, religion, marital status, sex, gender, sexual orientation, gender identity, veteran or disabled veteran status, political affiliation or belief, citizenship/status as a lawfully admitted immigrant, or disability. The district is committed to preventing and stopping discrimination, including harassment of any kind and any associated retaliatory behavior.

Seattle Colleges will take steps to assure that the lack of English language skills will not be a barrier to admission and participation in all educational and vocational education programs.

Inquiries regarding compliance and/or grievance procedures and disability support services may be directed to:

**Compliance Officer, Seattle Colleges, 1500 Harvard Avenue  
Seattle, WA 98122 | (206) 934-3873**

### Simplified Chinese

西雅图学院区致力于在教育、就业、服务和合同方面为所有学生、雇员和申请人提供平等机会,并且不根据种族或族裔、肤色、年龄、国家出身、宗教、婚姻状况、性别、性取向、性别认同、退伍军人或伤残退伍军人的地位、政治归属或信仰、公民身份/作为合法获准在美国工作的移民的身份或任何身体、感官或精神残疾的存在,除非残疾可能妨碍在可接受的水平上的表现。此外,为所有其他合格的残疾人提供合理的身体或精神限制。关于履约和(或)申诉程序的询问,可向学院标题 IX/RW 28A.640 官员提出。



**Russian**

Округ двухгодичных колледжей Сиэтла (Seattle College District), в состав которого входят двухгодичные колледжи Центрального (Seattle Central College), Северного (North Seattle College) и Южного Сиэтла (South Seattle College), а также Профессионально-технический институт Сиэтла, придерживается принципов и практики равенства возможностей для всех студентов, работников и соискателей в сфере обучения, занятости, услуг или заключения контрактов и не дискриминирует на основании расовой или этнической принадлежности, цвета кожи, возраста, национального происхождения, вероисповедания, семейного положения, пола, половой ориентации, гендерной самоидентификации, статуса ветерана или инвалида войны, политической принадлежности или политических убеждений, гражданства или статуса иммигранта, законно допущенного в США с разрешением на работу, или наличия нарушений физического, сенсорного или психического развития, за исключением случаев, когда такие нарушения могут воспрепятствовать приемлемой деятельности. При этом всем выявленным лицам с физическими или психическими нарушениями, допущенным к учебе или работе, предоставляются адекватные условия в разумных пределах. Запросы и/или жалобы, связанные с политикой недискриминации, можно направлять ответственному по колледжу за соблюдение поправки Title IX/RCW 28A.640 и/или координатору по разделу Section 504/ADA.

**Somali**

Degmada Kulliyada Jaaliyada Seattle «Seattle College District», oo ay ku jiraan Bartamaha Seattle, Kulliyadda Jaaliyada Woqooyiga iyo Koonfurta Seattle iyo Dugsiga Mihiyadda Seattle ayaa u daacad ah aaraada guud iyo ku-dhaqanka u sinnaanta fursadaheeda dhammaan ee ay siiso ardaydeeda, shaqaalaheeda iyo kuwa soo codsada waxbarashada, shaqadda, adeegyada, qandaraasyada, kala soocna aassaas uguma dhigto jinsiyad ama qolo, midab, da', qowmiyadda asalka qofka, diin, xaalad guur, jinsi, jandarka, ujeedka isu-tagga, aqoonsi sinji, xaaladda qof askari ahaan jiray ama askarinimo ku naafoobay, ku lug la haahaanshaha siyaasad, aaminaad, xaaladdiisa muwaaddinnimo wadankan si sharci ahaan loogu ogolaadey inuu ugu soo haajirey oo loo ogol yahay inuu ka shaqeysto ama jiritaanka naafada jirka, dareenka, ama naafada maskaxda, laga reebo markay naaf-onimadu ka hor istaageyso howsha shaqada ee laga rabo. Waxa intaa dheer, u-waafajin (accommodations) macquul ah oo xaddidan ee la og yahayyaa loo sameyn ee jirka ahaan ama maskadaee dhammaan dadka naafonimada leh ee arrinta u qalma. Qofka hoos ku qoran ayaa loo magacaabay inay wax ka qabato weydiimaha ku saabsan arrimaha ujeed-dooyinka kal-sooc-la'aanta oo ay ku jirto kuwa la xiriiira Sec 504 ADA iyo Title IX.

**Spanish**

Seattle College District, que incluye Seattle Central, North Seattle y South Seattle Colleges, tienen un compromiso con el concepto y la práctica de la igualdad de oportunidades para todos sus estudiantes, empleados y postulantes con respecto a educación, empleo, servicios y contratos, y no discriminan por motivos de raza o grupo étnico, color, edad, nacionalidad, religión, estado civil, sexo, género, orientación sexual, identidad de género, condición de veterano o veterano discapacitado, afiliación política o creencia, ciudadanía /condición de inmigrante admitido legalmente y autorizado a trabajar en los Estados Unidos, o presencia de alguna discapacidad física, sensorial o mental, excepto cuando la discapacidad pudiera impedir un desempeño de un nivel aceptable. Además, se implementarán todas las adaptaciones razonables para las limitaciones físicas o mentales conocidas para todas aquellas personas que cumplieran con los demás requisitos y tuvieran discapacidades. La persona que se menciona a continuación ha sido designada para manejar las consultas con respecto a las políticas antidiscriminatorias, incluso aquellas relacionadas con la Sección 504 de la Ley para los Estadounidenses con Discapacidades (ADA, por sus siglas en inglés) y el Título IX como sea listado.

**Vietnamese**

Những Trường Đại Học Cộng Đồng Seattle, bao gồm Trường Đại Học Cộng Đồng Trung Seattle, Bắc Seattle, Nam Seattle và Seattle Vocational Institute, cam kết với các khái niệm và thực hành của các cơ hội bình đẳng cho tất cả các sinh viên, nhân viên và các đương đơn trong giáo dục, việc làm, dịch vụ và hợp đồng. Trường cũng không phân biệt đối xử dựa trên sắc tộc hoặc chủng tộc, màu da, tuổi, quốc gia nơi xuất thân, tôn giáo, tình trạng hôn nhân, phái tính, giới nhận dạng giới tính, địa vị cựu chiến binh hoặc cựu chiến binh tàn tật, sự liên kết chính trị hoặc quan điểm chính trị, tình trạng công dân/diện di trú nhập cảnh hợp pháp được phép làm việc tại Hoa Kỳ, hoặc có tình trạng khuyết tật về thể chất, giác quan, hoặc tâm thần, trừ khi tình trạng khuyết tật có thể gây trở ngại tới khả năng sinh hoạt ở mức độ chấp nhận được. Ngoài ra, trường sẽ cung cấp các phương tiện trợ giúp đặc biệt cho tất cả những người khuyết tật hội đủ điều kiện nếu có các hạn chế về thể chất hoặc tâm thần. Yêu cầu về tuân thủ hoặc thủ tục khiếu nại, xin vui lòng liên hệ đến nhân viên của trường đại học Danh IX/ RCW 28A.640 và / hoặc Phần phối 504/ADA như được liệt kê.



## Disability Services for Students

Seattle Colleges is dedicated to providing equal opportunity for qualified students with disabilities to participate in college programs, services, events and activities, in accordance with Section 504 of the Rehabilitation Act, the Americans with Disabilities Act and Seattle Colleges District Policy 387 ([seattlecolleges.edu/about/policies-and-procedures/387](http://seattlecolleges.edu/about/policies-and-procedures/387)). For each campus, Disability Services (DS) is the designated office that coordinates services for students with disabilities.

To be eligible for academic accommodations, students engage in an interactive process with Disability Services and must provide documentation that includes the diagnosis and current functional impact on their academic performance. Disability Services works cooperatively with students, faculty and staff to arrange individualized accommodations. Qualified students must also meet the academic and technical standards required for admission to college programs or activities.

Students are advised to contact the DS office early in their educational planning to avoid delays in service. Disability Services promotes universal design within the College to create a welcoming and inclusive environment for all students.

To request services, students should contact the Disability Services office for the campus they plan to attend:

**North Seattle College, 206-934-7808**

**Disability Services ([northseattle.edu/disability-services](http://northseattle.edu/disability-services))**

**Seattle Central College, 206-934-4183**

**Accessibility Resource Center ([seattlecentral.edu/campus-life/student-support-and-services/disability-support](http://seattlecentral.edu/campus-life/student-support-and-services/disability-support))**

**South Seattle College and Georgetown, 206-934-5137**

**Disability Services ([southseattle.edu/disability-services](http://southseattle.edu/disability-services))**

**[seattlecolleges.edu/about/policies-and-procedures/pol387](http://seattlecolleges.edu/about/policies-and-procedures/pol387)**

## Title 38/Title 10

Seattle Colleges academic programs of study are approved by the Washington Student Achievement Council's State Approving Agency for enrollment of people eligible to receive educational benefits under Title 38 and Title 10, U.S. Code.

## Completion & Transfer Rates

Statistics and information on Completion and Transfer Rates at the colleges are available on the Facts and Figures web page: [seattlecolleges.edu/about/facts-and-figures](http://seattlecolleges.edu/about/facts-and-figures).

The official rules for students at Seattle Colleges can be found in the Washington Administrative Code, Chapter 132F-121 WAC – Student Activities, Rights, and Discipline. The Washington Administrative Code (WAC) is the official compilation of all current rules that have been adopted by state institutions of higher education and other state administrative agencies.

[apps.leg.wa.gov/WAC/default.aspx?cite=132F-121](http://apps.leg.wa.gov/WAC/default.aspx?cite=132F-121)

## District Policies Relating to Students

View Seattle College policies at [seattlecolleges.edu/district/studentlife/studentrules.aspx#official](http://seattlecolleges.edu/district/studentlife/studentrules.aspx#official).

Every reasonable effort has been taken to ensure the accuracy of this information. However, readers are encouraged to contact the individual Student Services departments at each college for further information.

## Student Complaints

Seattle Colleges has established procedures to assist students who feel they have a complaint relating to grades or an action by a member of the college community. These rules can be found at [apps.leg.wa.gov/WAC/default.aspx?cite=132F-121](http://apps.leg.wa.gov/WAC/default.aspx?cite=132F-121).

**North      Complaints Officer**  
**(206) 934-4703**

**Central    Dean of Student Development**  
**(206) 934-3890**

**South      Dean of Student Life**  
**(206) 934-6749**

## Memberships

Seattle Colleges is a member of several national organizations for higher education, including the American Association of Community Colleges (AACC), American Association for Women in Community Colleges (AAWCC), Association of Community College Trustees (ACCT), and League for Innovation in the Community College.

In Washington, Seattle Colleges holds membership in the Trustees Association for Community and Technical Colleges (TACTC) and the Washington Association of Community and Technical Colleges (WACTC).

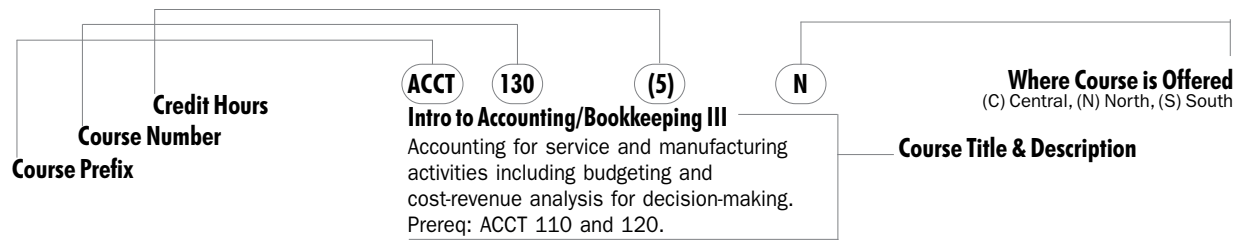
Regionally, Seattle Colleges belongs to the Seattle/King County Economic Development Council, Workforce Development Council Board, Seattle Chamber of Commerce, the Road Map Project Sponsor Group, the Puget Sound Coalition, and the Northwest Commission of Colleges and Universities (NWCCU).

# COMBINED CAMPUS COURSE DESCRIPTIONS



Brief descriptions of courses offered at the Seattle Colleges are listed here. Guides on pages 231-233 contain prefix/course and course/prefix lists to assist you in locating courses associated with a particular program. Courses are updated on an ongoing basis, and the most current course information is available at [seattlecolleges.edu](http://seattlecolleges.edu).

## How to Read Course Descriptions



## Common Course Numbering (&)

All Washington community colleges, including the Seattle Colleges, are using a **Common Course Numbering (CCN) System**. The system identifies courses that are equivalent at community colleges across the state to make it easier for students to transfer between two-year colleges.

**Courses identified with an ampersand (&) are part of the CCN system** (examples: ACCT& or HIST&). However, courses without an "&" will continue to transfer between two-year and four-year colleges under individual Direct Transfer Agreements (DTA), as in the past.

# Course/Prefix Index

## Prefix to Course

*NOTE: Prefixes are revised to fit the statewide Common Course Numbering (CCN) system implemented in Summer 2008. See page 4 for further CCN information. Course listings for Central, North and South start on page 190.*

ABD	Abroad/Study Abroad
ABE	Adult Basic Education
ABR	Auto Body Collision Repair
ABS	Applied Behavioral Science B.A.S.
ACCT	Accounting
ACM	Aerospace Composite Materials
AD	Application Development B.A.S.
AHD	Dental Assistant
AHE	Allied Health/Dental Hygiene/ Emergency Medical Technician/ Medical Assisting/Phlebotomy/ Respiratory Care
AHI	Health
AHM	Medical Assisting
AMA	Medical Assisting
AME	American Ethnic Studies
AMT	Aviation Maintenance Technology
ANTH	Anthropology
APPR	Apparel Design & Development
ARAB	Arabic
ART	Art
ASL	American Sign Language – see Languages & Literature
ASTR	Astronomy
AUT	Automotive Technology

BAK	Specialty Desserts & Breads – see Culinary Arts
BCT	Business Computers
BIOL	Biology
BOS	Business
BOT	Botany
BTS	Basic & Transitional Studies
BUS	Business

CCE	Early Childhood Education
CDS	Chemical Dependency – see Social & Human Services
CFS	Child & Family Studies
CHED	Community Health Education B.A.S. – see Respiratory Care

CHEM	Chemistry
CHIN	Chinese – see Languages & Literature
CMST	Communication
COR	Core Employment Readiness
CPP	Community Policing
CSC	Computer Science
CTN	Computing Technology
CUL	Culinary Arts
CWE	Cooperative Education/ Work Experience

DES	Graphic Design
DHY	Dental Hygiene B.A.S.
DRMA	Drama

ECED	Early Childhood Education
ECON	Economics
EDUC	Education
EEL	Sustainable & Conventional Energy & Control Technology
EET	Electronics Technology
EFDA	Expanded Function Dental Auxiliary
ENGR	Engineering
ENGL	English – see Languages & Literature
ENV	Environmental Sciences
ESL	English as a Second Language – see Languages & Literature

FAM	Parent Education/ Senior Adult Education
FRCH	French – see Languages & Literature
FSD	Restaurant Production – see Culinary Arts

GED	General Education Development
GEOG	Geography
GEOL	Geology
GERM	German – see Languages & Literature

HDC	Human Development
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HDM	Diesel & Heavy Equipment Technology
HEA	Health
HIN	Watch Technology
HIST	History
HMG	Hospitality Management B.A.S.
HOS	Hospitality – see Culinary Arts
HSC	High School Completion – Adult Basic Education
HUM	Humanities
HVC	Heating, A/C, Refrigeration Design Technology

IBN	International Trade B.A.S.
ICT	Computing Technology (IT)
IFS	Industrial First Aid
INT	Industrial Manufacturing Technology
ISC, ISD, ISP	International & Intercultural Studies
IT	Information Technology
ITAL	Italian – see Languages & Literature
ITC	Information Technology

JAPN	Japanese – see Languages & Literature
JRN	Journalism

LAN	Linguistics – see Languages & Literature
LHO	Landscape Horticulture
LIT	Literature – see Languages & Literature
LOG	Logistics

MAS	Medical Administrative Specialist
MATH	Mathematics
MET	Mechanical Engineering Technology – see Engineering
MEY	Meteorology
MGO	Marine Deck Technology
MIC	Information Technology
MSC	Material Science – see Science and Engineering
MTA	Building Trades Pre-Apprentice Training
MTS	Marine Technology
MUSC	Music
MVM	Automotive Technology

NANO Nanotechnology  
NME New Media  
NTR Nutrition  
NUR Nursing

OCEA Oceanography

PEC Physical Education  
PHA Pharmacy Technician  
PHIL Philosophy  
PHO Photography, Commercial  
PHYS Physics  
POLS Political Science  
PSG Psychology  
PST Pastry Arts – see Culinary Arts  
PSYC Psychology  
PTE Professional Technical Teacher Education B.A.S.

RCP Respiratory Care  
REL Religion  
RES Real Estate

SBST Sustainable Building Science Technology B.A.S.  
SCI Science  
SEN Senior Adult Education  
SHS Social & Human Services  
SLN Service Learning  
SMG Supervision & Management  
SOC Sociology  
SPAN Spanish – see Languages & Literature  
SPS Audiology  
SSC Social Sciences  
SURG Surgical Technology  
SUST Sustainability  
SWF Social Welfare

TDR Drafting: Architectural Engineering Drafting & Engineering Graphics & Design Technology

UGR Undergraduate Research

VIET Vietnamese – see Languages & Literature

WCO Wood Construction  
WEB Web Design & Development – see IT  
WFT Welding Fabrication Technology  
WIN Wine Industry Training  
WMN Women Studies

## Course to Prefix

Abroad/Study Abroad ABD  
Accounting ACCT  
Adult Basic Education ABE, HSC  
Aerospace Composite Materials ACM, AMT  
Allied Health AHE, AHI, AHL  
Allied Health Dental AHD  
American Ethnic Studies AME  
American Sign Language – see Languages & Literature ASL  
Anthropology ANTH  
Apparel Design & Development APPRL  
Application Development B.A.S. AD  
Applied Behavioral Science B.A.S. ABS  
Arabic ARAB  
Architectural Engineering Drafting see Drafting TDR  
Art ART  
Astronomy ASTR  
Audiology SPS  
Auto Body Collision Repair ABR  
Automotive Technology AUT, MVM  
Aviation Maintenance Technology AMT

Baking – see Culinary Arts BAK  
Basic & Transitional Studies BTS  
Biology BIOL  
Botany BOT  
Building Trades Pre-Apprentice MTA  
Business BUS  
Business Office Skills BOS  
Business Computer Technology BCT

Chemical Dependency – see Social & Human Services CDS  
Chemistry CHEM  
Child & Family Studies CFS  
Chinese – see Languages & Literature CHIN  
Communication CMST  
Community Health Education B.A.S. CHED  
Community Policing CPP  
Computer Science CSC  
Computing Technology CTN, ICT  
Cooperative Work Experience CWE  
Core Employment Readiness COR  
Culinary Arts BAK, CUL, HOS  
Culinary Arts FSD, PST

Dental Assistant AHD  
Dental Hygiene B.A.S. AHE, DHY  
Diesel & Heavy Equipment Technology HDM  
Drafting – Architectural/Engineering and Engineering Graphics & Design Technology TDR  
Drama DRMA

Early Childhood Education CCE, CFS, ECED  
Economics ECON  
Education EDUC  
Electronics Technology EET  
Emergency Medical Technician AHE  
Engineering ENGR, MET, MSC  
Engineering Graphics & Design Technology – see Drafting TDR  
English – see Languages & Literature ENGL, ESL

English as a Second Language – see Languages & Literature	ESL
Environmental Sciences	ENV
Expanded Function Dental Auxiliary	EFDA
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French – see Languages & Literature	FRCH
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General Education Development	GED
Geography	GEOG
Geology	GEOL
German – see Languages & Literature	GERM
Graphic Design	DES
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Health	HEA
Heating, A/C & Refrigeration Design	HVC
High School Completion – see Adult Basic Education	HSC
History	HIST
Hospitality – see Culinary Arts	HOS
Hospitality Management B.A.S.	HMG
Human Development	HDC
Humanities	HUM
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Industrial First Aid	IFS
Industrial Manufacturing Technology	INT
Industrial Power & Control Technology – see Sustainable & Conventional Energy & Control Technology	EEL
Information – see Library Information Research	INFO
Information Technology	IT, ITC, MIC, NET, WEB
International Business B.A.S.	IBN
International Studies	ISC, ISD, ISP
International Trade	IBN
Italian – see Languages & Literature	ITAL
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Japanese – see Languages & Literature	JAPN
Journalism	JRN

Landscape Horticulture	LHO
Languages ARAB, ASL, CHIN, ENGL, ESL, FRCH, GERM, ITAL, JAPN, LAN, RUSS, SPAN, VIET	
Library Information Research	INFO
Linguistics – see Languages & Literature	LAN
Literature – see Languages & Literature	LIT
Logistics	LOG
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Marine Technology	MGO, MTS
Material Science – see Science and Engineering	MSC
Mathematics	MATH
Mechanical Engineering	MSC, MET, ENGR
Technology – see Engineering	
Medical Assisting	AHM, AMA
Meteorology	MEY
Multiple Trades Apprentice	MTA
Music	MUSC
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Nanotechnology	NANO
Network Technologies	NET
New Media	NME
Nursing	NUR
Nutrition	NTR
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Oceanography	OCEA
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Parent/Senior Adult Education	FAM
Pastry – see Culinary Arts	PST, BAK
Pharmacy Technician	AHI, PHA
Philosophy	PHIL
Phlebotomy	AHE
Photography, Commercial	PHO
Physical Education	PEC
Physics	PHYS
Political Science	POLS
Pre-Apprentice Trades	MTA
Professional Technical Teacher Education	PTE
Psychology	PSG, PSYC

Real Estate	RES
Religion	REL
Respiratory Care B.A.S.	AHE, CHED, RCP
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Science	MSC, SCI
Senior Adult Education	FAM, SEN
Service Learning	SLN
Social & Human Services	CDS, SHS
Social Sciences	SSC, SWF
Sociology	SOC
Spanish – see Languages & Literature	SPAN
Specialty Desserts & Breads – see Culinary Arts	BAK
Study Abroad	ABD
Supervision & Management	SMG
Surgical Technology	SURG
Sustainability	SUST
Sustainable Building Science Technology B.A.S.	SBST
Sustainable & Conventional Power & Control Technology	EEL
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Undergraduate Research	UGR
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Vietnamese – see Languages & Literature	VIET
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Watch Technology	HIN
Web Design & Development – see IT	WEB
Welding Fabrication Technology	WFT
Wine Industry Training	WIN
Women Studies	WMN
Wood Technology	WCO



## Abroad/Study Abroad

**ABD 150 (1-30) N | S**  
**Study Abroad**

Students studying abroad through approved Seattle College District programs register for ABD 150, similar to the Learning/Coordinated Studies Programs. Once the student's enrollment schedule is confirmed, the course credits are broken out into discrete courses. All courses are marked STDY ABD in the course description. Study Abroad courses not offered in the Seattle College District are designated with 900 series of numbers. These courses may be used to satisfy distribution requirements in the Associate Degree.

## Accounting with International Accounting

**AIA 301 (5) N**  
**Intermediate Accounting I**

Intermediate Accounting I is the first of a two-course series which provides a comprehensive study of financial accounting theory and reporting, including the conceptual framework of financial accounting. Topics include: Generally Accepted Accounting Principles, an in-depth examination of assets, the elements and structures of financial statements, accounting research, and the uses of accounting for decision making. Prerequisite: Acceptance into AIA BAS Program or instructor permission.

**AIA 310 (5) N**  
**Accounting with International Accounting Ethics**

Within a global setting, students study ethical reasoning, behavioral ethics, and ethical conduct within an accounting practitioner's framework that guides their ethical obligations as they provide accurate legal financial reports that contribute to managerial decisions.

## Accounting

**ACCT 110 (5) N | S**  
**Introduction to Accounting/Bookkeeping I**

This introductory class covers the development of the accounting cycle for a sole proprietorship, from business transactions through closing entries and financial statements. Includes service and merchandising types of businesses, special journals, banking services, and payroll.

**ACCT 120 (5) N | S**  
**Introduction to Accounting/Bookkeeping II**

Explores specialized accounting procedures for merchandising businesses and partnerships. Intro to accounting for corporations. Prereq: ACCT 110 with 2.0 or higher.

**ACCT 131 (5) N**  
**QuickBooks**

Hands-on use of QuickBooks to record business transactions, prepare customer invoices, pay vendors, and record payroll. QuickBooks organizes and summarizes all financial data and produces a myriad of reports. Prereq: ACCT& 201 or ACC 110 or instructor permission. Lab Fee

**ACCT 197 (1-5) S**  
**Work Experience: Accounting**

Earn work experience credit in the accounting field. Prereq: Permission.

**ACCT& 201 (5) C | N | S**  
**Principles of Accounting I**

Defines basic accounting concepts, principles and procedures for recording business transactions and developing financial accounting reports. Recommended: ACCT 110 or sophomore standing (S).

**ACCT& 202 (5) C | N | S**  
**Principles of Accounting II**

Examines application of basic accounting concepts, principles and procedures to more complex business situations in a corporate setting. Prereq: ACCT& 201 with a minimum GPA of 2.0 or permission.

**ACCT& 203 (5) C | N | S**  
**Principles of Accounting III**

Analysis of accounting data as part of the managerial process of planning, decision-making and control. Concentrates on economic decision-making in enterprises. Prereq: ACCT 120, ACCT& 202 or permission (C, N); ACCT 120 or ACCT& 202 or permission (S).

**ACCT 214 (5) S**  
**Accounting Systems**

Computer applications of basic accounting concepts, principles and procedures, including but not limited to discussions of QuickBooks, Excel, and Microsoft Accounting. Prereq: ACCT 110, 120, &201 or &202 with 2.0 or higher.

**ACCT 251 (5) N**  
**Intermediate Accounting I**

Intermediate Accounting I is the first of two intermediate financial accounting courses which provide a comprehensive study of financial accounting theory and financial accounting reporting. The course will concentrate on the foundations of financial accounting and include an in-depth study of generally accepted accounting principles and concepts. Prereq: ACCT&202 or instructor permission.

**ACCT 252 (5) N**  
**Intermediate Accounting II**

Intermediate Accounting II is the second of two intermediate financial accounting courses which provide a comprehensive study of financial accounting theory and financial accounting reporting. The course will concentrate on the foundations of financial accounting and include an in-depth study of generally accepted accounting principles and concepts. PLEASE NOTE: This class is typically offered TWO times per year: Summer and Winter quarters (typical class offerings may change depending on student enrollment and other factors). Prereq: ACCT 202 or ACCT 251 or instructor permission.

**ACCT 255 (5) N**  
**Individual Income Tax**

Introduction to individual tax laws (as opposed to business tax laws). Includes preparation of individual income tax forms using text and/or web based sites or income tax software. PLEASE NOTE: This class is typically offered every quarter (typical class offerings may change depending on student enrollment and other factors).

**ACCT 256 (1-5) N**  
**Taxation of Corporations and Partnerships**

This course provides a comprehensive study of the taxation of corporations and partnerships. Basic tax research and the theory of taxation are also developed. Prereq: ACCT& 202 and ACCT 255 or instructor permission.

**ACCT 257 (5) N | S**  
**Business Tax Accounting**

Basic principles, practices and governmental regulations (federal, Washington state and local) involved in business tax accounting. Includes filing returns, record-keeping, tax planning, registrations and business licenses. Prereq: ACCT 120 or ACCT& 202 (N) or permission.

**ACCT 260 (5) N****Peachtree Accounting**

A hands-on approach to learning Peachtree Accounting Software, widely used by service and merchandising businesses and accountants. Utilize various modules to prepare internal and external reports. Prereq: ACCT 110, ACCT& 201 or permission.

**ACCT 261 (5) N****Accounting Information Systems**

This course examines accounting information systems as part of enterprise resource planning systems. It focuses on the activities performed in the major business cycles and the flow of accounting data and information in those systems, whether manual or computerized. Topics include systems analysis, systems design, and systems implementation, internal controls, fundamental database concepts, and flowcharting. Prereq: ACCT 110 or ACCT&201

**ACCT 265 (5) N****Accounting for Not-For-Profit and Gov Entities**

This course is an overview of accounting for not-for-profit and government entities. It covers basic accounting principles and procedures relating to not-for-profit and government organizations. It includes financial statement preparation and analysis. PLEASE NOTE: This class is typically offered TWO times per year: Summer and Winter quarters (typical class offerings may change depending on student enrollment and other factors). Prereq: ACCT&201 and ACCT&202 or permission.

**ACCT 267 (5) N****Not for Profit Financial Management**

This course provides the fundamentals of financial management for those pursuing careers within the public, health, and not-for-profit fields. Students will learn the vocabulary, concepts, methods, and basic tools of financial management and financial analysis within the three major areas of the public sector. PLEASE NOTE: This class is typically offered THREE times per year: Fall, Winter and Spring quarters (typical class offerings may change depending on student enrollment and other factors).

**ACCT 268 (5) N****Advanced QuickBooks**

Hands-on use of QuickBooks to record business transactions in the full accounting cycle, including those related to banking, payroll, inventory management, estimates, and progress billing. Advanced topics are covered, such as class tracking, sales tax, bank feeds, reimbursable expenses, employee time billing, and tracking fixed assets. Students will learn complex company file setup procedures, QuickBooks customization, and custom reports. Prereq: ACCT 131 or instructor permission.

**ACCT 269 (5) N****Not-for-Profit Practices and Procedures**

Provides an overview of the rules and regulations covering not-for-profit organizations. Topics addressed are preparation of Form 990 Return and Form 1023 Application for Exemption, charitable giving and fund raising issues, officer and board of director interaction and ethics, internal control and operational effectiveness.

**ACCT 270 (5) N****Cost Accounting**

Theory of cost accounting, cost systems, sources of cost data and their accumulation, allocation, and analysis; managerial control through cost data. PLEASE NOTE: This class is typically offered TWO times per year: Summer and Winter quarters (typical class offerings may change depending on student enrollment and other factors). Prereq: ACCT& 203 or permission.

**ACCT 271 (5) N****Ethics in Accounting**

Learn and cultivate the ethical commitment needed to ensure work in the business world meets the highest standards of integrity, independence and objectivity. Understand obligations and professional responsibilities of accountants and auditors. Uses case studies and SEC case files to study real world issues. PLEASE NOTE: This class is typically offered TWO times per year: Summer and Winter quarters (typical class offerings may change depending on student enrollment and other factors). Prereq: ACCT 202.

**ACCT 272 (5) N****Fraud Examination**

An introduction to the field of fraud examination. Provides an overview of the general fraud examination methodology and fraud theory approach and outlines the basics surrounding fraud examination including criminology related to fraud. \*Students must enroll in ACCT 272, 273, and 274 concurrently as part of the Summer Fraud Institute.\*Prereq: prior accounting course or instructor permission.

**ACCT 273 (5) N****Introduction to Financial Crimes**

Intro to major categories of financial crime and the legal procedures which are frequently relevant to fraud accounting work, including both criminal and civil procedures. \*Students must enroll in ACCT 272, 273, and 274 concurrently as part of the Summer Fraud Institute.\*Prereq: prior accounting course or instructor permission.

**ACCT 274 (5) N****Forensic Accounting**

Integrate accounting, auditing, and fraud investigative skills. Using case studies, analyze documents, evaluate internal controls, and trace funds to resolve accounting irregularities with an emphasis on fraudulent financial reporting. Includes indirect methods of reconstructing; income, litigation support, computing commercial and economic damages, and business valuation. Prereq: prior accounting course or instructor permission.

**ACCT 275 (5) N****Auditing**

This course is an introduction to auditing, covers such topics as generally accepted auditing standards (GAAS), the auditor's opinion, professional ethics, audit evidence, internal control, an audit procedures. Prereq: ACCT 252 or permission.

**ACCT 298 (1-5) N****Special Topics in Accounting**

Seminar on selected topics or activities in accounting. Prereq: Permission.

**ACCT 299 (1-5) C | N****Independent Study: Accounting**

Independent study of selected accounting topics. Prereq: Permission.

**ACCT 303 (5) C**  
**Accounting for Healthcare Management**

An introductory course for students pursuing a Bachelor of Applied Science Degree in Healthcare Management-Healthcare Services Management track. Includes basic accounting principles and financial statement preparation, with application of accounting techniques to management issues using a spreadsheet program. Topics include the accounting cycle, financial statements, the cost of producing a product or service, cost behavior and breakeven analysis, budgeting, inventory, and payroll.

**Adult Basic Education****ABE 020 (1-15) C**  
**Adult Basic Education Level 2**

Covers reading and writing. Review and apply language skills, correct usage and spelling.

**ABE 021 (1-15) C | N | S**  
**Adult Basic Education Math Level 2**

Meets the needs of beginner level math students who want to improve their ability to solve math problems including addition, subtraction, multiplication, and division of whole numbers and measurements. Prereq: Appropriate score on Division placement test, or Instructor's permission.

**ABE 022 (1-15) C | N**  
**Adult Basic Education Communication Level 2**

Designed to meet the needs of beginning level communication students who want to improve their ability in reading and writing. Emphasizes basic grammar, sentence structure, group work, and understanding and recounting events and details in academic and professional texts and forms. Prereq: Appropriate score on Division placement test, or Instructor's permission.

**ABE 024 (1-15) C**  
**Adult Basic Education Level 2 - Computers**

Computer lab class provides an opportunity to practice basic skills learned in class or learn new skills independently. Use popular computer programs as well as specialized basic skills software. Emphasizes keyboarding and computer literacy skills for those new to personal computers.

**ABE 030 (1-15) C | N**  
**Adult Basic Education Level 3**

Concentrates on reading comprehension, making inferences, recognizing fact and opinion, vocabulary development and writing simple paragraphs. Prereq: Varies by campus.

**ABE 031 (1-15) C | N | S**  
**Adult Basic Education Math Level 3**

Designed to meet the needs of low-intermediate level math students who want to improve their ability to solve math problems including whole numbers, fractions, decimals, measurements and data sets. Prereq: Successful completion of ABE 021 (ABE Math Level 2), appropriate score on division's placement test, or Instructor's permission.

**ABE 032 (1-15) C | N | S**  
**Adult Basic Education Communication Level 3**

Designed to meet the needs of low-intermediate level communication students who want to improve their ability in reading and writing by developing their reading comprehension and single paragraph writing. The course emphasizes basic grammar, punctuation, spelling, vocabulary development, understanding main ideas, and making inferences. Prerequisite: Successful completion of ABE 022 (ABE Comm Level 2), appropriate score on division placement test, or Instructor's permission.

**ABE 034 (1-5) C**  
**Computer Assisted Adult Basic Education Level 3**

More advanced computer-assisted practice in reading, writing and math. Learn from textbooks, fiction, policies and procedures manuals, and purchase agreements. Write résumés, reports and formal letters. Compute percentages, ratios, proportions, simple formulas and interpret graphs and charts.

**ABE 040 (1-15) C | N**  
**Adult Basic Education Language Arts I**

Emphasis on reading comprehension, making inferences, recognizing fact and opinion, vocabulary development, basic sentence patterns, paragraphs, punctuation, capitalization and correct word usage. Covers multi-paragraph essays. Prereq: ABE 030 or division placement test (N,C).

**ABE 041 (1-15) C | N | S**  
**Adult Basic Education Level 4 Math**

Adult Secondary Education Math Level 4 is designed to meet the needs of intermediate level math students who want to improve their ability to solve higher-level math problems including fractions, ratios and proportions, and percents and measurements.

**ABE 042 (1-15) C | N | S**  
**Adult Basic Education Communication Level 4**

Designed to meet the needs of intermediate level communication students who want to improve their ability to read and write at the college level and professional level. Emphasizes vocabulary, grammar, organization, structure, and purpose in both writing multi-paragraph essays and reading texts. Prereq: Successful completion of ABE 032 (ABE Comm Level 3), appropriate score on division placement test, or Instructor's permission.

**ABE 044 (1-15) C | N | S**  
**Adult Basic Education Level 4 - Computers**

More advanced computer-assisted practice in reading, writing, math and test-taking skills. Instructional activities will improve general reading, writing, math and test-taking skills. Take practice tests and work with instructor until ready to take the college division placement test (C,S). Covers the basics of Microsoft Office applications. Self-paced with a high level of student/teacher interaction (N).

**ABE 047 (1-5) N**  
**Intermediate Digital Literacy**

Intermediate digital literacy/computer skills course for students in Adult Basic Education with an emphasis on online tools and apps, beginning MS Word, Canvas, and MS Excel, job searches and applications, and online safety and privacy.

**ABE 049 (1-15) C | N | S**  
**Basic Skills Support for Professional/Tech Prgms**

Provides specific support to assist students in completing Professional Technical programs and building job-related language skills. Coreq: Enrollment in a Professional Technical program.

**ABE 050 (1-10) C | N**  
**Language Arts II**

Emphasis on preparing for college-level English courses with a focus on academic reading, writing and critical thinking strategies and skills, including identifying main ideas, making inferences, recognizing fact and opinion, developing more nuanced vocabulary, analyzing sentence patterns, employing advanced mechanics and word usage, writing paragraphs, transitioning between paragraphs, and drafting multi-paragraph essays.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**ABE 051 (1-15) C | N**  
**Geometry I**

An introductory geometry course that covers the study of angles, triangles, quadrilaterals, polygons, circles, Pythagoras' Theorem, and measurement, including perimeter, area, and volume. Students will study practical applications of how geometry is used in the real world.

**ABE 054 (1-15) C | N**  
**Computer Assisted ABE 5**

Use computers to improve basic skills of reading, writing and math. Prepare to take the College Placement Test and receive scores high enough to enter developmental education courses in English and math. Take practice tests and work with instructor until ready for the actual test.

**ABE 057 (1-5) N**  
**Advanced Digital Literacy for ABE**

Advanced digital literacy/computer skills course for Adult Basic Education students in advanced word processing (Word), spreadsheet (Excel), database (Access), and presentation (PowerPoint) applications. Students will create a variety of common business documents and learn to edit and format. Students will also learn file management skills, including how to create and name directories, rename files, and delete, copy, and move files. Prerequisite: completion of ABE 047 or instructor permission.

**ABE 059 (1-15) C**  
**Vocational ESL**

Intended to prepare students for further study or work in a variety of health care fields. Includes basic skills instruction to prepare students to meet their academic and vocational goals.

**ABE 060 (1-15) C | N | S**  
**Adult Secondary Education Level 6**

Preparation to pass the college placement exam needed to enter a college program. Emphasizes effective essay writing, reading college text, solving higher-level multi-step math problems, and adapting to the college culture.

**ABE 061 (1-15) C | N | S**  
**Adult Secondary Education Math Level 6**

Adult Secondary Education Math Level 6 is designed to meet the needs of high level math students who want to improve their ability to solve higher-level multi-step math problems.

**ABE 062 (1-15) C | N | S**  
**Adult Secondary Education Communication Level 6**

Preparation to pass the Communications portion of the college placement exam needed to enter a college program. Emphasizes effective essay writing, reading college text and adapting to the college culture.

**ABE 064 (1-15) C**  
**Adult Secondary Education Computer Assist Level 6**

Advanced computer-assisted skill-building in reading, writing, math and test-taking. Prepare for the COMPASS Test. Take practice tests and work with instructor until ready to take the actual test.

**ABE 070 (1-3) C | N | S**  
**Educational Interviewing for ABE/GED Students**

Helps ABE/GED students at all competency levels identify their current abilities, characteristics, styles and readiness to learn. Intro to campus resources.

**ABE 079 (1-5) S**  
**College Transitional English**

The focus of this class is on the four basic communication skills: reading, writing, listening and speaking. The aim is to prepare students for the 090 level developmental English or ESL classes. The class meets daily, Monday through Friday. Students who enroll as College Transfer will earn 5 credits. Prerequisite: Students may be referred by intake testing (ASSET or ESL assessment), by counselor or instructor assessment or by self-selection.

**ABE 080 (1-5) N**  
**English Skills Shop**

Support class for students enrolled in developmental English programs and students seeking to strengthen their academic writing skills. Individual and small group tutoring to improve listening, speaking, study skills, reading comprehension and rate; vocabulary, phonics and word skills, spelling, grammar, writing sentences, paragraphs, and essays. Strongly recommended for students enrolled in developmental English courses. Prerequisite: Advisor or instructor permission.

**ABE 081 (1-15) N**  
**Basic Math Skills**

This course covers whole and signed numbers, fractions, decimals, percent, ratio and proportion, units of measurement, and geometry. Prereq: ABE 021 or placement.

**ABE 083 (1-5) C**  
**Strategic Learning in a Content Area**

Supports strategic learning in a college class. Develops students' study skills and strategies for college success including metacognitive strategies, previewing, skimming, and scanning of written materials, summarizing, paraphrasing, note-taking skills, and time management. Introduces information literacy and basic research skills. Co-requisite: Concurrent enrollment in a college-level (1xx) class.

**ABE 084 (1-15) N**  
**Algebra I**

This course covers basic operations with algebraic expressions; solving and graphing linear equations and inequalities; word problems; and systems of equations. Prerequisite: ABE 041 or ABE 081 with a 2.0 or above, or successful completion of MATH 081 or placement.

**ABE 085 (1-15) N**  
**Algebra II**

This class will focus on factoring polynomials; rules of exponents; solving quadratic equations; equations and graphs; roots and radicals; solving rational equations; and problem solving. Prereq: ABE 084, with 2.0 or above, or successful completion of MATH 084.

**ABE 098 (1-15) N**  
**Intermediate Algebra**

This course covers real number systems, polynomial and rational expressions, exponents and radicals, first and second degree equations, linear systems of equations and graph. It also serves as an introduction to functions and logarithms. Prereq: ABE 085 with 2.0 or above, or successful completion of MATH 085 or MATH 097, or math placement, or instructor permission.



## Aerospace Composites Materials

ACM 101 (3) S

### Intro to Aviation Industrial Hygiene

This course covers the fundamentals of environment, health, and safety topics required to become a successful composites technician. In-depth and specific environment, health, and safety issues, policies, procedures, and regulations are discussed and practiced throughout the composites program. Topics include: hazardous communication, ergonomics, regulations, documentation, SOPs, LEAN, personal protective equipment, lockout/tagout, hand and power tool safety, and industrial housekeeping.

ACM 102 (3) S

### Measurement and Drawings - Aviation

This course covers the fundamental skills common in industry related to measurement and drawings. In drawings, skills include: types and interpretation, prints, views, a working knowledge of the alphabet of lines, tolerances, dimensioning, and drawing 3-D views. In measurement, the skills include: the care and handling of semi-precision and precision instruments, the difference between semi-precision and precision measurement, and the introduction and practice of several measurement instruments.

ACM 103 (5) S

### Materials: Properties, Choice and Application

In this course, students will learn about the physical and chemical properties of structures; includes uses, strengths, limitations, and other characteristics of metals, alloys, non-metals, and composite materials. Topics include: the terminology and fundamental knowledge of composites, knowledge and skills to work with metal and nonmetallic materials and various forms of hardware, and basic applied physics and chemistry concepts as related to aviation and other industries.

ACM 104 (6) S

### Composites Lab a - General Aviation

Running parallel with the other General Aviation Certification courses, Technical Laboratory A projects are designed to introduce, reinforce, and practice aspects of many, if not all, of the courses in the General Aviation Certificate. The student will create increasingly complex projects to gain mastery in the materials and processes of aviation and other industries requiring the fabrication, assembly and repair of composite materials.

ACM 111 (4) S

### Composite Fabrication & Tooling

This course is offered in the second quarter of the Aerospace Composite Technician program. It assumes students have had an introduction to material properties and processes and an introduction to composite fabrication, assembly and repair. This lecture course is taught in tandem with Composites Technician Laboratory B. Topics include: safety, matrices, fiber reinforcements, basic design, molding methods, core materials, tooling, and bonding and fastening.

ACM 112 (2) S

### Composite Inspection & Repair

This course presumes that the student has had an introductory overview course that broadly describes composites fabrication, assembly and repair. This course hones the knowledge and skills necessary to inspect, test, and repair composite structures. Emphasis is on structural and nonstructural evaluation, material handling, surface preparation, and repair procedures.

ACM 114 (9) S

### Composite Lab B - Advanced Composites

This course presumes the student has completed the Composite General Aviation Certificate which includes an introduction to composites fabrication, assembly and repair. Students create ever more complex projects to gain mastery in the proper use of tools, tooling, materials and processes, prints and drawings in order to fabricate, assemble and repair advanced composite materials.

ACM 198 (1) S

### Capstone A - Aerospace Comp Tech

Capstone A provides the tools, knowledge, and skills to successfully navigate a career in the field of composites. Skills covered are necessary behaviors, habits and documentation necessary to gain employment, navigate an organization, and advance in this career path. It is taught as a capstone throughout the certification pathway. Topics include industry relevant resumes, transferable job skills, interview skills and more. Capstone A is part one of two capstone courses.

ACM 199 (2) S

### Capstone B - Aerospace Comp Tech

Capstone B provides the tools, knowledge, and skills to successfully navigate a career in the field of composites. Skills covered are the behaviors, habits and documentation necessary to gain employment, navigate an organization, and advance in this career path. Topics include resumes, cover and thank you letters, transferable job skills, interview skills, project documentation and more.

## Allied Health

AHD 150 (1) C

### Intro to Dental Assisting

Intro to the field of dentistry and the dental assistant program with emphasis on attendance policy, academic progression, and professional appearance. Covers history of dentistry, dental terminology and the dental healthcare team.

AHD 190 (2) C

### Job Seeking Skills I

Learn basic skills involving employment applications, résumé, cover and thank you letters, and job interviews. Prepare for externship work assignment.

AHD 192 (9) C

### Dental Asst Man Clinical

Clinical practice in dental assisting functions, performed under direct supervision of the Board Certified Dentist in private practice, specialty office, and/or community dental clinic. Students demonstrate knowledge and competency in clinical dental health care in accordance with minimum entry-level industry standards for dental assisting. Prereq: Permission.

AHE 103 (3) N

### Math for Health Careers

Course for students entering a program in a health medical field, this class will review basic arithmetic and algebra and extend these concepts to the mathematics required for health care of children and adults. The class will cover calculations involving decimal and fractional numbers, ratios, proportions, and percents. Also addressed will be basic algebraic techniques to solve equations involving unknowns and proportions. Prerequisite: MATH 081 or placement into MATH 084 or MATH 097. ENGL& 101 recommended. Contact the Workforce Instruction Division at 206.934.3790 or Advising at 206.934.3658 for information and to register. Note: Must attend 1st class or contact instructor.

AHE 106 (3) S

### Math for Healthcare Careers

Students will learn basic computations with fractions and decimals, ratio and proportion, percentage, measurement systems, diluting of solutions, graphs, dosage and concentration problems, and basic algebra and statistics.



**AHE 107 (3) C****Introduction to Healthcare Leadership**

Prepares learners for entry into health professions leadership, examines leadership practices for entry into health professions at any level. Covers basic tasks for health care leaders and managers for the successful operation of a healthcare business unit.

**AHE 111 (12) C****Nursing Assistant Certified**

Covers instruction and hands-on experience in basic nursing care skills and supervised clinical training in a long-term care facility. Preparation for WA State Nursing Assistant Certified examination. Current Healthcare CPR, First Aid and HIV/AIDS are required prior to clinical, and are scheduled as separate courses.

**AHE 118 (5) N****Introduction to Phlebotomy I**

First class of the two-quarter I-BEST (Integrated Basic Education and Skills Training) Phlebotomist Certificate program that includes medical terminology, theory of blood collection, safety and infection precautions, ethical and regulatory standards, supervised blood collection practice, workplace communication skills and employment preparation. Supervised blood collection takes place in a laboratory setting. A 120-hour clinical externship is included in the second quarter. Prereq: (Non-native English speakers) CASAS test scores in Reading and Listening - The CASAS test must be taken by all non-native English speakers with a minimum score of (230 reading and 230 listening) required, (Native English speakers) College transcripts showing completion of English 097/098 or equivalent or higher, with a minimum grade of 2.0. Official transcripts are not required for classes taken within the Seattle Colleges District (North, Central, or South); or (Native English speakers who have not completed English 097/098 or equivalent or higher) CASAS test scores in Reading and Math with a minimum score of (230 reading) required. English placement tests must be taken within the last 6 months.

**AHE 119 (7) N****Introduction to Phlebotomy II**

Provides theory of basic blood collection techniques and supervised blood collection practice and a clinical externship of 120 hours. Prereq: AHE 118.

**AHE 124 (4) S****Software Applications for Health Care**

Learn Patient Accounting Software. Features include standard HCFA health insurance claims forms, diagnoses codes, patient ledgers, statements, patient appointment book and specialized reporting. Coreq: AHE 130.

**AHE 126 (2) C****Essential Skills in Healthcare**

Learn core skills applicable to all health disciplines. Each healthcare program chooses which modules are required.

**AHE 128 (4) C****Introduction to Healthcare Practice**

Covers elements of professionalism, ethical principles and basic assessment techniques for allied health practitioners in Washington state. Includes role of the healthcare practitioner, health history taking, vital signs assessment, patient management and infection control.

**AHE 129 (1) C****Introduction to Healthcare Applied Practice**

Covers professionalism, ethical principles and basic assessment techniques, including patient health history, vital signs assessment, patient management, Infection control, and the role of the healthcare auxiliary.

**AHE 130 (5) S****Medical Insurance and Coding I**

Covers basic diagnosis and procedural coding, ICD-9 and 10 (International Classification of Diseases) and the CPT (Current Procedural Terminology) coding systems recognized by the insurance industry. Course includes medical office insurance processing for billing and reimbursement, documentation, information flow, insurance forms and medical office policies. Course is part one of two insurance courses. AHE 131 follows this course. Pre Req: BUS 169, or Instructor Permission. Co-req: AHE 124.

**AHE 131 (3) S****Medical Insurance and Coding II**

Course is a topic continuation of AHE 130. Students will use ICD-9 and 10 (International Classification of Diseases) and the CPT (Current Procedural Terminology) coding systems to code insurance claims for the insurance industry, the physician, and medical office as the standard for billing and reimbursement. Insurance processing topics covered will include documentation, information flow, insurance forms, and medical office policies. Pre-req: AHE 130.

**AHE 135 (15) S****Home Care Aide**

This is a one quarter short term training course. The course runs as a cohort and covers 85 hours of learning and skills objectives mandated by WA State for Home Care Aides. Includes context-related basic skills, such as reading and study strategies, math, and oral communication. The course prepares students for success in passing the State of Washington Department of Health Home Care Aide examination, and is a step in continuing to Nursing Assistant Certified and health-related courses. Prereq: Permission.

**AHE 140 (10) C****Central Supply/Instrument Technician**

For students interested in being a certified Central Supply/Instrument Technician. Addresses infection control, supplying and processing and distribution of supplies. Gain knowledge in safety, inventories, interpersonal skills, communication, interdisciplinary teams, professionalism and ethics.

**AHE 141 (2) S****Pharmacology I for Professional Coders**

Intro to pharmacology. Includes medication laws, classifications, safety, medication effects and responses, pharmaceutical abbreviations, systems of measurement and safe dosage calculations.

**AHE 143 (4) S****Medical Terminology and A/P I for Coders**

This course provides the medical terminology and an analytical look at the human body's structure and functions as it relates to diseases, disease process and specifically coding for diseases and procedures. This course is developed specifically for coding professionals and is not meant for those entering nursing or the sciences. This course does not include a clinical science lab.

**AHE 144 (4) S****Medical Terminology and A/P II for Coders**

This course is a continuation of AHE 143 but can be taken out of sequence. It covers the medical terminology and an analytical look at the human body's structure and functions as it relates to diseases, disease process and specifically coding for diseases and procedures. The systems covered are distinct from those covered in AHE 143. This course is specifically for coding professionals and is not meant for those entering nursing or the sciences. It does not include a clinical science lab.

**AHE 146 (5) S****Intermediate Icd-9 and Icd-10 Coding**

Covers ICD-9-CM and ICD-10 diagnostic coding. Apply the numeric classification of codes to diseases and injuries, symptoms, disorders and for therapeutic interactions, using various source documents. Coding is used for billing, electronic health records, and HIPAA privacy. Prereq: AHE 130 or permission.

**AHE 147 (5) S****Intermediate Cpt Coding**

Learn appropriate service codes and methods for service and surgery: consultations, office visits, anesthesia, and specific surgeries. Apply CPT and HCPCS codes to medical data and records. Prereq: AHE 130 or permission.

**AHE 148 (3) S****Human Diseases I for Professional Coders**

Students will learn basic disease concepts, including mechanisms of disease, neoplasms, inflammation and infection. Students will acquire knowledge of common diseases, disorders, symptoms and injuries by each body system as it relates to coding for diagnoses and procedures in healthcare.

**AHE 150 (0.5) C****HIV/AIDS Education**

Meets requirements for health care professionals under RCW 18.130. Covers etiology and epidemiology of HIV, transmission and infection control, testing and counseling, clinical manifestations and treatment and psychosocial issues. Approved by the Washington State Department of Licensing.

**AHE 151 (1) C****Standard Precautions/ First Aid**

Covers blood-borne pathogens and infections that students may be exposed to in the health care setting, methods of prevention, and regulations surrounding workplace safety. Learn about equipment and supplies and practice using them.

**AHE 152 (1-1) C****Health Care Provider CPR**

American Heart Association Certificate—Health Care Provider CPR is for those in or entering health care with patient contact. Covers skills competency for infant, child and adult CPR that might be needed in the professional health care setting. Certificate awarded on completion. Prereq: Permission.

**AHE 155 (1-6) N****Special Topics**

This course covers customer service skills required to successfully provide basic patient services in long term care facilities, nursing homes, hospitals and clinics while following care procedures, controlling infections, safety and emergency preparedness, restorative care, and dealing with death and dying. Prerequisite: Successful completion of ENG 097/098 or COMPASS placement test into ENGL& 101 (taken within the last 2 years) or successful completion or admission to any of the Seattle College's Health Care programs or I-BEST Health Care programs. To register: contact Francie Mooney at 206.934.6067 or email Francie.Mooney@seattlecolleges.edu.

**AHE 165 (3) C****Medical Terminology I**

Fundamentals of medical terminology, with emphasis on basic rules, vocabulary building, abbreviations and knowledge of medical terms relating to body systems and medical specialties.

**AHE 168 (5) C | S****Medical Terminology**

Intro to the concept of word building with Greek and Latin word roots, prefixes and suffixes, resulting in the acquisition of a large medical vocabulary. Also available as correspondence course.

**AHE 171 (4) S****Excel for Health Occupations**

This course in Microsoft Excel for Health Care Occupations is a spreadsheet program you can use to manipulate numbers, track and chart medical sales, expenses, medical budgets help make informed medical business decisions. Students will learn to use calculations and pre-defined formulas to organize data, crunch statistical information, and more.

**AHE 172 (4) S****Word for Healthcare**

Covers comprehensive word processing using Microsoft Word Software for a Medical environment. Includes basic skills such as tables, envelopes, templates and mail merge. Includes advanced formatting skills and transcribing medical documents such as operative reports, radiology reports, discharge summaries, H&P reports and other medical documents and forms.

**AHE 173 (3) S****Intro to Records Mngmt**

The study of the basic alphabetic, numeric, subject and geographic filing principles necessary to manage database filing systems utilizing ARMA rules. Course includes hands-on practice in creating and using database systems to create files, tables, forms and queries; enter and manipulate data and generate reports for a medical environment.

**AHE 190 (12) N****Emergency Medical Technician**

PREREQUISITE ENTRANCE EXAMINATION REQUIRED. There will be a written advanced first aid exam that must be taken by all applicants to the program, after attending a mandatory information session. Applicants must attend one session and do not need to sign up in advance for the information session. All applicants must pay the \$35 application fee and \$35 test proctor fee at the NSC Cashier's office and bring both forms with the cashier's paid stamp on them to the exam. See additional information, including dates for the exam, on EMT website at <https://northseattle.edu/programs/emergency-medical-technician>. Cost is \*\$1,305.53 (\$185.28 tuition + \$1,100 college self-support fee + \$15 medical malpractice professional liability insurance fee + \$5.25 online courseware support fee). Note: AHE 192 Basic Life Support for Healthcare Providers is a corequisite and must be taken before the program starts. See course AHE 192. For additional information contact the Workforce Instruction Division at (206) 934-3790. \*subject to change

**AHE 192 (1) N****Basic Life Support for Healthcare Providers**

Corequisite class required for the EMT program; must take concurrently with AHE 190. This course uses the American Heart Association BLS curriculum that is the standard for healthcare agencies/personnel and meets the requirement for CPR certification that includes CPR for Adults, Children and Infants, AED and use of the Bag Valve Mask. Contact the Workforce Instruction Division at (206) 934-3790 for additional information. \*Cost is \$141.03 (\$15.78 tuition + \$120.00 college self-support fee + \$5.25 online courseware support fee). Note: must purchase textbook and pocket mask and bring to the first class. \*Subject to change.

**AHE 197 (1-5) C | S****Work Experience-Allied Health**

Allows students to earn work experience credit in Allied Health field. Prereq: Permission.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**AHE 198 (1-5) C**  
**Work Experience - Allied Health**

Allows students to earn work experience credit in Allied Health field. Prereq: Permission.

**AHE 199 (1-5) C**  
**Work Experience-Allied Health**

Allows students to earn work experience credit in Allied Health field. Prereq: Permission.

**AHE 202 (1) C**  
**Respiratory Care Orientation**

Intro to the Respiratory Care Program. Covers curriculum, policy, clinical procedures, professional outlook and study and library skills.

**AHE 209 (2) C**  
**Introduction to Respiratory Care**

Explores the respiratory care profession. Focuses on historical development and the role of the respiratory care practitioner. Emphasis on professionalism, ethical thought, death and dying, and working in a multicultural environment.

**AHE 213 (2) C**  
**Respiratory Care Clinical Assessment**

This course is a study of the concepts and principles by which disease alters the normal function of the cardiopulmonary system. The main emphasis will be on cardiopulmonary assessment. Students will learn to analyze clinical data and synthesize patient case data into a formal assessment. Further emphasis will be placed on development of logic and reasoning for an advanced Respiratory Care Practitioner (RCP). Prereq: Permission.

**AHE 215 (2) C**  
**Basic Pharmacology**

Basic Respiratory Care Pharmacology introduces the learner to foundational principles of the study of pharmacology. Learners will also begin their study of pharmacologic agents with medications used universally in Respiratory Care to treat primary respiratory disorders. This course is directed at adding to the learner's knowledge of respiratory care and the performance of the skills needed to safely deliver medications as adjuncts to the delivery of Respiratory Care. Prereq: Permission.

**AHE 217 (5) C**  
**Cardiopulmonary Anatomy and Physiology**

This course is designed to provide an in-depth investigation into the structure and function of the respiratory and cardiovascular systems of the human body. The interdependence of the two systems will be emphasized and the physiology of respiration will be examined in detail. Also covers multiple body systems and their interplay with the respiratory system under normal and abnormal conditions. Prereq: Permission.

**AHE 218 (4) C**  
**Basic Therapeutic Approaches**

This course is an introduction to the procedures used to assess and treat common respiratory diseases. Emphasis is on knowledge and skills necessary to safely and effectively apply patient assessment techniques; body mechanics, medical gas therapy, oxygen therapy devices, aerosol and humidity therapy, hyperinflation therapy, chest physiotherapy, and airway clearance techniques. Prereq: Permission.

**AHE 219 (1) C**  
**Basic Therapeutic Approaches Equipment and Techn**

An introduction to the application of Respiratory Care therapeutics learned in RCP 218. In this class learners will apply theory acquired in RCP 218 using models, simulation and laboratory partners for practice. Focuses on assessment, documentation, communication, medical gas and aerosol therapy, airway clearance, and hyperinflation therapies. Prereq: Permission.

**AHE 241 (3) S**  
**Pharmacology II for Professional Coders**

This course continues pharmacology as the study of drugs. The course continues with pharmaceutical laws, classifications and safety, pharmaceutical processing by the body will be covered to allow comprehension regarding the pharmaceutical effects, responses. Abbreviations, systems of measurement and safe dosage calculations will be covered to stress the importance of accurate recording/transcribing/reporting of drug information. Continues to acquaint students with pharmaceutical affects.

**AHE 242 (2) N**  
**Basic Blood Collection Techniques**

This course provides an introduction to basic blood collection techniques including theory and supervised blood collection practice. It is aimed towards training health care professionals such as nurses, ER Techs, medical researchers or students in health care programs who will be required to perform blood collections. Prerequisite: ENGL&101 or placement into ENGL&101 or healthcare licensure. Contact Workforce Instruction Division at (206) 934-3790 for information and to register.

**AHE 243 (4) S**  
**Legal/Ethics in Healthcare**

This course provides an overview of law and ethics in the healthcare system. Students will gain advanced knowledge of patient, healthcare laws and ethics related to EDI.

**AHE 298 (1) S**  
**Allied Health Special Topics**  
 Special topics.

**AHE 299 (1-3) C**  
**Allied Health Seminar**

Seminar format to address current trends and issues in allied health occupations.

**AHE 301 (5) C**  
**Principles of Healthcare Delivery**

Introduces U.S. healthcare delivery topics such as purpose, history, components, organization, strengths and weaknesses, and proposed and implemented reforms. Covers current and future challenges of healthcare delivery and the development of healthcare policies to address these challenges. Prereq: Instructor's permission.

**AHE 330 (5) C****Information Literacy for Health Sciences**

Introduces the organization, retrieval, and evaluation of electronic and print information. Overview of college library systems, traditional scholarly resources, and the concepts underlying the research process. Emphasis on information literacy skills specific to the allied health sciences through examination and application of specialized resources. Prereq: Enrollment in a BAS in Allied Health track; and, ENGL& 102 and MATH& 146, each with a 2.0 or higher.

**AHE 401 (5) C****Principles of Research**

General principles of research design and methodology with emphasis on applications for allied health practice. Prereq: Instructor's permission.

**AHE 426 (5) C****Leadership and Team Building/Organizational**

Covers leadership, working in and developing teams. Develops personnel management skills.

**AHE 498 (1-5) C****Special Topics in Allied Health**

Covers special topics in allied health relevant to tracks in the BAS of Allied Health degree. Taught by industry experts in the content being covered. Prereq: Instructor permission.

**AHL 101 (0.5) C****Hcp CPR/First Aid**

Designed to provide health care professionals with the ability to recognize life threatening emergencies, administer Cardiopulmonary Resuscitation (CPR) for infants, children and adults, utilize an automated external defibrillator (AED) and alleviate choking. Upon successful completion students receive certificates in Healthcare Provider Basic Life Support (BLS) and Heartsaver First Aid issued by the American Heart Association. Prereq: Instructor or Dean's Permission.

**AHL 105 (0.5) C****HIV/AIDS Training**

Designed to meet the seven hour requirement for healthcare workers in Washington State. The course includes a focus on epidemiology, blood borne pathogens, clinical manifestations, at-risk populations, psychological impact, transmission of disease, risks to healthcare workers, patient education, health promotion, and disease prevention. Prereq: Instructor or Dean's permission.

**AHL 111 (6) C****A&P I/Micro**

Focuses on the structure/function of the human body and systems: tissues and membranes, skeletal, muscular, and nervous. Emphasis includes microbiology, disease processes relative to major conditions, infectious diseases, neoplastic conditions, and congenital diseases. Prereq: Instructor or Dean's permission.

**AHL 112 (6) C****A&P II/Path**

Focuses on the following structures/functions of the human body and systems: respiratory, digestive, cardiovascular, lymphatic, reproductive, and urinary. Emphasis includes disease processes relative to major conditions, infectious diseases, neoplastic conditions, and congenital diseases. Prereq: AHL 111 with a 2.0 or higher, Instructor's permission, or Dean's permission. Co-req: AHL 114, or Instructor's permission.

**AHL 113 (3) C****Med Term**

Explores the language of medicine. Focuses on basic word parts (prefixes, roots, suffixes), definitions, pronunciation, spelling, abbreviations, acronyms, symbols, eponyms and terminology for diagnostic testing and medical procedures corresponding to the structures/functions of the human body and systems studied in Anatomy & Physiology AHL 111: tissues and membranes, skeletal, muscular, and nervous. Prereq: Instructor or Dean's permission. Coreq: AHL 111, or Instructor's permission.

**AHL 114 (3) C****Med Term II**

Continuation of AHL 113. Focuses on basic medical words: prefixes, roots, suffixes, definitions, pronunciation, spelling, abbreviations, acronyms and terminology for diagnostic testing/medical procedures corresponding to the structures/functions of the human body/systems studied in AHL-112, A&P II: skeletal, muscular, digestive, reproductive, urinary, nervous. Prereq: AHL 113 with a 2.0 or higher; or, Instructor or Dean's permission. Coreq: AHL 112, or Instructor's permission.

**AHL 123 (3) C****Insurance and Coding**

Explores areas of health insurance and numeric/alphanumeric codes utilized in health care for the purpose of maintaining accurate medical records and ensuring efficient claims processes. Emphasis is placed upon various types of health insurance and the individuals they serve, diagnostic and procedural code identification/utilization, and the Health Information Privacy and Accountability Act.

**AHL 124 (2) C****Med Office Finance**

Covers financial accounting aspects of medical practices and relative duties in this area of responsibility. Emphasis is placed upon vocabulary and abbreviations relative to bookkeeping and accounting, accounts receivable, collection procedures and basic concepts in Microsoft Excel. Prereq: Instructor's permission.

**AHL 125 (2) C****Mos**

Covers front office procedures and provides students with opportunities to apply their administrative knowledge within a simulated medical office setting. Students demonstrate their competency through prescribed scenarios focusing on customer service, reception, scheduling, referrals, billing procedures, insurance processes, critical thinking, and working toward positive outcomes. Prereq: Permission.

**AHL 126 (2) C****Recept & Sched/Med Recd**

Covers medical front office reception, admission and discharge procedures and provides students with opportunities to acquire administrative knowledge of the medical front office. Students demonstrate their competency through prescribed scenarios focusing on customer service, reception, scheduling, medical record management, critical thinking, and working toward positive outcomes. Prereq: Permission.

**AHL 127 (2) C****Ehr**

Focuses on the skills and techniques required for the clinical and administrative functions of a medical assistant in an ambulatory care setting relative to electronic health records. Emphasis is placed on patient confidentiality and HIPAA requirements. Includes criteria established by the Office of the National Coordinator for Health Information Technology under the provisions of the American Recovery and Reinvestment Act of 2009. Prereq: AHL113 with a 2.0 or higher.



**AHL 128 (3) C**  
**Law and Ethics**

The Law and Ethics course addresses legal and ethical matters relative to the allied health profession/professional and includes HIPAA regulations and how they are applied in a clinical setting. Patient advocacy, patient rights, the impact of the American Medical Association Council, cultural, social, ethnic diversity in ethical performance, tort law, scope of practice, informed consent as well as various laws and agencies relative to health care are included in this course. Prereq: Permission.

**AHL 142 (2) C**  
**Med Bill Apps**

Covers insurance and the electronic billing process and provides students with opportunities to apply their knowledge within a simulated medical office setting. Students demonstrate their competency through prescribed scenarios focusing on guidelines for specific insurance types and their billing requirements/processes, customer service, insurance processes, critical thinking, and working toward positive outcomes. Prereq: Permission.

**AHL 155 (2) C**  
**EKG Technician**

The Electrocardiogram Technician interacts directly with patients and performs diagnostic testing that monitors and records the activity of the heart. EKG Technicians work under the direction of a provider and/or clinical supervisor in a variety of clinical settings. The contents of this course includes anatomy and physiology, medical terminology, obtaining a 12 lead electrocardiogram, responding to and assisting providers with electrocardiogram requests in emergent and non emergent situations.

**AHL 161 (3) C**  
**Pharmacology**

Examines the language of pharmacology, abbreviations, Controlled Substances Act, drug dependency, and prescriptions. Explores medication supply, patient care applications, drug classifications and interactions, safety, and routes of administration. Covers learning of skills needed to administer oral medication, calculate dosages, and prepare injections. Prereq: Instructor's permission. Core: AHL 183.

**AHL 178 (6) C**  
**Clinical I**

Focuses on the skills, techniques and professionalism required in the educational process of Medical Assistants preparing to work collaboratively with medical professionals while caring for patients and interacting with family representatives of diverse communities. Prereq: Permission.

**AHL 180 (8) C**  
**Clinical II**

Upholds a professional environment within a simulated clinic setting while focusing on non-invasive procedures. Includes wound care, ear lavage/irrigation, respiratory treatments, identification and use of surgical instruments, sterilization processes, set up/break down for minor procedures, patient positioning, assisting the provider, documentation, diagnostic imaging, nutrition, gender specific procedures, and pediatric procedures/interaction. Prereq: Permission.

**AHL 183 (8) C**  
**Clinical III**

The Clinical III competency based course upholds a professional environment within a simulated clinic setting while focusing on invasive procedures. Medication administration through variable routes including injection, intravenous therapy, medication calculation, phlebotomy, waived laboratory tests, specimen integrity, handling and transport, safe clinical practices and effective patient documentation are included. Prereq: Permission; Coreq: AHL 161.

**AHL 189 (1) C**  
**Emergency Preparedness**

This competency-based course focuses on the skills, techniques and professionalism required for Medical Assistants relative to emergency preparedness and assisting with emergencies in an ambulatory care setting while working collaboratively with medical professionals and caring for patients.

**AHL 190 (6) C**  
**Clinical IV**

Clinical IV focuses on all back office procedures and continues to provide students with opportunities to apply and further develop their acquired competencies within a simulated professional clinic setting. Students demonstrate their competency through prescribed scenarios focusing on anticipation of patient and/or provider needs, critical thinking, directives by healthcare providers, and working toward positive outcomes relative to the daily demands and expectations of a medical assistant.

**AHL 191 (2) C**  
**Ma Natl Exam PREP**

This course provides an opportunity for Medical Assistants in the process of program completion or who have completed a Medical Assistant program and have not pursued certification to prepare to sit for a national certification examination through the administering agency of their choice. Students will utilize knowledge they have acquired throughout a Medical Assistant program and/or work experience.

**AHL 192 (5) C**  
**Ma Practicum**

This course satisfies the requirement for an unpaid practicum/externship in clinical practice under direct supervision in an ambulatory care/clinic setting. Practicum opportunities are decided through a competitive interview process. The acceptance to a clinic is a part of the educational process of the Medical Assistant program and does not imply or guarantee employment at the practicum site. Prereq: Permission.

**American Ethnic Studies****AME 102 (5) C**  
**Indigenous People and the U.S.**

Discusses the role that Native knowledge plays in the contemporary world, paying particular attention to Indigenous cultures in the Pacific Northwest. Looks at contemporary Indigenous culture as a unique form of knowledge that may allow us to create tools for a better and more just world for everyone. Students may meet with local Indigenous intellectuals, leaders, and elders to discuss ideas that are presently circulating.

**AME 150 (5) C | N**  
**America's Ethnic History**

Intro to U.S. history as a multicultural phenomenon. Emphasizes the interaction of American Indian, African, European, Latino and Asian immigrants in the development of the U.S. Focuses on conflict and cooperation in the areas of economics, politics and culture.

**AME 151 (5) C | N**  
**Societies and Cultures of the United States**

Intro to contemporary issues in American ethnic and race relations. Emphasizes racism, prejudice, stereotypes and equity issues through an examination of Asian, African and Indigenous Americans. Focuses on diversity of interests and identities within each community.



**AME 200 (5) C**  
**Leadership and Social Change**

Examines issues raised by civil rights struggles in the United States. Covers the forces shaping social change, the role of the individual or change agent, and the personal skills required of change agents. Incorporates community service as a central teaching technique.

**AME 201 (5) C | N | S**  
**Diversity and Social Justice**

Combines theoretical frameworks, practical issues and experiential activities to help students develop skills and identify plans of action in eradicating the multiple forms of social oppression. Use critical analysis as an investigative tool to examine racism, sexism, hetero-sexism, able-ism, class-ism, religious oppression and aspects of internalized oppression.

**American Sign Language****ASL 120 (5) C**  
**Introduction to Deaf Studies**

Overview of the types, causes, treatment and psychological aspects of deafness; history of deaf people; education of deaf people; and Deaf culture. May transfer to the University of Washington as an Individual and Society course.

**ASL& 121 (5) C | N**  
**American Sign Language I**

American Sign Language (ASL) is the complex, naturally existing language used by Deaf people in North America. ASL I introduces this language and the community of people that use it. Covers fundamental vocabulary, grammar, and culturally-appropriate uses of ASL through natural, everyday conversational situations in both formal and informal registers. For students who have not previously studied ASL. Prereq: Placement into ENGL& 101.

**ASL& 122 (5) C | N**  
**American Sign Language II**

Continuation of ASL 121. Develops ASL grammar skills, increases vocabulary, and deepens knowledge and appreciation of Deaf culture through natural, everyday conversational situations in both formal and informal registers. Prereq: Successful completion of ASL& 121 with a grade of 2.0 or higher or instructor permission.

**ASL& 123 (5) C | N**  
**American Sign Language III**

Continuation of ASL 122 with focus on grammatical features such as complex sentences, depiction, spatialization, and non-manual components. Intensive work in vocabulary development, grammar, and continued study of Deaf culture. Prereq: Successful completion of ASL& 122 with a grade of 2.0 or higher or instructor permission.

**ASL 132 (4) C**  
**Fingerspelling and Numbers**

Emphasis on receptive and expressive fingerspelling and number use within a range of contexts. Learn strategies for maintaining uninterrupted language flow. Prereq: ASL& 223 or ITP 165 with 2.5 or higher or permission.

**ASL& 221 (5) N**  
**American Sign Language IV**

Emphasis on expressive skills development and ASL fluency. Attention to the correct formation of signs, movement, rhythm, phrasing, linking, and clarity, intensive vocabulary building and proficiency in ASL grammar. Prerequisite: ASL& 123 with a 2.0 or higher or instructor permission.

**ASL& 222 (5) C**  
**American Sign Language V**

Continued development of receptive and expressive skills. Produce/receive narratives at a near-native level and decrease dependency on English syntax structures. Prereq: ASL& 221 with a 2.0 or higher or permission.

**ASL 299 (1-10) C**  
**Independent Study for ASL**

Independent study of selected topic(s) in ASL. A mutually desirable research project is assigned by faculty.

**Anthropology****ANTH& 100 (5) C | N | S**  
**Survey of Anthropology**

Introduces the field of anthropology. Covers biological and cultural anthropology, linguistics, and archaeology. Survey of humans over time and space. Includes evolution, ethics, political structure, social structure, economics, and communication. Prereq: ENGL&101 eligibility.

**ANTH& 106 (5) C**  
**American Mosaic**

Examines American culture, implications and consequences through the anthropological lens. Includes race, ethnicity, class, religion, sex, gender and ability. Explores individual experiences and structural patterns. Provides an insightful look at ourselves from anthropological and sociological perspectives. Field trips. May be taken as SOC 102.

**ANTH 130 (5) C | N**  
**World Cultures**

Exploration of global cultural variation and traditions in the modern context of international capitalism. Using ethnographic approaches informed by the ideas of cultural relativism and transculturation, considers both Western and non-western cultures as well as indigenous and industrialized cultures. Prereq: English 101 eligibility.

**ANTH 135 (5) C**  
**Introduction to Environmental Anthropology**

Intro to the relationship between cultures and environments. Explore how humans interact with, adapt to, extract resources from, and modify the environment. Looks at the dynamic between traditional and modern societies.

**ANTH 190 (5) C**  
**Anarchy and Anthropology**

Introduces basic anthropological insights into community, kinship, oppression and autonomy. Considers Homo sapiens' cultural evolution over the last 200,000 years with special attention to egalitarian societies. Topics covered include the idea of human nature, the origins of hierarchy, money and the state, and solidarity against institutional coercion in daily life. Assignments encourage creative and artistic expression. Prereq: Eligibility for ENGL 101.

**ANTH 201 (5) C**  
**Contemporary Issues in Anthropology**

Analysis of current research on a particular topic in cultural or physical anthropology. Topic varies by quarter; check with instructor for specific course content.

**ANTH& 204 (5) C | N**  
**Archaeology**

Introduction to the history, methods, and theories of archaeology. Trace and explain the principal lines of cultural evolution in the Old and New Worlds. Discuss the importance of cultural resource management and public understanding and involvement. Prereq: ENGL& 101 with a minimum grade of 2.0 (C)

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

**HIN** ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... **HIN**

Common Course Numbering explanation is on page 230.

**ANTH& 205 (5) C**  
**Biological Anthropology**

Intro to biological and cultural evolution of humans with evidence from fossil and contemporary populations. Examines physical and biological variations of humans past and present. Emphasis on developing a working vocabulary of anthropological terms.

**ANTH& 206 (5) C | N | S**  
**Cultural Anthropology**

Introduction to the study of human culture, including social organization, economics, political systems, religion, technology, art and language. Cultural perspective focuses on the interactions between large and small scale societies in an increasingly globalized world.

**ANTH& 228 (5) C**  
**Cultures of the Middle East**

Multidisciplinary intro to Middle Eastern cultures including social, economic, political and religious factors contributing to the region's diversity. Exploration of historical and contemporary forces and changing interpretations by both Westerners and Middle Easterners. Prereq: English 101 with a minimum grade of 2.0.

**ANTH 250 (5) C**  
**Applied Social and Cultural Change**

Explores social and cultural change historically and comparatively through an anthropological lens. Moves quickly from theory to practice to empower students to create effective and inspiring change-making actions. Change on an individual and structural level are addressed. Intrapersonal and interpersonal awareness are achieved through the practice of various life skills and humanization skills. Prereq: English 101 with a minimum grade of 2.0.

**ANTH 270 (5) C**  
**Food, Culture, and Politics**

Considers cultural & political dimensions of food from the Paleolithic to the present. Explores food & cultural identity, corporate control of the global food supply, movements toward popular food sovereignty, the Western Diet & human health, indigenous food traditions, the farmers' market movement, famine & food deserts, and political inequality & the food system. Eligible for SAGE (Sustainable Agriculture Education) Emphasis program. Prereq: Eligibility for ENGL 101.

**ANTH 275 (5) C | N**  
**Medical Anthropology**

Explores culture, society, medicine and health from a global perspective. Examines biomedical and cross-cultural perspectives of the human body, life, death, well-being and healing.

**ANTH 298 (1-5) C | N**  
**Special Topics in Anthropology**

Independent study or fieldwork in anthropology. Periodic meetings with instructor. Prereq: Permission.

**ANTH 299 (1-5) C**  
**Special Problems/Anthropology**

Small group setting to cover selected topics in anthropology. Prereq: Permission.

**Apparel Design & Development**

**APPRL 096 (2) C**  
**AD&D Skill Development 1**

For students preparing to enroll in the School of Apparel Design & Development who have little or no sewing or patternmaking experience. Introduction to sewing terms, commercial and production pattern development, layout and cutting, industrial sewing machine operation, and professional construction techniques for basic garments and samples. Prereq: Eligibility ENGL& 101.

**APPRL 098 (2) C**  
**AD&D Skill Development 2**

For students preparing to enroll in the School of Apparel Design & Development. Intermediate beginners update their sewing machine handling and patternmaking skills. More complex sewing techniques and sample garments are constructed using industrial sewing and pressing equipment. Includes pattern drafting and labeling for production. Prereq: APPRL 096 or permission through successful completion of a skills test and eligibility for ENGL& 101.

**APPRL 099 (6) C**  
**AD&D Skill Development Intensive**

An intensive course combining APPRL096, APPRL098, & APPRL100 (the prerequisite courses to enroll in the Apparel Design & Development program). It is intended for students with little/no sewing experience. Students gain industrial-equipment skills for sewing and pressing, complete sewing techniques and sample garments, and cover pattern-development and proofing. Upon successful completion, students will be eligible to enroll into the 2-year AD&D program. Prerequisite: eligibility for ENGL&101.

**APPRL 100 (2) C**  
**AD&D Skill Development 3**

Required for enrollment in AD&D. For students with previous sewing and patternmaking experience. Enhance industrial equipment handling skills for sewing and pressing to complete more difficult sewing techniques and sample garments. Covers pattern development of a bodice sloper and proofing methods. This course is a required prerequisite for enrollment into AD&D. Prereq: APPRL 098 or permission through successful completion of a skill test and ENGL&101 eligibility.

**APPRL 101 (4) C**  
**Construction 1 - Professional Techniques**

Covers professional techniques and methods to construct samples and garments to professional industry standards. Emphasis on accuracy, use of industrial sewing and pressing equipment, and developing technical specification packages. Prereq: APPRL 100 and program entrance requirements.

**APPRL 102 (4) C**  
**Construction 2 - Professional Techniques**

Build on skills from APPRL 101 by producing samples and garments using intermediate construction techniques and meeting industry quality standards. Emphasis on industrial equipment use and proficiency, and enhanced specification package development. Prereq: APPRL 101.

**APPRL 103 (4) C**  
**Construction 3 - Professional Techniques**

Presents techniques and methods using factory processes to construct garments for manufacturing. Blends skills in pattern design for target markets and construction for mass production. Continuation of technical specification development and industrial equipment use. Prereq: APPRL 102.

**APPRL 111 (4) C**  
**Patternmaking 1 - Flat Pattern and Drafting**

Development of basic production patterns using flat pattern and drafting methods. Focus on fundamental patternmaking practices including cutting, labeling and approaches for pattern manipulations. Prereq: APPRL 100 and program entrance requirements.

**APPRL 112 (4) C**  
**Patternmaking 2 - Draping**

Pattern development using draping techniques to generate basic slopers. Combines draping with basic flat pattern manipulations to create patterns for garment designs. Prereq: APPRL 111.

**APPRL 113 (4) C**  
**Patternmaking 3 - Design by Flat Patternmaking**

Continues development of flat pattern and draping techniques from APPRL 111 and 112. Combines fitting methods, and use of production pattern blocks and pattern modifications to create more complicated garment designs. Prereq: APPRL 112.

**APPRL 114 (2) C**  
**Patternmaking 4 - Pattern Alteration for Fit**

Focuses on evaluating and achieving good fit through fit analysis and pattern adjustment and alteration techniques for common body variations. Prereq: APPRL 102 & APPRL 112.

**APPRL 130 (2) C**  
**Apparel Manufacturing**

Survey of the apparel manufacturing business cycle. Includes materials acquisition, production, scheduling, product costing, machine processes and industry standards. Prereq: APPRL 100 and program entrance requirements.

**APPRL 131 (3) C**  
**Business Practices in Fashion**

Examines aspects of conducting business in the fashion profession including industry practices, job categories, professional development and business communications. Prereqs: APPRL 101, 111, 130 & 151.

**APPRL 141 (2) C**  
**Design 1 - Principles of Design**

Covers the basic design principles of repetition, rhythm, emphasis, harmony, balance, scale and proportion as they relate to garment design. Prereq: APPRL 100 and program entrance requirements.

**APPRL 142 (2) C**  
**Design 2 - Fabric Science and Textiles**

Analyze how fibers, yarns, fabric structure and finish affect fabric characteristics. Studies include textile history, independent research and visual presentation. Prereqs: APPRL 130 and APPRL 151.

**APPRL 143 (2) C**  
**Design 3 - Color and Palettes**

Investigates color design trends and application in the apparel market. Explores hues, values and saturation and basic color theory. Prereqs: APPRL 142 and APPRL 152.

**APPRL 151 (3) C**  
**Computer Applications for Apparel Design 1**

Develop Excel, Illustrator and Photoshop skills for use in the apparel design field. Includes specification development, technical drawing and image editing. Prereq: APPRL 100 and program entrance requirements.

**APPRL 152 (3) C**  
**Computer Applications for Apparel Design 2**

Continues building computer skills, terminology and procedure. Gain proficiency in graphics programs commonly used in industry to produce technical drawings and visual presentations. Prereq: APPRL 151.

**APPRL 197 (1-5) C**  
**Work Experience in Apparel Design**

Earn relevant work experience and practical hands-on skills through the completion of an internship in the apparel design and development field. Prereq: Permission.

**APPRL 201 (4) C**  
**Ready-To-Wear Construction**

Construction methods with focus on ready-to-wear and tailored garments. Coordinates with APPRL 211 to execute pattern designs for specific target markets. Prereq: APPRL 103. Coreq: APPRL 211.

**APPRL 202 (4) C**  
**Active Sportswear Construction**

An advanced course focused on industry methods and standards for constructing active, technical sportswear, outerwear and accessories. Projects are constructed from patterns designed in APPRL 212. Prereqs: APPRL 201 and 211. Coreq: APPRL 212.

**APPRL 211 (4) C**  
**Pattern Design for Ready-To-Wear**

Presents advanced pattern design for ready-to-wear and tailored garments. Employs a variety of methods to produce patterns from blocks, measurements, fashion source material, and line drawings. Coordinates with APPRL 201 to construct pattern designs. Prereqs: APPRL 103 and 113.

**APPRL 212 (4) C**  
**Pattern Design for Active Sportswear**

Patternmaking for active sportswear and outerwear. Develop patterns from samples and sketches to industry standards and for functionality. Pattern designs are constructed in APPRL 202. Prereq: APPRL 211.

**APPRL 221 (4) C**  
**Pattern Grading**

Covers basic principles of grading garment designs for manufacturing. Produces scaled-up and scaled-down versions of patterns using the shift and grid methods of grading. Prereq: APPRL 103 and 113.

**APPRL 222 (4) C**  
**Computerized Pattern Grading**

Explore apparel industry standards and guidelines for pattern sizing for more complex patterns. Intro to using computer-aided technology to size patterns. Prereq: APPRL 221.

**APPRL 230 (4) C**  
**Portfolio and Resume Development**

Survey course of job search and interviewing strategies including production of a professional portfolio and resume targeted for the apparel design and development industry. Prereqs: APPRL 197, 202, 212, 222, 242.

**APPRL 241 (4) C**  
**Design 4 - Print and Pattern**

Development of surface designs for fabrics and garment silhouettes. Focus on design methodology, textile pattern and print technology, Photoshop techniques and apparel industry practices. Prereqs: APPRL 143 and APPRL 152.

**APPRL 242 (4) C**  
**Design 5 - Line Design**

Explore elements of designing a line of clothing to industry standards. Focus on development of boards for line presentations and design of a clothing line for production in APPRL 270. Prereq: APPRL 241.

**APPRL 260 (3) C**  
**Fashion History**

Survey of key clothing items from major historical periods. Gain tools for communicating clothing concepts and understand current fashion trends. Explore social influences and cultural ideals that impact fashion. Prereqs: APPRL 143, 151 & 152.

**APPRL 270 (8) C**  
**Final Line Design and Development**

Capstone course to produce the line of clothing designed in APPRL 242. Includes pattern development, materials sourcing, garment construction and production of technical specifications. Collaboratively produce the annual fashion portfolio show where final collections and portfolios are on display to industry professionals and the public. Prereqs: APPRL 197, 202, 212, 222, & 242.

**Application Development  
Bachelor of Applied Science****AD 300 (5) N**  
**Component Software**

This course focuses on object-oriented programming using Java with an emphasis in the creation and use of software components. It also presents other programming concepts such as reusability, the model-view-controller (MVC) design pattern, elementary data structures (linked lists, binary trees), recursion, and algorithmic analysis using Big-O notation. Prereq: Acceptance into the Application Development BAS.

**AD 310 (5) N**  
**Software Lifecycle**

Overview of tools, processes, and practical approaches that support software product lifecycle. Topics include: project life-cycle management: team roles, tasks, timelines; responding to customer needs and requirement changes, development paradigms: waterfall, spiral, agile, RAD (Rapid Application Development); documentation requirements; tools: source code management, unit testing, debugging. Prereq: Acceptance into the Application Development BAS.

**AD 315 (5) N**  
**Discrete Mathematics  
in Computer Programming**

This course provides hands-on application of the (abstract) discrete structures that constitute the backbone of computer science. Topics shall include: numerical representation and limitations for numerical methods, discretization, discrete probability, finite-state machines. Other topics may be included at instructor discretion. Topics shall be explored within the context of student-written application programs. Prereq: AD 300 or CSC 143; MATH& 151 with a 2.5 or better; or instructor permission.

**AD 320 (5) N**  
**Web Application Development**

This course is an intermediate course in developing a database driven web application incorporating MVC patterns. The course will cover state maintenance, CRUD, & REST integration on both server & client side. Students will parse, cache, integrate API data achieved by third party providers into their application. Technologies can include as jQuery, CURL, AJAX & parsing JSON & XML.

**AD 325 (5) N**  
**Data Structure & Algorithms**

Covers fundamental data structure and their algorithms and applications in problem solving by programming. Includes linked lists, stacks, queues, priority queues, binary and multi-way trees, directed graphs, hashing, internal and external sorting.

**AD 330 (5) N**  
**Professional Communication in IT**

This course presents strategies for effective communication in the technology environment. Emphasizes ethics in professional communications in the context of diverse teams and technical teams and discusses ethical guidelines for communication of technical information and outcomes. Also explores the intersection of professional communication and legal issues such as copyright, fair use and intellectual property. Prereq: Acceptance into the Application Development BAS.

**AD 340 (5) N**  
**Mobile Application Development**

Intermediate course in the fundamentals of mobile application development. Includes: program language & mobile platform design, building apps that respond to users in a useful/intuitive way, integration of data sources, location awareness, image/file management, and legal & ethical issues specific to the mobile environment. Prerequisites: AD 320 and acceptance into the AD-BAS program or instructor permission.

**AD 350 (5) N**  
**Database Technology**

Covers intermediate programming in an SQL relational database. Provides an introduction to non-relational databases as used in cloud computing and Big Data. The RDMS topics include views, models, stored procedures, triggers, indexing, JOINS and abstraction techniques, query construct efficiency. Introduction to noSQL databases: uses terminology, indexing, storage, compute consumption, compression, and reliability.

**AD 400 (5) N**  
**Project Management in Software Development**

This course provides a comprehensive overview of current processes, practices & tools used to manage software development projects. Using a combination of case studies & projects, students apply best practices for planning, organizing, scheduling, & controlling software projects. Emphasizes legal & ethical issues that relate to project management. Prereq: Acceptance into the Application Development BAS.

**AD 410 (5) N**  
**Web Application Practicum**

Work in teams to create a MVC based web application. Store and share code via software versioning system and use small team agile strategies. Write requirements documents, build the app in stages and integrate components into a larger project. Covers legal and ethical issues of app development and lifecycle, and working in a diverse and collaborative environment. Prereqs: AD 310 & 320.

**AD 420 (5) N**  
**Cloud Computing - Software as Service**

Covers fundamentals & strategies for moving & developing apps & data storage in the cloud. Students will analyze cloud based offerings & compare them for suitability to specific app & infrastructure needs. They will learn to deploy apps to the cloud, utilize cloud based services, develop cloud specific apps, and explore legal and ethical issues specific to the cloud computing environment. Prerequisites: AD 320, 325, & 350.

**AD 430 (5) N**  
**Mobile Application Practicum**

Students work in teams to build a mobile app for an external client. Students will interview users, prototype their apps, write app specs, & consult for product viability & legal issues. Teams will use a recognized development strategy, performing design reviews and quality assurance checks at intervals. Upon completion, teams will deploy their mobile apps. Prereq: AD 310, 320, & 340.



**AD 440 (5) N****Cloud Computing Practicum**

Students will work in small teams to develop and deploy cloud-based services & apps for an external client: determining suitability, cost benefit analysis, ongoing maintenance needs in deploying an existing app to a cloud-based service, develop/implement a deployment plan to migrate an app to a cloud-based service, extend the apps capabilities to utilize cloud-specific offerings such as big data or cloud-based development platforms. Prereq: AD 310, 320, & 420.

**AD 450 (5) N****Datascience Development**

Fundamentals of data science course with topics that include data wrangling, visualization, exploratory data analysis, and machine learning. Students will gain hands-on data science experience with Python or R. AD450 is the first of a two-course sequence.

**AD 470 (5) N****Data Science Practicum**

This course is the second of the two-course sequence. Students integrate and apply the data analytics skills they have learned in Data Science Development course (AD 450) to conduct real-world data science projects. In the projects, students engage in processing real-world data, using a variety of visualization tools and applying appropriate data analytics models. Students conclude the projects with presenting key insights and findings. Prerequisites: AD 450 Data Science Development

**AD 490 (5) N****Internship/Capstone Project AD-BAS**

In this course for the Application Development, Bachelor of Applied Science, students shall complete a capstone project or arrange and complete an internship, applying the skills learned in the classroom to the workplace. Students write a culminating paper, reflecting on their experience and integrating it with classroom learning. Prereq: Instructor permission.

**Applied Behavioral Science  
Bachelor of Applied Science****ABS 206 (1-5) C****Writing in the Human Services**

Develops academic writing and research skills required for success in advanced studies in human services. Covers technical writing conventions and skills needed to develop reports and documents for the workplace. Prereqs: ENGL& 101 with a minimum grade of 2.0 and acceptance into the BAS Applied Behavioral Sciences program or permission.

**ABS 310 (5) C****Professionalism and Ethical Practice**

Examines ethical principles in the field of human services, including client interactions, peer-to-peer interactions, working with various communities, and the impact of ethics/ethical decisions. Prerequisite: Permission.

**ABS 320 (5) C****Applied Social Psychology**

Examines the application of social psychological concepts and systems theory in human service settings including prevention, policy analysis, groups, professional and client relationships, and multi-cultural competence. Prereq: PSYC& 100.

**ABS 330 (5) C****Information Literacy and Program Assessment**

Intro to organization, retrieval and evaluation of electronic and print information: college library systems, networked information systems, traditional scholarly resources, and concepts of research. Examine specialized resources of various Social and Human Services disciplines.

**ABS 340 (5) C****Applied Environmental Science**

Investigates the relationship between environment and the human condition. Explores human needs and experiences based on the health of their environment, specific challenges posed by degraded environments and unequal access to healthy environments. Focus on developing environmental literacy and familiarity with tools for promoting environmental justice. Local field trips may be required. Prereq: Enrollment in Applied Beh. Sciences BAS program, or Instructor's permission.

**ABS 350 (5) C****Quantitative Principles in Research  
& Assessment**

Explores the quantitative organization of data central to scientific research and assessment design in applied behavioral sciences. Prereq: PSYC&100, PSYC 217, and MATH 098 (or MATH 088), each with a minimum 2.0 or higher.

**ABS 360 (5) C****Public Policy Analysis**

Learn the art and science of providing problem-solving advice to government decision-makers, managers, and citizens in order to influence government processes. Understand theoretical frameworks, problem definition, development of alternative solutions, predicting impact of choices, policy evaluation and modification of policies through policy case studies. Prereq: SHS 103 or POLS 202 or Permission.

**ABS 399 (1-5) C****Independent Study and Research**

Pursue academic and professional areas of interest and possible employment related to applied behavioral science.

**ABS 410 (5) C****Economic-Political Systems: Public Implications**

Explores the nature and scope of political economy by examining its historical evolution. Conducts a comparative analysis of contemporary political and economic systems and analyzes how public service relates to political economy through taxation and finance.

**ABS 415 (5) C****Cross-Cultural Competency in Human  
Services**

Develops an understanding of theories, research and applications pertaining to the process of cross-cultural competency. Students examine cultural assumptions, values, perceptual and cognitive orientations, cultural stereotypes, prejudice, ethnocentrism, non-verbal behaviors, language, and meaning systems in cross-cultural interactions between people from diverse cultural and ethnic groups.

**ABS 430 (5) C****Sociology of Families**

Examines the trends, issues, and debates regarding the social construction of families; and, how changes in families relate to social, economic, global and political changes in the larger social structure. Students develop critical thinking and analytic skills by drawing on empirical research, personal histories, current events, and public policy issues. Prereqs: SOC 101 with 2.0 or higher.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**ABS 495 (5) C**  
**Senior Capstone Project**

Students demonstrate their mastery of learning in the field of Applied Behavioral Science. Under the guidance and direction of instructors, they will evaluate their overall educational experience and individual professional direction by integrating experiential learning, coursework, knowledge, and skills, and demonstrating critical thinking, oral presentation, creativity, problem-solving, and writing commensurate with senior level work. Prereq: Completion of all prior program requirements.

**ABS 497 (5) C**  
**Advanced Field Placement I**

This is the first of two quarters of applied professional work in a community setting consistent with the student's area of interest. Meets requirements for supervised field practice required for licensure and professional accreditation in many professional specialties.

**ABS 498 (5) C**  
**Advanced Field Placement II**

Second quarter of applied professional work in a community setting consistent with the student's area of interest. Meets requirements for supervised field practice required for licensure and professional accreditation in many professional specialties.

**ABS 499 (1-5) C**  
**Independent Study and Research**

Pursue academic and professional areas of interest and possible employment related to applied behavioral science.

**Arabic**

**ARAB 101 (5) C | S**  
**Arabic 101**

Modern Standard Arabic (MSA) language within the cultural context of Arabic-speaking people. Provides students with elementary Arabic communication skills of listening, speaking, reading, and writing. No prior knowledge of Arabic required. Prereq: English 101 eligibility.

**ARAB 102 (5) C | S**  
**Arabic 102**

This course begins with a review of the material taught in Arabic I. An emphasis on speaking skills is continued in this level. Conversational situations include general topics from Arabic I, as well as speaking about family and friends, daily life activities, and various cultural topics such as Arabic names and titles, activities at home, and the Arab family structure. An increasing amount of time will be spent on the written language and grammar.

**ARAB 103 (5) S**  
**Arabic 103**

This course begins with a review of the material taught in Arabic II. Arabic III continues with a comprehensive and complex focus on Arabic speaking, reading, and writing skills. Students will be able to relay personal experiences using complex grammar and will gain a thorough understanding of Arabic culture.

**Art**

**ART 091 (5) S**  
**Introduction to Digital Photography**

This course is designed to help students become well rounded in the fundamentals of digital photography. Students will receive basic instruction, demonstration, and see samples of the desired outcomes. They will be allowed to go outside and shoot assignments based on what they are learning. A portfolio of student work will be created to share with the instructor and peers.

**ART 092 (5) S**  
**Geography Through Art**

Explore world geography continent by continent through map work and artwork of the region. For each continent students will study the major concepts in geography for the area including climate, landforms, resources, and culture then explore how art is reflective of the region. Students will also create art that fits with each continent's geography. Students will keep a personal geography notebook that contains all their maps and art projects for course.

**ART& 100 (5) C | N | S**  
**Art Appreciation**

Historical backgrounds and design fundamentals that have affected art using slide lectures, reading and practical studio applications.

**ART 101 (5) C | N | S**  
**Design**

Studio series in the fundamentals of two-dimensional art with problems based on line, space, texture, shape and color theories. Includes practical applications of theories to design. Required for art majors.

**ART 102 (5) C | N | S**  
**Design**

Continuation of ART 101. Intro to three-dimensional space organization using the elements of design. Construction in sculptural formats. Required for art majors. Prereq: ART 101

**ART 103 (5) C | S**  
**Design**

Tutorial in individual problems in design. Prereq: Permission.

**ART 105 (5) C**  
**Survey of Modern Art**

Study of major art movements of the late nineteenth century to the present with a focus on the major artistic forms, artists, and styles emerging out of Europe and the United States. Consideration also is given to the impact and exchange of artistic traditions and practices outside of Europe and the United States. May be taken out of sequence. Prereq: ENGL& 101 (C)

**ART 106 (5) N**  
**Color Theory**

Introduction to the basic principles of color theory as it pertains to fine arts and design applications. Students will develop skills in mixing and paint application necessary to realize a project in color from concept to completion. This studio class includes demos, lectures, critique, and collaborative work. Students will develop original, creative designs that utilize color interactions and practical approaches to color design problems. Basic drawing experience encouraged.

**ART 111 (5) C | N | S**  
**Drawing**

Freshman level drawing. Study of line, value, space, perspective and composition through the use of a variety of drawing media.

**ART 112 (5) C | N | S**  
**Drawing**

Continuation of ART 111. Exploration in subject and media including drawing from the human figure. Focus on composition, expression, and creative conceptualization. Prereq: ART 111 or permission.

**ART 113 (5) C | N | S**  
**Drawing**

Continuation of ART 112. Further development of fine art drawing with an emphasis on expression and composition, including development of portfolio building or other project. Prereq: ART 112 or permission.

**ART 114 (5) C | N | S**  
**Introduction to Digital Photography I**

Intro to digital camera use, photography basics, photographic visualization, composition, lighting, and minimal editing. Students must provide their own digital camera with five or more mega-pixels, Auto, Auto-P, Aperture Priority, Shutter Priority, and full manual Exposure Modes. Prereq: Eligibility ENGL 096 or equivalent.

**ART 115 (5) N**  
**Introduction to Digital Photography II**

Continue with photography basics involving digital imaging, lighting, models, and presentation. Students need a current DSLR camera with full manual modes, tripod, lens tissue, thumb drive, card reader, compact flash or other memory card. Photo lights optional. Prereq: ART 114 or permission.

**ART 121 (5) C | N**  
**Introduction to Printmaking**

Study and application of basic relief print media. Covers linocuts, woodcuts, multicolor prints and experimental monoprints. Intro to relief and intaglio techniques, with emphasis on small editions. Recommended: Some drawing background.

**ART 122 (5) C | N**  
**Introduction to Printmaking-Intermediate**

Covers various aspects of printmaking, with an emphasis on intaglio printmaking processes. Intro to drypoint, engraving and etching with hard and soft grounds. Learn water and acid etching and the use of photosensitive emulsions on metal plates. Recommended: Some drawing background.

**ART 123 (5) C | N**  
**Continuing Printmaking: Monotype and Monoprint**

Develop technical and conceptual skills to create the painterly print. Emphasis on sequential imagery, layered impressions, color use and inks, use of the press, plates and papers and evolution of personal imagery. Covers variation, using a matrix and altered monotypes. Recommended: Some drawing background.

**ART 124 (5) N**  
**Printmaking - Screenprint**

Study and application of screenprinting media. Covers multiple techniques to create screens for Fine Art prints on paper. Introduces use of transparency in image. Instruction and focus on color mixing and interaction. Investigates multiple color print techniques and registration, with emphasis on monoprints and small editions. No pre-requisites. Transfer class.

**ART 166 (5) N**  
**Video Art I**

Introduction to video art through use of digital video filming and editing. Explore digital video editing, sound integration, formatting, output and distribution strategies and options. Covers visualization, composition, effects, and transitions of digital video within a fine art context. Create, present and critique finished digital video works. Recommended: ART 114 and ART 210.

**ART 170 (1-5) S**  
**Photography as An Art Language**

Traces the history and distinctive properties of photography. Includes camera, exposure, lighting, composition, black and white dark-room work and digital imaging.

**ART 171 (5) C**  
**American Indian Art & Aesthetics**

Explores expressions of life by the Indigenous peoples of North America, specifically the peoples known as American Indian, Alaskan Native, and some Canadian First Nations. Introduces ways of thinking, storytelling, dance, art objects, film, and music that are expressions and aesthetic representations of Native North America (above 30° North parallel).

**ART 201 (5) C | N | S**  
**Painting**

Beginning painting in oil or synthetic media using still life. Emphasis on basics: composition, value studies, color mixing, canvas preparation, styles and techniques. Recommended: Drawing background.

**ART 202 (5) C | N | S**  
**Painting**

Further development of color and composition in oils or synthetic painting media. Individual instruction. Prereq: ART 201 or permission.

**ART 203 (5) C | N | S**  
**Painting**

Further studies in color, composition and subject matter including portfolio building or other project. Individual instruction. Prereq: Art 202 or permission.

**ART 204 (5) N**  
**Mural Art**

Explore the stages of mural art from brainstorming and budgeting to community input and creation, with particular emphasis on the craft of mural execution. Hands-on experience requires ability to work outdoors 3+ hours at a time. Prereq: ART 201 or permission.

**ART 205 (5) C | S**  
**Water Color Painting**

Intro to water color painting. Covers basic wash techniques, color mixture, value contrast, composition and wet into wet. Recommended: Some drawing background.

**ART 206 (5) S**  
**Water Color Painting**

Continuation of ART 205, based on a series of water color problems utilizing skills learned in the previous quarter. Further work with composition. Prereq: ART 205 or permission.

**ART 207 (5) S**  
**Water Color Painting**

Individual water color projects in series. Prereq: ART 206 or permission.

**ART 210 (5) N | S****Digital & Graphic Art - Photoshop + Illustrator**

First of 2 courses. Image design, creation and manipulation using vector-based and pixel-based programs. Combines fine art and technical aspects of digital composition for production of media formats including print and web-based. Previous drawing/design and basic computer skills strongly recommended.

**ART 211 (5) N | S****Sculpture**

Fundamentals of composition in the round, in clay and plaster, using basic techniques of carving, casting and building. Prereq: One quarter of drawing, design, or permission.

**ART 212 (5) N | S****Sculpture**

Fundamentals of relief composition in clay, plaster and wood using basic techniques of carving, casting and building. Prereq: ART 211 or permission.

**ART 213 (5) N | S****Sculpture**

Fundamentals of three-dimensional composition with emphasis on life studies. Basic materials used are clay, plaster, or wood. Prereq: ART 212 or permission.

**ART 214 (5) N | S****Digital & Graphic Art - Intermediate**

Continuation of ART 210. Further explore fine art and technical aspects of digital composition using vector graphics (such as Adobe Illustrator) and pixel-based (such as Adobe Photoshop) programs. Students will be encouraged to further develop their own visual language. Includes lectures, software demos, digital image making exercises, projects and readings. Prereq: ART 210.

**ART 215 (5) N | S****Digital Art and Graphic Design - Advanced**

Continuation of ART 214. Further explore fine art and technical aspects of digital composition using pixel and vector based software (such as Adobe Creative Suite). Students will be encouraged to further develop their own visual language. Includes lectures, software demos, digital image making exercises, projects and readings. Prereq: ART 214. Software is available on campus. Online students are responsible for obtaining their own software.

**ART 221 (5) N | S****Ceramic Art**

Beginning basic pottery design and construction. Emphasizes hand building coils and slabs, basic glazing and beginning pot throwing on the potter's wheel.

**ART 222 (5) N | S****Ceramic Art**

Develop throwing skills. Understand basic glaze composition and kiln operation. Continue studies in techniques of surface decoration. Prereq: ART 221 or permission.

**ART 223 (5) N | S****Ceramic Art**

Continuation of ART 222. Advanced work on the wheel. Emphasis on combining methods of construction. Learn basic glaze skills. Prereq: ART 222 or permission.

**ART 240 (5) N****Book Arts**

Studio course in the art of book-making. Students will create narratives through visual story telling; learn tool handling and techniques in book construction; discuss historical and social contexts for the artist book; develop a personal expression through the medium of artist books. Methods of image-making will include, but are not limited to: painting, drawing, printmaking, digital art and collage.

**ART 251 (5) C | N****Art History**

Study of the major forms of visual expression including Paleolithic, Egyptian, Mesopotamian, Greek, Roman and Early Christian periods. Emphasis on European and Middle Eastern art (C, S).

**ART 252 (5) C | N****Survey of Western Art: Medieval-Renaissance**

Emphasis on the Medieval period through the Renaissance focusing on European and Islamic art. Continuation of ART 251 but can be taken out of sequence. Prerequisite: Eligibility for ENGL& 101.

**ART 253 (5) C | N****Survey of Western Art: Renaissance-Present**

Emphasis on the Italian Renaissance through the present day. Continuation of ART 252 but may be taken out of sequence. Prerequisite: Eligibility for ENGL& 101.

**ART 254 (5) C****Survey of Northwest Coast Art**

Surveys the visual culture of the Pacific Northwest Coast, beginning with indigenous arts in historical context through the present, with a focus on contemporary expressions and issues. Consideration will also be given to the exchange of artistic traditions and practices beyond the Northwest and the impact of colonialism, technological developments, and societal shifts. Prerequisite: Eligibility for ENGL&101.

**ART 255 (5) C | N****Survey of Asian Art History**

Survey of the visual arts of India, China, and Japan with a focus on major religions, artistic forms, techniques, and cultural traditions. Consideration will also be given to the impact of outside invaders on the arts and cultural exchange across space and time. Prerequisite: Eligibility for ENGL&101.

**ART 256 (5) C****Art History: History of Photography**

Examines the role photography has played reflecting and shaping culture from its emergence in the 19th century to the digital revolution currently underway. Emphasizes photography's role in the larger development of art history and what it means to photograph, to be photographed, and to view photographers as part of an audience. Students make a few photographs of their own along the way. Prereq: ENGL 101.

**ART 257 (5) N****Non Western Art History: Art of Africa & Oceania**

Survey major forms of art from Africa, Australia, and South Pacific Islands. Art will be examined through the lens of pre-colonization, colonization, and art of indigenous peoples post-colonization to present day. Includes the study of sculpture, architecture, painting, and personal adornment. May be taken out of sequence. Transfer class.

**ART 258 (5) N****Design History: a Global Perspective**

Introduction to the history of design with emphasis on the industrial age through contemporary design focusing on global design. Focus on colonialism and its effects on design, design practice across global regions, and contemporary design solutions in post-colonial regions. Transfer class.

**ART 281 (5) N****Jewelry Design I**

Learn basic design and construction of non-ferrous metals involved in jewelry making. Bench techniques involve forging, soldering and basic stone setting. Lab fee required. Transfer Class.

**ART 282 (5) N****Jewelry Design II**

A continued exploration of metal fabrication and jewelry design. Surface enrichment, advanced forming techniques, faceted stone setting and the introduction to enameling. Prereq: ART 281. Lab fee required. Transfer class.

**ART 283 (5) N****Introduction to Alloying and Jewelry Casting**

Explore the alloying and casting processes of Jewelry Design. Learn lost wax casting and rubber molding processes. Prereq: ART 282. Lab fee required. Transfer Class.

**ART 284 (5) N****Bench Techniques and Practices**

Advanced bench skills and production techniques will be taught allowing students to create innovative pieces with personal statements. The emphasis will be on creating a body of work that is exhibition ready. Prereq: ART 283. Lab fee required. Transfer class.

**ART 285 (5) N****Metal Techniques for Small Scale Sculpture**

Metalsmithing techniques used to create functional and sculptural objects. Students learn the physical properties of metal and create objects that express personal images and creative thoughts. Basic metalworking techniques used to create metal sculpture, hollowware and model making. Field trips to some metal fabrication studios included to develop resources for future projects. Transfer class.

**ART 290 (5) N****The Art Business**

Fundamentals of the business aspects of art, including designing and packaging the portfolio for A.F.A./C.F.A. degrees, photographic artwork, building a resume, marketing, copyrights, contracts and other essential business practices. Recommended: At least two college-level art courses. Transfer Class

**ART 298 (3) C****Directed Reading in Art**

Advanced film production involves scripting, budgeting and scheduling. Emphasis on information film production, interior and studio lighting for color, sync-sound recording and editing techniques.

**ART 299 (1-5) C | N | S****Special Problems in Art**

Individual or seminar instruction. May be repeated to earn a maximum of 9 credits. Prereq: Second year art major, level of ability and permission.

**Astronomy****ASTR& 100 (5) C | N | S****Survey of Astronomy**

Emphasis on astronomic concepts fundamental to an understanding of the solar system, stars, galaxies and origin and history of the universe.

**ASTR 102 (5) N****Space and Space Travel**

Introduction to space exploration, both robotic and human, and the engineering of space-faring vehicles to withstand space hazards. Prerequisite: Completion of MATH 098 (with a grade of 2.0 or higher) and placement into ENGL& 101. Transfer class. Lab class.

**ASTR 104 (5) C****Observational Astronomy**

Covers the celestial sphere and coordinates; Earth's orbital motion; time; moon, planets, stars, constellations and deep sky objects. Includes technology, processes and math used by astronomers: optics, telescopes, digital detectors, data reduction, observing techniques and data analysis. Minimum two nights observing required. Prereq: Recommend ASTR& 100 and MATH 102.

**ASTR 201 (5) N | S****The Universe and the Origin of Life**

Modern views of atomic and molecular evolution from the big bang theory through the formation of the solar system and emergence of life on earth. Discuss extraterrestrial intelligent life and the ultimate fate of the cosmos. Recommended: AST 100 or some science background.

**Auto Body Collision Repair****ABR 111 (4) S****Introduction to Automotive Collision Technology**

Covers the skills needed to become a good body shop employee, typical movement of a vehicle through a body shop and basic procedures for repairing a collision damaged vehicle. Identify and use general purpose hand tools and power tools used in a body shop.

**ABR 112 (3) S****Safety and Environmental Practices**

Covers various environmental and other regulations in an automotive refinishing department. Locate hazardous warning information for products used in refinishing, select the proper personal protection equipment, inspect it and demonstrate proper use.

**ABR 113 (8) S****Welding and Cutting**

Covers the differences between various metal joining processes, selection of the correct heat joining for various jobs, the advantages of using MIG welding, personal and shop safety, along with vehicle protection measures. Learn about welding wires, shielding gases, tuning the welder. Be able to visually inspect and destructively test the weld.

**ABR 121 (4) S****Panel Replacement and Alignment**

Covers selection, understanding and use of panel replacement and alignment tools. Prereq: ABR 111, 112 and 113 or permission.

**ABR 122 (3) S****Working with Trim and Hardware**

Covers the proper use and selection of tools and removing and installing of interior door trim panels, door locks and handles, deck lid lock cylinders and exterior trim. Install pinstripes and decals. Prereq: ABR 111, 112 and 113 or permission.

**ABR 123 (4) S****Metal Straightening**

Covers the basic fundamentals of metal straightening and proper selection of metal straightening tools. Prereq: ABR 111, 112 and 113 or permission.

**ABR 124 (4) S****Body Fillers**

Covers the correct mixing and application of body fillers to increase the quality of the repair. Prereq: ABR 111, 112 and 113 or permission.

**ABR 131 (2) S****Understanding Automotive Finishes**

Identify the differences between a variety of automotive finish systems, including dry time, chemical make-up and plant and body shop application. Prereq: ABR 111, 112 and 113 or permission.

**ABR 132 (6) S****Preparing the Surface for Refinishing**

Determine the condition of a vehicle's finish and plan the steps used in refinishing the vehicle. Prereq: ABR 111, 112 and 113 or permission.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**ABR 133 (5) S**  
**Preparing the Equipment, Paint & Refinishing Mat**

Setup and use the final preparation, spray environment and drying areas for refinishing. Understand paint mixing formulas using reference manuals; mix paint according to published formulas; and describe the various types of air supply equipment and setup. Use various types of spray guns, make all preliminary adjustments to the air system and spray gun, test the spray gun and make final adjustments in preparation for refinishing. Prereq: ABR 111, 112 and 113 or permission.

**ABR 134 (1) S**  
**Detailing**

Covers proper cleaning of the exterior and interior of the vehicle, removal of overspray, decals and pinstripes. Prereq: ABR 111, 112 and 113 or permission.

**ABR 161 (5) S**  
**Damage Analysis**

Covers how a vehicle absorbs the forces of a collision through crush zones, how damage travels from the point of impact through the body, and the identification of two types of damage conditions. Prereq: ABR 111, 112 and 113 or permission.

**ABR 162 (3) S**  
**Door Skin Repair and Replacement**

Covers proper alignment of door frames, the principles and techniques for removing and replacing a welded door skin, door intrusion beam removal, surface preparation and installation techniques. Prereq: ABR 111, 112 and 113 or permission.

**ABR 163 (5) S**  
**Quarter Panel Replacement**

Analyze quarter panel damage, determine whether sectioning or full panel replacement is required; learn the principles and techniques of removing a damaged quarter panel, surface preparation, alignment and installation. Prereq: ABR 111, 112 and 113 or permission.

**ABR 164 (2) S**  
**Moveable Glass and Hardware**

Remove and install moveable door glass, identify cause and correct air and water leak problems. Prereq: ABR 111, 112 and 113 or permission.

**ABR 171 (7) S**  
**Straightening Structural Parts**

Learn proper mounting and anchoring of the vehicle and various types of pulling equipment. Study H.S.S., cold and hot stress relief, pulling and straightening of front, rear end, side impact and roof damage. Prereq: ABR 111, 112 and 113 or permission.

**ABR 172 (7) S**  
**Full and Partial Panel Replacement**

Understand full or partial panel replacement, uses of various types of joints used in sectioning, repair or replacement of a complete rail section, rocker panel, A and B pillar, floor pan, truck floor and full body section. Prereq: ABR 111, 112 and 113 or permission.

**ABR 173 (2) S**  
**Restoring Corrosion Protection**

Covers safely working with chemicals, corrosion and its effect on vehicles and restoring corrosion protection to collision damaged areas. Plan effective and correct corrosion protection treatment to welded areas and exposed seams, interior seams, exposed surfaces, trim and accessories during repairs.

**ABR 181 (6) S**  
**Steering and Suspension**

Covers identifying and diagnosing tire and wheel steering, rack and pinion steering, power steering suspension, strut type and problems in steering and suspension systems.

**ABR 182 (7) S**  
**Electrical and Electronic Systems**

Learn to diagnose and repair electrical and mechanical systems problems.

**ABR 183 (3) S**  
**Mechanical Systems**

Focuses on repairing a vehicle involved in a collision, often removing mechanical parts, including suspension, steering, drive train and engine parts and servicing of mechanical parts. Some areas require collision repair technicians to be certified to perform mechanical repairs.

**ABR 191 (4) S**  
**Applying the Finish**

Prepare a surface for topcoat, apply primer-scaler, and apply single stage paint, base, clear-coat and tri-coat finishes. Prereq: ABR 131.

**ABR 192 (3) S**  
**Blending Color**

Prepare a vehicle for a blend, blend single-stage, blend base coat, clear coat or tri-coat finishing. Prereq: ABR 131.

**ABR 193 (3) S**  
**Solving Paint Application Problems**

Identify paint application problems caused by contamination, paint defects caused by spraying techniques and solve paint problems related to drying, curing of paint and those caused by improper preparation. Prereq: ABR 131.

**ABR 194 (3) S**  
**Finish Defects, Causes and Cures**

Covers identifying paint film defects, causes and corrective methods, surface defects and corrective methods of repair. Prereq: ABR 131.

**ABR 197 (1-5) S**  
**Industry Internship (Itec Based)**

Provides instructional link between classroom and on the job experience; reinforces and documents on-the-job learning experiences; and provides opportunities for faculty and student interaction.

**ABR 199 (1-12) S**  
**Auto Body Rebuilding and Refinishing**

Principles of correcting auto body and sheet metal damage. Includes a study of characteristics of metal, frame repair, welding and refinishing.

**ABR 299 (1-12) S**  
**Special Topics in Automotive Collision Repair**

A special topics course for an individual or group in Automotive Collision Repair.



## Automotive Technology

### AUT 100 (6) S Introduction to Electricity

This introductory course covers skills required by the Automotive Service Excellence Education Foundation (ASEEF) including electrical theory; testing series and parallel circuits using a multimeter; diagnosing electrical system problems using schematics and component locators; Testing battery, starting and charging systems on vehicles including safety procedures. MATH 110 is embedded in this course.

### AUT 102 (4) S Advanced Electrical Systems

Covers understanding and using schematics. Includes battery, starting and charging system operation and testing.

### AUT 104 (3) S Automotive Electronics

Contents include: safety, automotive lighting, gauges and warning devices, horns, windshield wipers and washers, defoggers, power accessories diagnosis and repair or replacement of the components. In addition the function and construction of each component.

### AUT 106 (3) S Basic Power Accessories

Covers basic computer operation and applications on the vehicle, using scan tools to diagnose electronically controlled components and accessories. Prereq: MVM 100, MVM 102, AUT 100, Math 110. Coreqs: AUT 102, AUT 104.

### AUT 112 (3) S Manual Transaxles and Clutches

Power flow and principles involving manual transaxles; troubleshooting and diagnosing manual transaxles noises, clutch issues and shifting problems, removal and reinstall manual transaxle in vehicle. In addition the function and construction of each component, as well as their diagnosis and service procedures will be covered.

### AUT 114 (3) S Manual Transmissions, Transfer Cases & Drive Axl

Covers basic principles involving manual transmissions, transfer cases and drive axles, including function and construction of each component, diagnosis and service procedures. Prereq: MVM 100, MVM 102, AUT 100.

### AUT 116 (6) S Air Conditioning and Heating

Basic principles involving air conditioning and heating systems; troubleshooting and diagnosing of air conditioning and heating systems; removal and reinstalling of air conditioning and heating components in vehicles. In addition, the function and construction of each component, as well as their diagnosis and service procedures will be covered. Instruction in safety, environmental awareness.

### AUT 118 (4) S Automatic Transmission Diagnosis and Service

This course covers power flow and principles involving automatic transmissions. Teaching how to diagnose, service and make adjustments to automatic transmissions. Teaching will include understanding electronic control systems, and how to locate and repair external transmission leaks. Students will be taught to perform a proper road test for transmission problems. In addition, the function and construction of each component, as well as their diagnosis and service procedures will be covered.

### AUT 120 (6) S Advanced Automatic Transmission Service

This course covers bench tear down inspection and reassembly of the transmission. In addition it covers the function and construction of each component. We will also remove and reinstall automatic transmissions in vehicles.

### AUT 122 (4) S Steering and Suspension

Steering and suspension theory, diagnosis and repair or replace including but not limited to chassis design, wheel bearings, steering and suspension components function and construction.

### AUT 124 (4) S Tires and Wheel Alignment

Tire and wheel construction, materials, application, remove & install, balance, diagnosis and repair. Performing a 4 wheel alignment, understanding all the components on the vehicle and road conditions that can affect alignment. Repair or replacement of those components on the vehicle as well as how aftermarket components can affect ride and safety of the vehicle.

### AUT 126 (3) S Basic Brake Systems

This course covers all of the components of disc brake, drum brake and mixed systems. We cover how each component works both in theory and in reality in the shop. We teach how to service, diagnose and to repair or replace each of the components.

### AUT 127 (4) S Advanced Brake Systems

Covers operation, diagnosis and service of disc brakes, power brakes and Antilock braking System (ABS) brake components.

### AUT 128 (4) S Automotive Engine Diagnose/Remove and Replace

This course covers automotive gasoline engines operation, lubrication and cooling systems. It also covers removal and installation.

### AUT 130 (8) S Automotive Engine Rebuild

Covers engine disassembly, cleaning of engine parts, inspection and measuring of engine components, cylinder head rebuilding, overhauling engine blocks and reassembly of an automotive engine.

### AUT 132 (3) S Automotive Welding

Covers safety in welding and proficiency in oxy-acetylene welding, oxy-acetylene brazing, oxy-acetylene cutting and MIG welding. Learn which type of welding process is used when joining various types of metals in different situations. Prereq: MVM 100 and 102 or permission.

### AUT 134 (3) S Introduction to Engine Performance

Automotive engine performance theory, operation and diagnosis of engine performance components, as well as removal, repair or replacement of components from vehicles. Prereq: MVM 100, MVM 102, AUT 100. Coreqs: AUT 128, AUT 132.

### AUT 138 (4) S Advanced Drivability and Fuel Systems

This course will cover gasoline ignition and fuel systems. Included are distributor waste spark and coil on plug ignition systems also fuel pumps both electric and mechanical, fuel injection throttle body, port fuel sequential and gasoline direct injection systems.

**AUT 140 (4) S**  
**Engine Computers**

Covers automotive engine computer, its multiple power and ground supplies and how these affect the running of the vehicle. Includes inputs and outputs of the vehicle, how each contributes to the running of the engine and how to diagnose each one. Prereq: MVM 100, AUT 100, 102, 104, 106, 136 and 138 or equivalent, or permission.

**AUT 142 (6) S**  
**Emission Controls and Diagnostic Test Equipment**

Covers all emission-related items on the vehicle and the federally mandated OBD II system. Includes use and operation of super charges and turbo charges on cars.

**AUT 197 (1-6) S**  
**Internship Automotive Technology**

This course will provide an instructional link between classroom experience and actual on-the-job experience to help students bridge the gap between work and learning; reinforce and document student learning experiences on the job; and provide opportunities for faculty and student interaction throughout the student's work experience.

**AUT 299 (1-18) S**  
**Special Topics: Automotive**

Special topics for individual or group study. Prereq: Permission.

**MVM 100 (3) S**  
**Introduction to Automotive Technology I**

This course focuses on skills required by the National Automotive Technicians Education Foundation (NATEF) including safety; nomenclature of components and parts; performing preventive maintenance procedures; tools and equipment; repair manuals; parts and time estimating guides; fasteners and equipment; and how they relate to the automotive industry. Prereqs: Placement into ENGL 105 and MATH 110. Coreqs: AUT 100, MVM 102, MATH 110.

**MVM 101 (8) S**  
**Introduction to Motor Vehicle Maint Technology I**

This introductory course covers safety and Material Safety Data (MSD); tools and equipment; gathering vehicle maintenance information; repair orders, repair manuals, parts and time estimating guides; component identification; component theory and fasteners. Prereqs: Compass scores. Coreqs: HDM 171, MAT 110, BUS 159.

**MVM 102 (6) S**  
**Introduction to Automotive Technology II**

This course builds on MVM 100 to meet Automotive Service Excellence Education Foundation (ASEEF) standards by covering vehicle inspection; lube, oil and filter; cooling system; belts and hoses; heating and air conditioning system; driveshaft; manual and automatic transmission service and using a scan tool to retrieve diagnostic trouble codes (DTC).

**Aviation Maintenance Technology****AMT 111 (17) S**  
**Basic Science for Aviation**

This course introduces students to aircraft terminology and nomenclature, basic physics, aircraft drawings, maintenance forms and records, Federal Aviation Regulations (FARs), materials and processes, the exercise of mechanics privileges, and shop safety practices as they pertain to every day shop problems.

**AMT 112 (17) S**  
**Basic Electricity for Aviation**

This course introduces students to the basic concepts of electricity and magnetism. Methods of generating alternating and direct current are studied. Students will learn the proper methods of overhaul, inspection, installation and repair of aircraft electrical components. Safety precautions are also emphasized.

**AMT 113 (1-17) S**  
**Airframe Structure and Repair**

This course introduces students to the use of wood, fabric, composites, fiberglass, plastic and metal as materials for aircraft structures. Upon completion of the projects in the course, students learn methods of inspection and repair of aircraft structures. Safety precautions are emphasized when using the various materials found in aircraft structures.

**AMT 133 (17) S**  
**Powerplant Theory and Maintenance**

This course introduces students to powerplant theory and maintenance practices of the reciprocating engine and the gas turbine engine. Course topics include overhaul of each powerplant type, inspection technique, induction systems, cooling systems, exhaust, and turbocharging systems.

**AMT 197 (15) S**  
**Aviation Internship**  
Work experience.**AMT 199 (1-10) S**  
**Special Projects**

Topics could include inspection and repair of all types of sheet metal and composite structures. Prereq: Permission.

**AMT 214 (17) S**  
**Airframe Systems**

This course Introduces students to the five basic airframe systems: hydraulic-pneumatic power, landing gear, ice and rain control, cabin environment, fuel systems and management. Students work on assigned projects in each of the areas.

**AMT 215 (1-17) S**  
**Advanced Airframe**

This course Introduces students to aircraft inspection and record keeping procedures, including doors and interior furnishings, fire detection and extinguishing systems, aircraft instruments, aircraft electrical systems, and communication & navigation systems.

**AMT 234 (17) S**  
**Powerplant Systems and Components**

This course Introduces students to aircraft engine fuel metering systems, ignition systems, lubricating systems, ice and rain control systems and indicating systems. Upon completion of the projects, students learn the correct procedures for inspecting, testing, overhauling, & troubleshooting powerplant systems & related components. Safety precautions are emphasized when using the various shop tools and equipment.

**AMT 235 (17) S**  
**Advanced Powerplant**

This course Introduces students to aircraft propeller systems, fire detection and extinguishing systems, reciprocating and turbine engines, powerplant inspections troubleshooting. This is the final phase of powerplant technology and reviews are given for the final FAA exam with emphasis is placed on FAA regulations, airworthiness concepts, safety, personal and technical ethics.

**AMT 295 (16) S**  
**Airframe & Powerplant Master Class**

This intensive master class is for those with an approved 8610-2 FAA rating application. It provides a review of General, Airframe and Powerplant sections of the written, oral and practical FAA-licensing exams with special focus on those areas of civilian aviation not typically encountered during military service.

**AMT 296 (2) S****Amt Professional Portfolio**

The student will complete an industry research project, develop a job search strategy, create an industry-relevant resume, complete an online job application, and participate in required workshops, and attend a job interview event. They will describe and provide documentation of successfully scheduling and attaining FAA AMT certification according to procedures described in relevant FAA CFRs. Instructor Permission.

**AMT 298 (12) S****Special Topics - Aviation Maintenance**

Overview of various parts of the aircraft and their operation, including methods of corrosion detection, removal, treatment and correct painting techniques. Prereq: Permission.

**AMT 299 (5) S****Special Topics: Maintenance for Aviation Profess**

Basic aircraft maintenance on a variety of aircraft systems and components by arrangement.

**Avionics****AVIO& 203 (2) S****Avionics Communications**

Preparation for the FCC General Radiotelephone Operator License and Ship Radar Endorsement, utilizing Federal Communications Commission guidelines, fundamentals of communication and Key Topics.

**Basic & Transitional Studies****BTS 040 (1-15) C****Basic & Transitional Studies: ABE Offsite**

Emphasizes reading comprehension, making inferences, recognizing fact and opinion, vocabulary development, basic sentence patterns, paragraphs, punctuation, capitalization, and correct word usage. Covers multi-paragraph essays. Prerequisite: BTS division placement test with appropriate score, or Instructor's permission.

**BTS 050 (1-5) N****Academic Skills Support for I-Best**

Class will provide I-BEST enrolled ABE and ESL students with tailored, separate support and review to ensure student success in various I-BEST programs.

**Biology****BIOL& 100 (5) C | N | S****Survey of Biology**

Intro to biological principles and concepts: cell biology, application of biological knowledge to problems of society, and development of an awareness of science. Lab included. For non-science majors.

**BIOL 103 (3) C****Nutrition for Food Service Professionals**

Identification of known nutrients for human health; demonstration of dietary quality guidelines; utilization of dietary guidelines in meal planning, including modification of existing recipes to meet nutritional recommendations.

**BIOL 107 (5) C****Introduction to Comparative Animal Behavior**

An overview of current thinking and research in the science of animal behavior. Focuses on evolutionary principles and their influence on animal behavior. Discover how animals learn, how learning & instinct shape behavior, and how different strategies affect survival. Gain insight into human behavior from a new perspective and understand why and when sociality and apparent altruism can be advantageous. Prereq: Eligibility for MATH 084, 087, or 091. Completion of ENGL& 101 with 2.0 or higher.

**BIOL 120 (5) C****Marine Biology**

Emphasis on natural history, ecology, distribution, habitat, adaptation, interrelationships of local species. Field trips and lab included.

**BIOL 125 (5) N****Biology of the Pacific Northwest**

Discover fundamental principles of biology and ecology through readings, experiments and field trips. This online course fulfills the lab science requirement. Transfer class.

**BIOL 128 (5) C | N | S****Survey of Human Anatomy & Physiology**

Focuses on the structure, function, and location of the body's organ systems, and how organ systems interact to maintain homeostasis in response to different physiological challenges, such as exercise, injury, and disease. Lab included.

**BIOL 150 (5) S****The Biology and Evolution of Infectious Diseases**

Covers biology, epidemiology and evolution of infectious human diseases such as cholera, Ebola, HIV/AIDS, tuberculosis, malaria, influenza (including H1N1), smallpox and others. Emphasizes local and global environments of past and newly emerging diseases that impact human societies, including economic, social, cultural, historical, political and ethical aspects. Prereq: ENGL 096 or permission.

**BIOL& 160 (5) C | N | S****General Biology W/ Lab**

This course is a one quarter intro to biology. Basic biological concepts will be introduced, with an emphasis on biological molecules, cell structures and processes, genetics, evolution, and a survey of biodiversity.

**BIOL 161 (5) C****Human Genetics**

Introduction to human genetics and genomics. Topics include stem cells, Mendelian and multifactorial inheritance, DNA structure and function, genetic variation, cancer, genomic testing, genome modification, impacts of genetics, including bioethical issues. Prereq: ENGL& 101 with 2.0 or higher; and, eligibility for MATH 084, 087, or 091.

**BIOL 197 (1-5) C****Work Experience-Biology**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply biology knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**BIOL& 211 (5) C | N | S****Majors Cellular Biology**

BIOL&211 is the first of a three-quarter introduction to biology sequence in preparation for advanced study in areas such as medicine, dentistry, cell biology, microbiology, or veterinary medicine. BIOL& 211 focuses on cellular biology, BIOL& 212 on the biological diversity in animals and BIOL& 213 on evolution, ecology and biological principles of prokaryotes, fungi, protists and plants. Lab included.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**BIOL& 212 (5) C | N | S**  
**Majors Animal**

A three-quarter intro to biology sequence in preparation for advanced study in areas such as medicine, dentistry, cell biology, microbiology, or veterinary medicine. BIOL& 211 focuses on cellular biology, BIOL& 212 on the biological diversity in animals and BIOL& 213 on evolution, ecology and biological principles of prokaryotes, fungi, protists and plants. Lab included. Prereq: ENGL& 101 and CHEM& 160 Continuation of series. Emphasis on the biological diversity of animals, general principles of animal physiology, growth and development. Prereq: BIOL& 211. One quarter college chemistry (pref. inorganic series) or permission (C).

**BIOL& 213 (5) C | N | S**  
**Majors Plant**

A three-quarter intro to biology sequence in preparation for advanced study in areas such as medicine, dentistry, cell biology, microbiology, or veterinary medicine. BIOL& 211 focuses on cellular biology, BIOL& 212 on the biological diversity in animals and BIOL& 213 on evolution, ecology and biological principles of prokaryotes, fungi, protists and plants. Lab included. Prereq: ENGL& 101 and CHEM& 160 Continuation of series with an emphasis on prokaryotes, fungi, algae, and plants including their diversity, anatomy and physiology. Includes evolutionary and ecological principles relevant to biological studies. Lab. Prereq: BIOL& 211 with 2.0 or better (N,C). BIOL& 212 with 2.0 or better (S)

**BIOL& 241 (5) C | N | S**  
**Human Anatomy and Physiology 1**

Covers fundamental principles and establishes a basis for advanced study of anatomy and physiology and clinically related subjects in the paramedical fields.

**BIOL& 242 (5) C | N | S**  
**Human Anatomy and Physiology 2**

Fundamentals of human anatomy and physiology presented in lecture and laboratory. Designed to establish a basis for studying clinically related subjects in the paramedical fields. Continuation of BIOL& 241 with Lab.

**BIOL 259 (3) N**  
**Foundations in Quantitative Biology**

An Exploration of quantitative skills used in biology, with a focus on applying those skills to current biological issues. Topics include data analysis, probabilities, statistics, algorithms, and numerical simulations. Level of math required has been addressed in pre-requisite. Transfers to the University of Washington as Biology 359. Prerequisite: Biology 213 with a 2.0 or higher, or instructor permission.

**BIOL& 260 (5) C | N | S**  
**Microbiology**

Fundamentals of microbiology. Topics include bacterial cell biology, growth and growth control, metabolism, genetics, identification, viruses, human innate and adaptive immune systems, host-bacteria interactions, immunization, infectious disease epidemiology, and antibacterial drugs. Includes lab. Prereq: Two college-level BIOL and/or CHEM courses with 2.0 or higher; eligibility for MATH 088, 098 or 136 or instructor permission.

**BIOL 290 (5) N**  
**General Genetics**

Intro to genetics for science majors. Mendelian inheritance, linkage and recombination, extensions of Mendel, sex determination, multifactorial traits, gene structure and function, mutations and chromosome abnormalities, population genetics, the human genome, genetic technologies, current applications (including cloning, genetic testing, genetically-modified plants and animals, gene therapy and forensics) and related ethical issues. Prereq: 10 credits of college-level biology or permission.

**BIOL 298 (1-5) C | N**  
**Special Topics**

Seminar on selected topics or activities in the biological sciences. Prereq: Variable, dependent on topic.

**BIOL 299 (1-5) C | N**  
**Independent Study in Biology**

Independent study of approved topics in the biological sciences. This course is an agreement between the student(s) and a faculty adviser that will guide the student(s) through the course work. Prereq: Instructor's permission.

**Botany**

**BOT 112 (5) C**  
**the Plant Kingdom**

Intro to the anatomy, physiology and diversity of plants. Includes reproduction, evolution and ecology of these organisms. Lab. Prereq: Eligible for MATH 084 and ENGL& 101.

**Business**

**BUS 100 (1-5) C**  
**Fundamentals of Supervision**

Intro to first-line supervision, covering total responsibilities of a supervisor. Includes the function of management, human relations and motivation, effective communications, systems concepts and problem-solving.

**BUS& 101 (5) C | N | S**  
**Introduction to Business**

Survey of American business in a global context: business and economic terminology, forms of business ownership, management, accounting, finance, international marketing and foreign exchange rates. Also covers small businesses, business start-ups and franchising.

**BUS 103 (3) C**  
**Personnel/Human Resource Management**

Intro to organizational structure of the modern business office; recruitment and training; management of human resources; employee rights and ethical issues; legal responsibilities; and team-oriented collaboration for human relation dynamics.

**BUS 104 (3) C | S**  
**Keyboarding**

Intro to keyboarding for those with little or no experience. Includes alpha/numeric keyboarding and basic word processing for creation of business documents. May be taken for S/NC grade.

**BUS 105 (4) N**  
**Keyboarding**

Taught on the computer, beginning keyboarding, which is for students with no keyboarding experience, emphasizes touch keyboarding with speed and accuracy on alphabetic and number keys. Basic word processing concepts and letter and memo formatting are introduced. Computer Fee.



**BUS 106 (3) C | N | S**  
**Keyboarding/Skillbuilding**

Development of speed and accuracy of letter, symbol and number keys through extensive drills and timings. May be taken for S/NC or decimal grade and may be repeated for credit. Prereq: Keyboarding of 25 net wpm).

**BUS 112 (5) N**  
**Multi-Cultural Issues in the American Workplace**

Introduces students to the legal, racial, and cultural aspects of the American workplace. Class activities and group discussions examine diversity, self-exploration as a basis for understanding others, historical overviews of ethnic influences on American business, work force demographics, and cross-cultural communication. PLEASE NOTE: This class is typically offered only ONE time per year: Winter quarter (typical class offerings may change depending on student enrollment and other factors).

**BUS 113 (3) C | S**  
**Diversity Issues in Business**

Intro to legal, gender, racial and cultural aspects of business. Examines diversity, self-exploration as a basis for understanding others, historical overviews of ethnic influences on American business, workforce demographics and cross-cultural communication.

**BUS 114 (5) N**  
**Introduction to Marketing**

Marketing presents an opportunity: find a need and fill it! Responding to the wants and needs of the consumer with the right product, price, promotion, and distribution forms the basis of the marketing concept. Marketing is dynamic, highly-visible, and often very controversial. Marketers must demonstrate value, quality, and service exceeding customer demands while maintaining channel relationships and meeting company goals and objectives. Marketing methods vary, but the need for marketing remains constant in the face of changing business practices. Marketing is essential to survival in today's customer-driven business. Prerequisite: Eligible for English 101 through English Placement Test or completion of English 097/098.

**BUS 115 (2) N | S**  
**Computational Skillbuilding**

Intro to basic operation of touch addition, subtraction, multiplication and division on the electronic printing calculator. Use of memory register and applications to solve business math problems. Enrollment may be for S/NC audit or decimal grade.

**BUS 116 (5) C | N | S**  
**Business Math/Spreadsheets**

Use business math applications to work with percentages, invoices, trade and cash discounts, markups and markdowns, payroll, depreciation and other business applications. Use Excel software to create spreadsheets. 2.0 or higher required for BIT Certificates and degrees (C) Prereq: Math 081 or MATH 084 placement (N); placement at MATH 081 level (C).

**BUS 117 (2) N**  
**Records Management**

Gain an understanding of the components of correct document and information management. Learn the rules as established by the Association of Records Managers (ARMA) for correctly applying filing guidelines to alphabetic, numeric, geographic and subject filing systems.

**BUS 118 (5) N**  
**Project Management Introduction and Overview**

This course is an overview of project management from a business perspective. Topics will include project authorization & planning as well as managing project resources, scheduling, budgeting and risk. Students will apply principles to their own project.

**BUS 119 (3) N**  
**Leadership and Management Skills**

Project managers, team leaders, and work group managers must be able to integrate people, projects, and sponsors inside and outside the organization in order to complete tasks and deliverables on time. This course will teach you effective leadership, the difference between leading and managing, and the various styles of each. Learn through participation in role playing and other activities. It will also include responsibilities, team development, team dynamics, personality types, influence without authority, conflict management, and organizational and cultural influence on a project. PLEASE NOTE: This class is typically offered TWO times per year: Winter and Spring quarters (typical class offerings may change depending on student enrollment and other factors). Prereq: IT 101 or BUS 169; BUS 236.

**BUS 122 (3) C**  
**the Entrepreneur Toolkit**

Identify and learn entrepreneurial and small business skills. Develop an understanding of the difference between an employee and an entrepreneur/employer. Appropriate for students from any discipline that might lend itself to self-employment such as culinary, optician, photography, and others.

**BUS 123 (5) N**  
**Word for Business**

In this Word course, students will create and edit a variety of business documents such as letters, memos, reports, and basic tables and charts. They will create and edit electronic forms, outlines, mail merges, and column text. Students will learn how to share work for comments, revisions, and merging and how to integrate other Office applications with Word. Recommended: Familiarity with computer usage or successful completion of BUS 169 or IT 101, ability to key 25 words a minute or successful completion of BUS 105. Computer Fee.

**BUS 124 (5) N**  
**Excel for Business**

Learn to use Excel, a spreadsheet program that enables you to create worksheets that allow you to enter, calculate, manipulate, and analyze data such as numbers and text; create charts, graphical representations which give you data visual impact. Use Excel as a database to manage and organize data, to search for specific data, and to select data that meets particular criteria. PLEASE NOTE: This class is typically offered THREE times per year: Fall, Winter and Spring quarters (typical class offerings may change depending on student enrollment and other factors). Recommended: Familiarity with computer usage or successful completion of BUS 169 or IT 101. Computer lab fee required.

**BUS 125 (5) N**  
**Access for Business**

Gain an understanding of database concepts and how you can effectively use information in your business. Use Microsoft Access to design, create, and edit tables, queries, forms, and specialized reports. Manipulate data using specific criteria, queries, and filters. Learn to import/export data among various applications software. Recommended: Familiarity with computer usage or successful completion of BUS 169 or IT 101. Computer lab fee required

**BUS 126 (2) N**  
**PowerPoint for Business**

Learn Microsoft PowerPoint to create visuals to accompany business and personal presentations. Create, change, customize and save PowerPoint files. Add and manipulate graphics and apply appropriate design elements to presentations.



**BUS 129 (5) C****Small Business Accounting**

Learn the Language of Business: Accounting! This includes the terminology, definitions, principles and rules of accounting. Students will learn the entire Accounting Cycle by setting up an accounting system, and how to analyze, classify and enter transactions into the system. Students will know how to set up and run a company's books in both manual and computerized accounting systems as well as create and interpret financial statements in accordance with GAAP rules. Prereq: MATH 081.

**BUS 131 (5) C | N | S****Integrated Communications I**

Review and refine basic English grammar, spelling, punctuation and word usage skills by composing effective basic business letters and memos. Intro to oral communication skills essential to successful giving/receiving of information and cultural aspects of the communication process. Prereq: Satisfactory English placement test score (N,C), ASSET: W&R=46, SLEP: combined=65.

**BUS 132 (5) C****Integrated Communications II**

Further develop communication skills integrating business English grammar, punctuation and word usage skills with composition of effective, complex business documents. Develop research, business report writing and documenting skills. Practice oral presentation techniques, handling of questions, problem-solving and conflict-resolution techniques. Complete meeting preparation tasks. Prereq: BUS 131 with 2.0 or higher.

**BUS 140 (5) C | N | S****Customer Relations**

Develops skills to identify and resolve customer complaints, handle difficult customers and utilize effective verbal and nonverbal communication methods. Learn appropriate professional use of various electronic media and contribute positively to the service culture of an organization. Examines future trends and changes in work environments.

**BUS 151 (5) N****Introduction to Entrepreneurship**

Overview of the entrepreneurial process, examination of the market-place, and discussion of successful business entry strategies. Will also cover need/market trend identification, product/service selection, initial concept validation, as well as developing and accessing sources of information and assistance. Computer Lab fee.

**BUS 152 (5) N****Entrepreneurship Product/Service/  
Pricing/Mktg**

This course introduces the entrepreneurial student to the product selection, pricing, and marketing processes. Products/services are selected. Pricing strategies and channels of distribution are discussed. Specific marketing and selling strategies are reviewed. The product, pricing and marketing selections of a business plan are written. Prerequisite: BUS 151 or instructor permission. Computer Lab fee. \*Please plan to attend class Saturdays from 8am to 5pm. We will complete 151, followed by 152, followed by 153 over the course of the quarter. Students should enroll in all three classes.

**BUS 153 (5) N****Entrepreneurship Planning Business  
Financials**

Intro to financial planning, financing, and operations processes. Review forecasting assumptions, prepare financial needs projections, study new business financing and prepare plans for growth and contingencies. Complete the business plan. Prerequisite: BUS 152 or instructor permission. \*Please plan to attend class Saturdays from 8am to 5pm. We will complete 151, followed by 152, followed by 153 over the course of the quarter. Students should enroll in all three classes.

**BUS 154 (5) N****Exploring Entrepreneurship**

Overview of the entrepreneurial process. Develop a business plan using the student's own business idea. Learn skills and characteristics of successful entrepreneurs, techniques for evaluating business opportunities, planning tools, selling and marketing basics, financial analysis, record keeping, regulations of Washington State, and step by step procedures for starting a small business.

**BUS 155 (3) C****Small Business Marketing**

BUS 155 introduces principles and concepts of marketing. Marketing concepts increase the effectiveness and chance of success for many different efforts by getting the right message to the right people. Both online and offline approaches will be covered. Prereq: English 101 eligibility.

**BUS 156 (5) N****Introduction to E-Business/Commerce**

Overview of the principles of electronic commerce: the origin and growth of e-commerce; comparison with traditional commerce; the relationship of e-commerce to the Internet; electronic money; electronic contracts, legal issues, stock trading; catalogs, accounting, auditing and taxation, international aspects and e-marketing. Prereq: ENGL& 101 eligibility or completion of ENGL 097/098.

**BUS 159 (5) S****Introduction to Computing for  
Technical Programs**

This course focuses on introducing students to keyboarding, word processing, spreadsheet applications, email, graphic presentations and performing Internet research. Students will also practice effective communication skills and become familiar with industry specific software. Prereqs: Compass scores. Coreqs: MVM 101, MAT 110, HDM 171.

**BUS 164 (1-2) S****Career Development I**

Learn the steps to research and identify job leads, to approach companies for job-shadow opportunities, and to practice effective informational and position interviews. Required capstone course for Office Assistant Certificate.

**BUS 166 (2) S****Career Development III**

Plan and create a project proposal. Research an area business or non-profit organization, investigate its needs, create a project solution, present the proposal and implement the result for the organization. Required capstone course for Office Professional Certificate.

**BUS 169 (5) N | S****Using Computers in Business**

Learn basic word processing (Word), spreadsheet (Excel), database (Access), presentation graphics (PowerPoint) and email applications. Intro to Windows and file management. Prereq: BUS 104 or CTN 100 (S) and keyboarding skills.

**BUS 170 (1-5) C | N | S****Information Technology I**

Intro to Word, Excel, and Outlook. Create letters, business correspondence, reports and spreadsheets commonly used in a business setting. Prereq: Touch type 25 correct wpm.

**BUS 171 (1-5) C | N**  
**Information Technology II**

Covers intermediate document creation and formatting features in Word. Create charts, tables and spreadsheets and incorporate them into business correspondence. Intro to PowerPoint and the use of Outlook contact lists. Prereq: BUS 170 or permission and touch type 35 correct wpm.

**BUS 172 (1-5) C | N**  
**Information Technology III**

Use the MS Office Suite to integrate text, data, and charts in business-related projects. Learn database concepts through Access. Prereq: BUS 171 or permission and touch type 45 correct wpm.

**BUS 177 (5) S**  
**Spreadsheets**

Learn and use Microsoft Excel to manipulate numbers, track sales and expenses, create budgets and charts to help make informed business decisions. Use calculations and pre-defined formulas to organize data, process statistical information and more. Prereq: BUS 169 or equivalent.

**BUS 179 (5) S**  
**Word Processing**

Covers comprehensive word processing using Microsoft Word. Includes basic skills and more advanced techniques such as tables, envelopes, templates and mail merge. Prereq: BUS 169 or 170 or equivalent.

**BUS 182 (5) C | N | S**  
**Information and Database Management**

Study the basic alphabetic, numeric, subject and geographic filing principles necessary to manage filing systems, as established by the Association of Records, Managers and Administrators (ARMA International). Includes computer practice using a database software simulation. Intro to Microsoft Access database features.

**BUS 184 (5) C**  
**Business Database Applications**

Covers the concepts of relational database design for solving typical business problems. Uses Microsoft Access and OpenOffice Base relational database software to implement the proposed business solutions. Prereq: BUS 170.

**BUS 185 (5) C**  
**Small Business Management**

Covers the skills necessary to start and successfully manage a small business, especially for entrepreneurs and those wanting to work for and/or improve an existing business. Includes business plan creation, marketing, copyrights/patents, prototyping, and cash flow.

**BUS 186 (5) N**  
**Sustainable Business**

Examines the relationships between business, social and economic development and the environment. Explores how emerging technologies are reshaping energy utilization and management for businesses and their communities. Prereq: BUS& 101 or permission.

**BUS 197 (1-5) C | S**  
**Work Experience-Business Occupations**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply business knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**BUS 200 (5) N | S**  
**Law and Society**

Fundamental concepts, structure, and function of the American legal system. Emphasis on the role of law in society rather than on the rules of law. Includes sources of law, court systems, dispute resolution, constitutional law, torts, criminal law, contracts and legal reasoning.

**BUS& 201 (5) C | N | S**  
**Business Law**

Covers nature, development and operation of principles of business law relating to contracts, commercial paper, corporations, agency, partnerships and sales.

**BUS 205 (5) N**  
**Human Resource Management**

Analyzes basic functions of supervisory-level management with emphasis on skills needed to be an effective leader/manager of a diverse work force. Covers management functions of planning, organizing, directing, evaluating, and skill development in effective communication, motivation, problem-solving, managing conflict, and selecting employees.

**BUS 210 (5) C | N | S**  
**Business and Economic Statistics**

Studies statistical methods and their application to business and economic data.

**BUS 214 (5) N**  
**Retail Management**

Students will learn the specifics of managing retail establishments of many types. Topics covered will include basic supervision skills, types of retail establishments, retail organizational structures, customer databases, integrated systems and technology in retail, and typical retail manager functions such as scheduling, merchandising, ordering, customer service, training and hiring of employees.

**BUS 215 (5) N**  
**Introduction to International Trade Business**

Studies business operations, private enterprise and governmental relationships in a world environment, including investments, marketing, transportation, trade agreements, management, production decisions and financial analysis. Recommended: prior business experience.

**BUS 216 (5) C | S**  
**Professional Development**

Learn to develop positive mental attitudes and examine useful techniques for personal and professional success. Emphasizes various aspects of career development.

**BUS 220 (5) N**  
**Business Finance**

Businesses must choose what assets to purchase and how to pay for them. Learn how businesses optimally raise funds while making net contributions to value. Includes financial risk and return; capital markets, structure and cost; and international finance issues. Prereq: BUS 116, either ACCT 110, 201 or 215, or permission.

**BUS 226 (5) N**  
**Advertising & Sales Promotion**

This course presents elements of advertising and sales promotion. Students will gain an understanding of strategy, branding, lead generation, messaging, creative choices, selection of appropriate media, traditional and digital, developing an integrated marketing communications plan, and tracking and analyzing campaigns. The class will also study the social, ethical, and economic aspects of advertising and promotion. REQUIRED: ENGL&101 or ENGL&235; Strongly RECOMMENDED: BUS 114.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**BUS 227 (5) N**  
**Digital Marketing**

Students learn the fundamentals of digital marketing, including search engine optimization (SEO), search engine marketing (SEM), display advertising, content creation, e-mail marketing, social media strategy, mobile marketing, and analytics/measurement. Students have opportunities to experiment with these methods and also learn the importance of building an integrated marketing strategy. Prerequisite: ENGL&101 or ENGL&235. Recommended: BUS114 Intro to Marketing or marketing experience.

**BUS 228 (5) N**  
**Social Media Marketing**

Learn best practices for effective marketing with social media platforms to engage with customers, learn from them, and positively influence them toward a company or product brand or nonprofit. Avoid the risks associated with careless social media practices. Gain hands-on practice with developing and implementing a social media marketing plan.

**BUS 229 (5) N**  
**Project Management Tools Techniques and Control**

This course will teach the students how to define and sequence project tasks and how to use the most popular planning and control tool, MS Project. Students will complete a project using Project Management elements, including developing a project plan and budget. Students will also work with resource allocations, critical path, dependencies, estimating, risk management, contingency planning, implementation, and evaluation. Prerequisite: IT 101 or BUS 169 and BUS 236

**BUS 230 (5) N | S**  
**Business Communications**

Develop effective business writing skills through preparation of letters, reports, memoranda and employment documents. Emphasizes intercultural aspects of communication. Prereq: BUS 131. Recommended: BUS 104 (S) or BUS 105 (N).

**BUS 236 (5) N**  
**Interpersonal Communications for the Workplace**

This course teaches effective interpersonal communication skills. Students learn communication styles and effective ways to adapt communication to meet business needs. Through individual and group activities, students improve understanding of cultural diversity, non-verbal communication, and individual influences on communication. Techniques for making informal and formal business presentations are also covered. Careful preparation for the employment interview is emphasized. PLEASE NOTE: This class is typically offered every quarter (typical class offerings may change depending on student enrollment and other factors).

**BUS 237 (5) N**  
**Team Skills in the Workplace**

This course will explore aspects of successful teams, and examine the importance of assessing and recognizing individual team member skills. This course will also review and use tools to support the growth and development of teams in effective decision-making, efficient meetings, and improving team performance. Prereq: BUS 236

**BUS 240 (5) C**  
**Internet Law**

Explores legal issues & topics directly related to the internet: copyright, trademark, & service mark rights; privacy; contractual issues surrounding work-products; web site development & licensing agreements; employment issues including discrimination & monitoring of employee e-mail; censorship; domain name registration; & defamation or CyberSlander. Provides an overview of the basics of constitutional law, contracts, torts, regulations, criminal law, & personal law as needed.

**BUS 280 (5) N**  
**Business Data Analytics**

Learn business analytics to comprehend the amount of data that business professionals deal with every day. Learn the basics of descriptive, predictive, methodologies. Your will also learn how to build efficient models and graphic presentations to solve business problems and how to convert large data sets of unorganized raw data into useful information for decision making. Prerequisites: MATH 098 or higher; BUS 169 or equivalent. Recommended: BUS 124 (or MATH& 146) and BUS 210.

**BUS 298 (1-5) N**  
**Special Topics: Business**  
Prereq: Permission.

**BUS 299 (1-5) C**  
**Special Topics/Business**  
Individual or group study projects on topics in the field of business. Prereq: Permission.

**Business Computer Technology**

**BCT 111 (1-5) C**  
**Computer Literacy and Application Fundamentals**

Introduction to computer use, concepts, terminology, word processing, presentation and database software. Practical experience in business skills relative to the use of applications, the Internet, email, scheduling, contact management, directory and file management and database software. Prereq: typing 20 wpm for 5 minutes at 98% accuracy.

**Business Office Skills**

**BOS 103 (2) C**  
**Keyboarding**

Development of touch keyboarding skills. Emphasis on proper technique, strategies, practice drills, and timed exercises to improve speed and accuracy. Prereq: Permission.

## Business Skills

**SSW 094 (1-8) S**  
**Taking the First Step**

An introduction to the workplace, including the basic standards, tools, and expectations. Students will identify and reduce barriers to success and will learn basic critical thinking and problem solving skills. This course is competency based. Each student will be assessed in written and oral communication, math proficiency, and computer literacy. The student will develop skills in each area through individual and group work.

**SSW 095 (1-8) S**  
**You and the Workplace**

Students examine own personal values, traits, and skills as they relate to the workplace. This course focuses on self-esteem, its effects on one's career, maintenance, and success in one's chosen work. This course is competency based. Each student will be assessed in written and oral communication, math proficiency, and computer literacy. The student will develop skills in each area through individual and group work.

**SSW 096 (1-8) S**  
**Contemporary Issues in Business**

An introduction to business basics, contemporary issues, and tools needed to be successful in the career of choice. This course will help each student identify career choice and the skills needed. Also, decision making, personal life organization, team work, and planning for the future will be discussed. This course is competency based. Each student will be assessed in written and oral communication, math proficiency, and computer literacy. The student will develop skills in each area through individual and group work.

## Business Technology Management

**BTM 098 (3) C**  
**Computing Essentials**

Presents common concepts and principles for effective use of current technologies. Covers basic technology vocabulary, general uses and functions of computers, mobile devices, software applications and the Internet. Designed for students with little or no experience using computers and/or the Internet for academic and professional purposes. Prereq: Placement into ENGL 092/ESL 093 or equivalent and basic keyboarding skills (United States keyboard).

**BTM 100 (2) C**  
**Orientation and Career Exploration**

Provides the skills and knowledge necessary to develop and pursue a career plan. Includes identification of personal strengths, values, and interests, and evaluation of careers compatible with personal preferences. Provides key career resources, practice in career search skills, and career and education strategies to reach goals.

**BTM 101 (2) C**  
**Word**

Introduces key concepts and software to develop and create business documents. Topics include document design, creation, formatting, layout, output, graphics, tables, citations, and sharing documents. Prereq: none. BTM 098 or BTM 111 recommended.

**BTM 102 (2) C**  
**Excel**

Introduces key concepts to develop and analyze business spreadsheets. Topics include formulas, formatting, functions, charts, and working with multiple workbooks. Prereq: Recommended BTM 111.

**BTM 103 (2) C**  
**MS PowerPoint**

Create, collaborate, and effectively present your ideas with the leading presentation software. Create, edit, and add dynamic multimedia effects to engage business and related audiences.

**BTM 104 (2) C**  
**Photoshop**

Introduces Photoshop using the array of tools for editing digital photos, scanned photographs, and creating photo-realistic images. Prereq: Recommended BTM 111.

**BTM 106 (3) C**  
**Keyboarding**

Keyboarding using Word for students with little or no typing experience. Includes alpha/numeric keyboard and word processing of correspondence documents. May be taken for S/NC grade.

**BTM 107 (3) C**  
**Speedbuilding**

Development of keyboarding speed and accuracy through hands-on and timed exercises. May be taken for S/NC or decimal grade. PREREQ: Recommended Keyboarding speed of 25 net wpm.

**BTM 108 (3) C**  
**Applied Business Math I**

Discusses whole numbers, fractions, decimals, percentages, and applied case studies using these operations to solve everyday business math problems. Prereq: Eligibility Math 081.

**BTM 109 (5) C**  
**Business Communications I**

Review and refine basic English grammar, spelling, punctuation and word usage skills to effectively compose basic business documents. Prereq: Eligibility ENGL 097 or equivalent.

**BTM 111 (5) C**  
**Business Applications I**

This course is part of the new Business Technology Management (BTM) Program in the BITCA Division. BTM is built on core foundation courses and stackable pathways to prepare students with the technology and business skills needed for in-demand careers. The Program comprises short-term certificates and optional industry certifications, leading to a two-year degree in one of several career pathways and a transfer degree option.

**BTM 112 (5) C**  
**Business Applications II -Data Analysis w/Excel**

Explores the use of Excel data analysis tools to transform data from many sources into effective business intelligence reporting solutions for any organization. Emphasis on introducing advanced query editing, pivot table creation, and interactive summary visualizations. Prerequisite: BTM 111 with 2.0 or higher, or Instructor's permission based on equivalent experience.

**BTM 113 (5) C**  
**Business Applications III**

Introduces students to advanced MS Office applications skills along with cloud-based, client-side computing. Students learn content management sites to manage their work and participate in team projects. Prereq: BTM 111 and BTM 112, each with a 2.0 or higher.

**BTM 118 (5) C**  
**Applied Business Math II**

Covers applied business statistics, invoices, trade and cash discounts, markups and markdowns, payroll, depreciation, compound interest and solving equations. Includes use of spreadsheet software to analyze business data. Prereq: BTM 108 with a minimum grade of 2.0.



**BTM 119 (5) C****Business Communications II**

Further develops business English grammar, punctuation, and word usage skills to compose effective, complex business documents. Develops research, business report writing, and documenting skills. Includes practice of techniques and strategies for effective oral presentations. Covers planning, facilitating, and documenting business meetings. Prereq: BTM 109 with a minimum course grade of 2.0.

**BTM 120 (5) C****Customer Relations Management**

Develops skills to identify and resolve customer complaints, handle difficult customers, utilize effective verbal and nonverbal communication methods, and use customer relationship management systems. Covers appropriate professional use of various electronic media. Provides skills to contribute positively to the service culture of an organization. Examines future trends and changes in global work environments. Prereq: Eligibility ENGL 097 or equivalent.

**BTM 122 (5) C****Professional Development**

Course designed to enhance positive attitude, professional and personal comportment, collaborative techniques, and comprehensive presentation skills to achieve personal and professional success in global interactions.

**BTM 197 (1-5) C****Work Experience: Business Technology Management**

Integrates educational studies with supervised internship work experience. Provides individualized opportunities to apply Business Technology Management knowledge and skills in the workplace. Includes setting of work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Instructor's permission. Co-requisite: Must be employed, interning, or volunteering in a position approved by program faculty or the Cooperative Education.

**BTM 217 (5) C****Web Design and Development**

Introduces website design and development using Hypertext Markup Language (HTML) along with Cascading Style Sheet (CSS). Focuses on designing and developing webpages with hand-coded HTML elements in conjunction with managing website file structure and project. Includes common webpage design formats and functions with a focus on User Experience and User Interface (UX/UI) design. PREREQ: BTM 111 recommended.

**BTM 218 (4) C****Web Design with Dreamweaver**

Introduces Adobe Dreamweaver, a software program for webpage and website development. Includes creation of simple webpages as well as dynamic and comprehensive websites. Covers a range of Web design concepts and webpage elements such as HTML, CSS, and JavaScript. Almost no hand-coding is involved. Prereq: BTM 111 recommended.

**BTM 220 (5) C****Social Media Marketing**

Explains the role social media plays in a digital marketing strategy. Students will learn best practices for different platforms and test their social media skills. Course projects include creating a real Facebook ad campaign. One of five courses required for the Facebook Digital Marketing certificate.

**BTM 221 (5) C****Digital Branding & Advertising**

Introduces digital branding and paid advertising strategy for professionals and small business owners. Topics covered include creating appropriate content, search and display advertising, and consumer psychology. Search and display life-cycle best practices are discussed. Students will calculate advertising costs, bids, and key optimization metrics.

**BTM 222 (5) C****Digital Marketing Foundations**

Introduces the basics of digital marketing and branding strategy in the context of a small business owner. Students will learn marketing concepts including market segmentation, market positioning, unique value propositions, and key marketing metrics. Strategies to create effective marketing content are presented.

**BTM 223 (5) C****Email Marketing**

Introduces issues regarding email marketing. Topics covered include understanding the life-cycle of an email campaign, generating email lists, and available automation tools. Students will practice creating marketing emails that focus on voice, tone, and content.

**BTM 225 (5) C****Marketing Fundamentals**

Introduces principles and concepts of marketing. Marketing concepts increase the effectiveness and chance of success for many different efforts by getting the right message to the right people. Both online and offline approaches will be covered.

**BTM 226 (3) C****Small Business Startup**

Introduces steps to starting a small business. Learn to select the most appropriate form of business ownership, register a business name, and access and complete required local, state, and federal legal documents. Study trademarks, copyrights, and patents. Examine ways to finance a business. Present start-up proposals to community business professionals for review. Prereq: Instructor's permission.

**BTM 227 (3) C****The Entrepreneur Toolkit**

Introduces entrepreneurial and small business principles and skills. Explores entrepreneur opportunities and interests. Includes development of a small business, entrepreneur venture plan.

**BTM 228 (5) C****Small Business Management**

Covers the skills necessary to successfully start, improve, and manage a small business, including business plan creation, marketing, copyrights/patents, prototyping, and cash flow.

**BTM 231 (5) C****Applied Accounting I**

Introduces the Language of Business: Accounting! Terminology, principles and rules of accounting. Focuses on the entire Accounting Cycle through setting up both a manual and computerized accounting system and analyzing, classifying and entering transactions into the system. Includes creation and interpretation of financial statements in accordance with GAAP rules. Completion of the three-course series provides preparation for the certified bookkeeper exam. Prereq: Math 081 with 2.0 or higher.

**BTM 232 (5) C****Applied Accounting II**

Covers complex business situations in a small business and corporate setting, focusing on plant and equipment, depreciation, short- and long-term liabilities, formation of partnerships and corporations, cash flows, financial statements and ratios in accordance with Generally Accepted Accounting Principles (GAAP). Completion of the three-course series provides preparation for the certified bookkeeper exam. Prereq: BTM 231 with minimum grade of 2.0.



**BTM 236 (5) C****Supervision Management**

Introduction to first-line supervision management, covering total responsibilities of a supervisor. Includes the function of management, human relations and motivation, effective communications, systems concepts and problem-solving.

**BTM 237 (5) C****Human Resource Management**

Introduction to organizational structure of the modern business office; recruitment and training; management of human resources; employee rights and ethical issues; legal responsibilities; and team-oriented collaboration for human relation dynamics.

**BTM 240 (5) C****Applied Database Design**

Introduces the concepts and application of designing and building relational database models in solving business database problems. This will include using basic Structured Query Language (SQL) and database software to build database applications. Prereq: BTM 111 minimum grade of 2.0 recommended or instructor permission.

**BTM 245 (5) C****Business Process Management**

Examines the creation, improvement, automation, and mapping of a set of procedures (e.g., a business process) to improve an organization's internal & external activities or workflows so that it may more efficiently deliver the wants of its clients.

**BTM 250 (5) C****Records Information Management**

Examination of manual and digital record management systems currently used in industry. Introduction and application of the following filing/management systems: Alphabetic (as established by ARMA International), geographic, numeric, and subject. Access 2016 will be used to design, create, maintain, update, and integrate an electronic filing system. Prereq: BTM 211 is recommended.

**BTM 260 (5) C****Project Management**

Overview of project management from a business and IT perspective, including project estimation, feasibility, planning, risk management, contingency planning, scheduling, control and Agile project methodology. Examine and evaluate project planning techniques, budget estimation, resource allocations, critical path dependencies, risk management, contingency planning, implementation, and evaluation; and, complete a project. Prereq: BTM 111 with a 2.0 or higher; or, Instructor's permission.

**BTM 265 (5) C****Operations Management**

Administer business practices to manage an organization's internal resources to maximize efficiencies in the production and delivery of an organization's goods and services. Functions include analyzing all aspects of an organizations operations to create strategies that improve operational productivity. Prereq: Eligibility for ENGL 096. BTM 111 or equivalent recommended.

**BTM 275 (5) C****Computer User Support**

Introduces students to the fundamentals of help desk operations. Emphasizes the basic components of a successful help desk, provides students with working knowledge of software to process and track calls, and presents hands-on experience with problem analysis. Prereq: BTM 111 with a 2.0 or higher, or instructor's permission.

**BTM 278 (5) C****Organizational Behavior**

Focuses on a variety of factors that influence organizational behavior, including: the structure; policies and procedures; management effectiveness; and interactions of individual groups and workplace environments. The impact human behavior has on job performance, communication, motivation, and leadership will be used to study how they affect organizational identity, design, innovation, change, and many other roles that shape organizations. Prereq: Eligibility for ENGL 096.

**BTM 299 (1-5) C****Independent Study**

An independent study course for Business Technology Management students who need to fulfill degree requirements under the approval and supervision of faculty. Prereq: Permission.

**Career Bridge****CAB 101 (6) S****Career Bridge**

An introductory course using a systematic approach to help individuals understand themselves relating to occupational interests and goals. Includes testing interests and skills. Focuses on real-world examples and group exercises to help students develop good strategies for achieving success in the workplace and in life. The course will also address behaviors and attitudes necessary to be an effective student and employee. Course offered through Worker Retraining Program. Instructor Permission.

**Certified Medical Assistant****CMA 101 (5) C****Introduction to Medical Assisting**

A history and overview of medical practices and the healthcare team, certification and professional organizations. Effective communication related to communication in healthcare is addressed; includes cultural perspectives on illness. This course introduces the student to legal and ethical concepts related to ambulatory healthcare. Emphasizes critical thinking, HIV/AIDS education, and emergency preparedness.

**CMA 102 (4) C****Fundamentals of Administrative Medical Assisting**

Provides students with opportunities to acquire knowledge of the medical front office focusing on skills and techniques required for the clinical and administrative functions of a medical assistant in an ambulatory care setting. Covers the office environment as well as computer medical application, telephone techniques, professional correspondence, and medical records management relative to electronic health records. Prereq: Instructor's permission.

**CMA 103 (8) C****Fundamentals of Clinical Medical Assisting**

Students learn medical assisting theory and how to apply it to medical assisting clinical practice. Clinical practice will include, but not be limited to, vital signs, equipment sterilization, diagnostic procedures, and role responsibilities when assisting physicians with their work. Medical device knowledge will include wheelchairs, crutches, nebulizers, and audiometry. Communication, documentation, and patient education topics are also discussed. Prereq: Instructor's permission.

**CMA 104 (5) C****Billing and Coding Procedures**

Covers insurance & the electronic billing processes, financial accounting aspects of medical practices, and health insurance & numeric/alphanumeric codes utilized in healthcare for the purpose of maintaining accurate medical records & ensuring efficient claims processes. Provides students with opportunities to apply their knowledge within a simulated medical office setting. Emphasizes various types of health insurance, billing, & bookkeeping. Prereq: Instructor's permission.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**CMA 105 (8) C**  
**Phlebotomy and Laboratory Procedures**

Provides students with a professional environment within a simulated clinic setting focused on invasive procedures. Students are introduced to phlebotomy, CLIA waived tests theories, procedures and values, specimen handling and transport, safe clinical practices, and effective medical record documentation and practical application of skills as related to the medical assistant in a healthcare provider environment. Prereq: Instructor's permission.

**CMA 106 (7) C**  
**Administrative and Clinical Practice/Review**

This course will be a full quarter of review of all administrative and clinical procedures. Students will practice as if they were in an actual medical clinic. This course will be mostly hands-on with minimal lecture.

**CMA 107 (8) C**  
**Medication Administration & Pharmacology**

The student will learn theory and practical procedures in calculating medication dosages and administering medications. Theory includes legal and ethical factors, the medication order or prescription, dosages, drug labels, calculating dosages, the seven rights of drug administration, and various routes to deliver medications. These routes include practice in oral medications, various parenteral routes - injections intradermal, subcutaneously and intramuscularly.

**CMA 108 (1-12) C**  
**Medical Assisting Practicum**

Students will acquire study skills for the national CMA exam, then participate in an unpaid practicum (externship) of 90-180 hours in a medical clinic. Students will also apply for CMA exam, MA-C WA State License and graduation.

**Chemistry**

**CHEM& 110 (5) C | N | S**  
**Chemical Concepts W-Lab**

Stresses a humanistic approach to chemistry and de-emphasizes mathematical problem-solving. Reveals chemical principles, facts and theories through practical applications, computer graphic illustrations and experiments. Includes lab.

**CHEM& 121 (5) C | N | S**  
**Introduction to Chemistry**

Introduction to Chemistry (CHEM&121) is intended for non-science and allied health majors. Completion of CHEM& 121, and either CHEM& 131 or CHEM& 122, fulfills the chemistry requirement for many health science majors (e.g. nursing, dental hygiene, etc.). This lab science course covers the fundamentals of chemistry, including: measurements, atomic structure, types of reactions, thermodynamics, stoichiometry, equilibrium, kinetics, and acid base chemistry.

**CHEM& 122 (5) C**  
**Introduction to Organic Chemistry**

Continuation of organic chemistry and intro to biochemistry. Lab included. Prereq: CHEM& 121.

**CHEM& 131 (5) N | S**  
**Intro to Organic Chemistry and Biochemistry**

Covers the structure, properties and reactions of various organic compounds, including hydrocarbons, alcohols, aldehydes, ketones, carboxylic acids and amines. Examines complex compounds found in living systems: carbohydrates, lipids, proteins, and nucleic acids. Lab focuses on analysis and separation techniques. Prereq: CHEM& 121 with 2.0 or higher.

**CHEM& 139 (5) C | N | S**  
**General Chemistry PREP**

Lecture. Includes chemical mathematics, basic atomic structure, chemical bonding, chemical equation balancing, mole concept and chemical stoichiometry. Prereq: MATH 098.

**CHEM& 161 (6) C | N | S**  
**General Chemistry with Lab I**

For science majors. A three-quarter sequence introducing basic concepts of chemistry: structure and bonding, chemical reactivity, physical measurement, stoichiometry, structure of matter, gas laws, intermolecular forces, solutions, chemical kinetics, equilibrium, acid/base, thermodynamics, redox and electrochemistry. Satisfies the general chemistry requirement for science and engineering majors, pre-Med, pre-Pharmacy, pre-Veterinary, etc. Lab included.

**CHEM& 162 (6) C | N | S**  
**General Chemistry with Lab II**

For science majors. Second of three-quarter sequence introducing basic chemistry concepts: structure, bonding, chemical reactivity, physical measurement, stoichiometry, structure of matter, gas laws, intermolecular forces, solutions, chemical kinetics, equilibrium, acid/base, thermodynamics, redox and electrochemistry. Satisfies the general chemistry requirement for science and engineering majors, pre-Med, pre-Pharmacy, pre-Veterinary, etc. Lab included.

**CHEM& 163 (6) C | N | S**  
**General Chemistry with Lab III**

For science majors. Covers chemistry principles, structure of matter, atomic and molecular theory, the elements, quantitative relationships, nuclear chemistry, aqueous solutions, kinetics, chemical thermodynamics, oxidation and reduction, electro-chemistry, periodicity, equilibrium systems, qualitative analysis and organic chemistry. Fulfills the QSR requirement for A.A. degree. Prereq: CHEM& 162.

**CHEM 197 (1-5) C**  
**COOP Work Exp**

Work experience.

**CHEM& 241 (4) C | N**  
**Organic Chemistry I**

The first course in a three-quarter sequence that includes introduction to organic chemistry, chemistry of carbon compounds and what makes them unique from other branches of chemistry. It covers structure and bonding, functional groups, nomenclature and stereoisomers, preparation, synthesis and reactions of various types of organic molecules, including alkanes, alkenes, alkynes, and alkyl halides.

**CHEM& 242 (4) C | N**  
**Organic Chemistry II**

The second course in a three-quarter sequence that is the continuation of the chemistry of carbon compounds. This course covers alkane, alkene, alcohol and aromatic functional groups and their nomenclature, structure, and reactivity. There is also the continuation of study of arrow pushing mechanisms. Modern instrumentation such as FTIR, NMR and Mass spectroscopy are introduced.

**CHEM& 243 (4) C | N**  
**Organic Chemistry III**

The third course in a three-quarter sequence of organic chemistry, the chemistry of carbon compounds. This course focuses on carbonyl compounds and their structure, bonding, nomenclature and reactivity. Carbohydrates and proteins are also introduced.

**CHEM& 251 (4) C | N**  
**Organic Chemistry Lab I**

First quarter of a two-quarter organic chemistry laboratory sequence. Entails purification techniques, synthesis & spectral analysis of representative compounds.

**CHEM& 252 (4) C | N**  
**Organic Chemistry Lab II**

Second quarter of a two-quarter organic chemistry laboratory sequence. Entails synthesis, identification of unknowns & spectral analysis of representative compounds.

**CHEM 255 (3) N**  
**Biochemistry I**

First course in a 2 quarter sequence. Survey of basic principles of biochemistry and molecular biology, emphasizing chemical events in living systems in terms of metabolism and structure-function relationships of biologically important molecules. For chemistry, biochemistry, medicine, dentistry, pharmacy or medical technology majors. Prereq: CHEM&242 with a grade of 2.0 or better.

**CHEM 256 (3) N**  
**Biochemistry II**

Second course of a two-quarter sequence. Survey of basic principles of biochemistry and molecular biology. Covers chemical events in living systems in terms of metabolism and structure-function relationships of biologically important molecules. For chemistry, biochemistry, medicine, dentistry, pharmacy, or medical technology majors. Prereq: CHEM 255 with 2.0 or better.

**CHEM& 261 (6) S**  
**Organic Chemistry with Lab I**

The first course in a three-quarter sequence includes molecular structure and bonding; acid-base chemistry; nomenclature, reactions and synthesis of hydrocarbons; stereochemistry, and an introduction to reaction mechanisms. This sequence satisfies the organic chemistry requirements for science and engineering majors and for various programs such as pre-medical, pre-dental, pre-pharmacy and other pre-technical disciplines. Format includes laboratory work. Prereq: CHEM&163 with a 2.0 or higher.

**CHEM& 262 (6) S**  
**Organic Chemistry with Lab II**

The second of a three-course series in organic chemistry includes structures, reactions, mechanisms and preparation of molecules containing specific functional groups, as well as spectroscopic analysis. This sequence satisfies the organic chemistry requirements for science and engineering majors and for various programs such as pre-medical, pre-dental, pre-pharmacy and other pre-technical disciplines. Format includes laboratory work. Prereq: CHEM&261 with a 2.0 or higher.

**CHEM& 263 (6) S**  
**Organic Chemistry with Lab III**

The third of a three-course series in organic chemistry includes further study in the synthesis, reactivity and properties of a variety of functional groups including carbonyls, as well as biologically relevant molecules. This sequence satisfies organic chemistry requirements for science and engineering majors and for programs such as pre-medical, pre-dental, pre-pharmacy and other pre-technical disciplines. Format includes laboratory work. Prereq: CHEM&262 with a 2.0 or higher.

**CHEM 298 (1-5) C**  
**Special Topics**

Seminar of selected topics and/or activity in the chemical sciences. Prereq: Variable, dependent on topic.

**CHEM 299 (1-5) C | N**  
**Special Topics in Chemistry**

Independent study of approved topics in the chemical sciences. Prereq: CHEM& 163 and permission.

**Chinese****CHIN& 121 (5) C | N**  
**Chinese I**

Intro to the standard language, emphasizing correct pronunciation and basic structure, with oral practice and structure skills. Emphasis on systematic study of the phonetics (Pinyin) and basic grammar. Covers everyday expressions and vocabulary, and background on history, culture and customs. Intended for students who have not previously studied Chinese. Recommended: Eligibility for ENGL& 101 (C).

**CHIN& 122 (5) C | N**  
**Chinese II**

Continuation of CHIN& 121. Prereq: CHIN& 121 or permission.

**CHIN& 123 (5) C**  
**Chinese III**

Continuation of CHIN& 122. Prereq: CHIN& 122 or permission.

**Civics – Career Link****CIV 060 (5) S****Civ - Career Link**

This course will prepare students to be an engaged citizen as they learn about the way government operates, the fundamental documents that the United States is founded on, and current government issues.

**Communication****CMST& 101 (5) C | N | S**  
**Introduction to Communication**

Intro to communication as a transactional process, with attention to personal, cultural, group and public communication. Covers verbal and nonverbal messages, listening, self-concept and perception. Prereq: Placement into ENGL& 101.

**CMST& 102 (5) C | N****Introduction to Mass Media**

History and impact of the mass media from hieroglyphics through print, advertising, radio, TV, movies and the Internet. Critically read media texts and analyze the effects on individuals and cultures. Prereq: ENGL& 101 placement.

**CMST 175 (5) N****Oral Interpretation**

Interpretation as an artistic process of studying literature and other texts through individual and group performance with an audience. Analyze and perform various texts in their aesthetic, intellectual and emotional entirety. Prereq: Placement into ENGL& 101.

**CMST 205 (5) C | N | S****Multicultural Communication**

Study concepts of culture and the opportunities and challenges of multicultural communication in domestic settings. Focuses on the importance of culture in all human interaction; the variables which affect intercultural communication, including ethnicity, gender and multicultural identities; and the influences of American culture around the world. Prereq: ENGL& 101.

**CMST& 210 (5) C | N | S****Interpersonal Communication**

Covers principles and processes of human communication, including observations and applications, personal and cultural contexts, nonverbal and verbal interactions, multiple intelligence, perception, models and definitions.

**CMST& 220 (5) C | N | S****Public Speaking**

Covers the process of getting started with confidence; topic selection and research; and preparation and delivery of informative, persuasive, special occasion and other forms of presentations. Prereq: Placement into ENGL& 101.

**CMST& 230 (1-5) C | N | S****Small Group Communication**

Experience in and analysis of communication within groups, emphasizing the value of interdependent thoughts and efforts, active listening and empathizing, cooperative roles and tasks, power and conflict management, and collaborative decision-making and problem-solving. Prereq: Placement into ENGL& 101.

**CMST 240 (5) C****Introduction to Health Communication**

Introduction to Health Communication examines the psychological and persuasive appeals aimed at promoting behavioral change with the design and implementation of a health education campaign. Students develop a health education campaign integrating theories of behavioral change, persuasion, cultural competence, health literacy, social marketing, and mediated messages. Prereq: ENGL& 101 with a minimum GPA of 2.0.

**CMST 245 (5) S****Media Communication and Criticism**

Contemporary perspectives on the transformation of human interaction through media-based communication. Evaluates the content of modern criticism within the context of the cultural and economic marketplace of ideas and values. Prereq: ENGL& 101.

**CMST 275 (1-5) S****Online Communication**

Survey of communication issues and applications emerging from the ongoing development and use of digitized media. Focus on functioning effectively within the frontier environment of cyberspace. Write and prepare material for digital formats. Prereq: ENGL& 101 and 102; or permission; access to the Internet; and basic email and word processing skills.

**CMST 285 (5) N****Current Topics in Communication**

Timely, multidisciplinary approaches to interpersonal, group, organizational, intercultural and media communication. Prereq: ENGL& 101 and 102; or permission.

**CMST 295 (1-5) C | N****Studies and Works in Communication**

Analytical study or creative work in Communication. Prereq: ENGL& 101 and 102, an approved learning contract/proposal and permission.

**CMST 299 (1-5) C****Special Problems in Speech**

Special projects in Communication.

**Community Health Education****CHED 301 (5) C****Principles of Community Health**

Introduces students to terms, concepts, theories, methods and resources which are related to community and public health issues and designed to improve the health of populations in the United States. Focuses on the role of healthcare workers in various community health settings and organized activities. Emphasis on principals that meet the national standard of practice for all health education specialists.

**CHED 304 (5) C****Principles of Higher Education in Allied Health**

This course reviews adult learning theory, emphasizing practical skills for successful post-secondary teachers and trainers in allied health disciplines. Topics include development of course outlines and syllabi, learning objectives, teaching methods, experiential and non-experiential learning, clinical skills development strategies, professional presentation skills and assessment.

**CHED 310 (5) C****Health Communication**

Examines health disparities, social determinants, interpersonal and cultural competence, health literacy, and the planning and implementation of a health promotion campaign to educate target populations.

**CHED 311 (5) C****Social Determinants of Health**

Examines the conditions of our local environment, applying narrative, photo-journals from our own lives and from fiction to the theory of social determinants (i.e., the social and economic environments that we live in that raise the risk of disease for some groups and individuals and reduce it for others). Understanding social determinants gives us a context for understanding health and disease in communities. Prereq: Acceptance into CHED program.

**CHED 312 (5) C****Health Behavioral Change Theoretical Foundations**

Introduces theories from the social and behavioral science field to understand health related behaviors and guide development of interventions designed to prevent, reduce, or eliminate health problems. Presents and explores the ecological approach that examines the interplay of three influences: intrapersonal, interpersonal, and community

**CHED 322 (5) C****Program Planning and Evaluation**

Provides a foundation in Community Public Health. Covers the establishment of measurable outcomes, the creation of monitoring of programs, and the final evaluation at completion of programs. Studies the theories of program planning and methods of community participation. Examines the importance of community engagement, stakeholder buy-in, and sensitivity to the needs and voices of diverse groups in the community, particularly of those marginalized and vulnerable.

**CHED 341 (5) C****Community Health Needs Assessment & Improvement**

Focuses on public and community health needs by identifying the strategic planning process used to manage and improve the health of the population in a targeted area. Covers the planning and evaluation of improvement methods while considering social determinants of health, as well as health inequities, social justice, and global health initiatives. Prereqs: Completion of all required BAS core classes with a 2.0 or higher in each, or concurrent enrollment in the last remaining BAS core class.



**CHED 476 (1) C****Community Health and Education Capstone I**

The 1st of 3 successive capstone courses in Community Health & Education. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g., education, systems improvement, etc.). The 3 qtr. project concludes with a final paper & a presentation. Prereq: All BAS core classes with 2.0 or higher; or concurrent enrollment in any remaining BAS core classes.

**CHED 477 (1) C****Community Health and Education Capstone II**

The 2nd of 3 successive capstone courses in Community Health & Education. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g., education, systems improvement, etc.). The 3 qtr. project concludes with a final paper & a presentation. Prereq: Completion of CHED 476.

**CHED 478 (3) C****Community Health and Education Capstone III**

The last of 3 successive capstone courses in Community Health & Education. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g., education, systems improvement, etc.). The 3 quarter experience concludes with a final paper & a presentation. Prerequisite: Successful completion of CHED477.

**CHED 479 (5) C****Community Health and Education Capstone**

The capstone course is an integrative project for students to demonstrate synthesis of coursework in an application relevant to education, health promotion, community health, training, program planning, evaluation, needs assessment, policy, operations, and communications using a comprehensive and practical framework. Students may work with healthcare organizations to address or resolve issues. Students present capstone project as part of the requirement.

**Community Service, Cooperative Ed.****CMS 197 (1-3) C****Community Service/Volunteer**

Provides students with an opportunity to serve their community by engaging in meaningful volunteer service with diverse agencies and populations while enhancing career and personal goals. This course includes reflection and supervision/evaluation by the site supervisor. Prerequisite: Instructor's permission. Co-requisite: Must be volunteering in a non-profit or not-for-profit organization; public/private school, college, or university; hospital; or government agency.

**CMS 198 (1-3) C****Community Service/Volunteer**

Provides students with an intermediate-level learning opportunity to serve their community by engaging in meaningful volunteer service with diverse agencies and populations while enhancing career and personal goals. This course includes reflection and supervision/evaluation by the site supervisor. Prereq: Instructor's permission. Co-requisite: Must be volunteering in a non-profit or not-for-profit organization, public/private school, college, university, hospital, or government agency.

**CMS 199 (1-3) C****Community Service/Volunteer**

Provides students with an advanced learning opportunity to serve their community by engaging in meaningful volunteer service with diverse agencies and populations while enhancing career and personal goals. This course includes reflection and supervision/evaluation by the site supervisor. Prerequisite: Instructor's permission. Co-requisite: Must be volunteering in a non-profit or not-for-profit organization; public/private school, college, or university; hospital; or government agency.

**Computer Applications****ICT 103 (2) S****Computer Applications I**

Intro to popular applications software. Hands-on experience with a word processor, spreadsheet, database manager and MS-DOS.

**Computer Science****CSC 100 (5) S****Beginning Computers**

Covers basic computer terminology; characteristics of hardware and software; capabilities, limitations and problems associated with computers; intro to email and the Internet.

**CSC 110 (5) C | N | S****Introduction to Computer Programming**

An overview of computer program design and problem solving with a focus on problem analysis, program development, testing and debugging. Students will use functions, control structures, and data structures to develop a variety of increasingly complex programs to solve scientific and technical problems. Students will learn to document and test their solutions. Programming language may vary.

**CSC 111 (5) N****Computers for Math and Science**

Introduces skills, concepts, and capabilities necessary to effectively use information technology. Includes operation of computers and networks. Learn contemporary applications such as spreadsheet, database, and presentation software. Build your own website with images, links, multimedia, and some simple programs.

**CSC 142 (5) C | N | S****Computer Programming I**

General principles of modern programming, including how to design, implement, document, test and debug computer programs, using the Java programming language. Topics include objects, messages, expressions, statements, methods, classes, conditionals, iteration, arrays, and collections. Computer fee. Transfer class.

**CSC 143 (5) C | N | S****Computer Programming II**

Advanced concepts of modern programming that continue the ideas introduced in CSC 142. Topics include classes and interfaces, inheritance, exceptions, recursion, analysis of algorithms, and some dynamic structures (lists, stacks, trees). Uses Java programming language. Lab fee. Transfer class.

**CSC 299 (1-5) C | N****Independent Study**

Independent study of approved topics in computer science. Prereq: Permission.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**Computer Technology**

**CTN 101 (5) S**

**Introduction to Computing Technology**

Learn the common hardware components of computing systems, including the technical knowledge to make decisions about hardware selection, configuration, and upgrading for software optimization. Covers basic network topologies and management schema. Prereq: CSC 100 or concurrent enrollment.

**CTN 120 (5) S**

**Databases I**

Study of database concepts and applications using recent version of Microsoft Access. Includes practical experience setting up related database systems and developing tables, queries, forms and reports. Prereq: CSC 100.

**CTN 121 (5) S**

**Database II**

Advanced topics in MS Access: Create macros, switchboard, action queries, front-end Access/back-end SQL. Intro to SQL: create databases, SQL queries and tables from script, use views, more join types. Includes SQL server: back-up techniques, security, user rights and permissions. Prereq: CTN 120 with 2.0 or higher.

**CTN 131 (5) S**

**Introduction to Computer Programming**

Intro to computer programming using Microsoft Studio and/or other languages to explore elementary programming techniques. Use various control structures, and modular program design and structural concepts. Prereq: CSC 100 (2.0 or higher) or permission.

**CTN 142 (5) S**

**Operating Systems II**

Study the implementation and administration of the most recent Microsoft Windows operating system to help prepare for the Microsoft certification exams. Focus on general operating systems' architectural concepts including file, memory, I/O, and process management methods. Learn Unix and Windows operating systems' intrinsic structure and functionality. Prereq: CTN 101 (2.0 or higher) or permission.

**CTN 143 (5) S**

**Operating Systems III**

Intro to the Linux operating system including features and distributions, the X Window System, user commands, installation, administration, basic networking and shells. Helps prepare the student for the CompTIA Linux+ certification exam. Prereq: CTN 142 with 2.0 or higher.

**CTN 160 (5) S**

**Web Production I**

Intro to Internet media development using HTML 5, tables, forms and CSS3. Learn how to deploy and test sites on a web browser. A final project is to build a website. Prereq: CSC 100 or permission.

**CTN 161 (5) S**

**Web Production II**

Web development using streamlined development tools and responsive web design. Integrate graphics and complex code to produce professional quality websites. Tools used meet current industry standards. Prereq: CTN 160 (2.0 or higher) or permission.

**CTN 170 (5) S**

**PC Hardware I**

Covers computer hardware repair and service training toward A+ certification prep. Focus on peripherals, software and hardware designs. Covers work habits, customer interaction, reference materials, and basic linear troubleshooting. Includes choices, installation, configuration and economic guidelines for repair or replacement decisions. Prereq: CSC 100, CTN 101 with 2.0 or higher or equivalent.

**CTN 171 (5) S**

**PC Hardware II**

Preparation for the CompTIA A+ certification for hardware and software technologies. Develops knowledge and hands-on competencies in core hardware and operating system technologies including installation, configuration, diagnosing and preventive maintenance. Emphasizes customer interaction techniques and systematic approaches to troubleshooting. Prereq: CTN 170 with 2.0 or higher.

**CTN 197 (1-15) S**

**Computing Internship**

Provides practical work experience and employment contacts by integrating academic studies with actual on-the-job training. Orientation to Internships required prior to registration. Prereq: Permission.

**CTN 224 (5) S**

**Web Server Configuration and Management**

Focuses on building, maintaining, and optimizing web servers. Topics include security, user management, and authentication and access tracking. Prereq: CTN 101 and 160; CTN 270.

**CTN 270 (5) S**

**Local Area Networks I**

Intro to networking concepts, terminology and technologies including history, OSI reference model, standards, common protocols, data translation techniques, data transmission processes and network structures. Includes error handling, communication hardware and popular network operation systems. Prereq: CSC 100. Recommended: CTN 101.

**CTN 274 (5) S**

**Local Area Networks III**

Covers advanced topics in computer networking, including remotely installing operating systems, implementing network security, setting up directory services such as Active Directory, designing and implementing policies, setting up and implementing print services and configuring distributed file systems. Prereq: CTN 270 with 2.0 or higher.

**CTN 276 (5) S**

**Virtualization and the Cloud I**

Learn how Cloud computing and virtualization technologies work. Covers differences between Cloud computing and virtualization, the technologies, TCO and continuing costs, and decision guidelines. Discuss and use Xen, Hyper-V, VMware and application level virtualization technologies. Prereq: CTN 142, 274 & 282 with 2.0 or higher.

**CTN 277 (5) S**

**Network Security I**

Intro to the concepts and practices used to guard organizational data and computer systems. Select and deploy practical and effective solutions used to identify, assess and prevent external network threats. Covers Microsoft and Linux operating systems for server security, firewall security and remote access solutions. Prereq: CTN 270.

**CTN 278 (3) S**  
**Wireless Communication I**

Intro to wireless communication and WLAN use, design, installation, security and troubleshooting. Studies the 802.11 standards including WLANs, Bluetooth and cellular technology concepts. Learn how and why wireless communication works and how to select and setup the correct wireless devices for the best network solution. Prereq: CTN 270 or equivalent.

**CTN 281 (5) S**  
**Security+ Certification**

Prepares students for the latest CompTIA Security+ Certification Exam. Focus is on security risks, vulnerabilities and solution concepts including Infrastructure, access control, cryptography, physical, network and operating system security strategies, assessments and auditing. Uses the most recent distributed operating systems. Prereq: CTN 277 with 2.0 or higher.

**CTN 282 (5) S**  
**CISCO I**

Intro to networking official CCNA 5.0 CCNA Routing and Switching. First of four-course Cisco training program which prepares the student for the Certified Cisco Network Associate certification exam. Includes building simple LANs, performing basic configurations for routers and switches, and implementing IP addressing schemes. Prereq: CTN 270 with 2.0 or higher.

**CTN 283 (5) S**  
**CISCO II**

CCNA 5.0 CCNA Routing and Switching: Routing Protocols. Second of four-course Cisco training program which prepares the student for the Certified Cisco Network Associate certification exam. Includes Routing Concepts, Static and Dynamic routing, EIGRP, OSPF. Uses IPv4 and IP v6. Prereq: CTN 282 and pass the CCNA 1 final.

**CTN 284 (5) S**  
**CISCO III**

CCNA 5.0 CCNA Routing and Switching: Switched Networks. Third of four-course Cisco training program. Covers the architecture, components, and operations of a converged switched network, Layer 2 switching protocols and concepts with the primary focus on VLANs concepts, configuration, security and communication. Intro to WLANs, hierarchical design model and switch configuration. Troubleshoot with Virtual LANs, VTP, and inter-VLAN routing in a converged network. Prereq: CTN 283 and pass Cisco 2 final.

**CTN 285 (5) S**  
**CISCO IV**

CCNA 5.0 Connectivity Networks. Fourth of four-course Cisco training program. Study of WAN technologies and network services required by converged applications in a complex network. Includes selection criteria of network devices and WAN technologies; configuration and troubleshooting; resolving common issues with data link protocols, and implementation skills for IPSec and virtual private network operations in a complex network. Prereq: CTN 284 and pass the Cisco 3 final.

**CTN 286 (5) S**  
**Virtualization and the Cloud 2**

Learn advanced management methods for virtualization technologies such as VMware ESXi, XenServer. Install, configure, manage, and troubleshoot virtualization server products and guest operating systems. Gain practical experience with High Availability, VM migration, virtualized networking, SAN configuration and data security concepts. Prereq: CTN 276 with 2.0 or higher or work experience equivalent or instructor permission.

**CTN 287 (5) S**  
**Cloud Computing**

Build a cloud server using Microsoft products (Hyper-V, SharePoint, and Azure) to understand the interactions of each and the advantages, the complexities, security issues, disadvantages and seamless appearance from the users' view of the Cloud. Prereq: CTN 276 with 2.0 or higher or work experience equivalent.

**CTN 295 (5) S**  
**Research and Customer Service**

Learn effective customer service. Includes support desk techniques, infrastructure and research methods to solve technical problems efficiently. Emphasizes customer interaction and soft skills. Accomplish, document, evaluate, and present research to the customer. Study help desk techniques and infrastructure. Prereq: CSC 100 or equivalent. Recommended: at least one hardware, operating system, programming or networking class with 2.0 or higher.

**CTN 298 (1-10) S**  
**Special Topics - Computing Technology**

Special topics in individual or group study in the Computing Technology field. Prereq: Permission.

**Cooperative Work Experience Internships****CWE 101 (1-3) N**  
**Portfolio, Preparation & Workplace Success**

Learn how to find and succeed in the internship or job you want. Create portfolios, research resources, develop job search tools and integrate workplace competencies into your next career experience. Prepares students to compete for internship and employment opportunities or to transfer to a four-year school. (Variable 2-3 credit) Prereq: ENGL 095/096 or higher or placement into ENGL 097/098 strongly recommended.

**CWE 102 (2) N**  
**Job Shadow**

Provides an opportunity to observe the practical side of the student's chosen field of study. Students are introduced to expected behavior, culture, and dynamics of the workplace. Students will find and shadow professionals in the field, conduct information interviews, and assess their own career choices. Credits variable (1 - 2). Class meets Wednesdays from 12:00 PM - 2:00 PM in IB3406.

**CWE 110 (1-3) N**  
**Internship**

In CWE 110, students apply theory and skills learned in previously completed courses to their internship work site. Students write learning objectives, participate in online discussions, have performance evaluations, and share/reflect on their experiences through oral presentation and a final essay. Hybrid course meets 2x during the quarter. Read instructor notes for meeting dates and times. Credits variable (2-3). Prerequisite: CWE 101 or Instructor permission.

**CWE 197 (1-5) C**  
**Work Experience-Cooperative Education**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**CWE 198 (1-5) C****Work Experience-Cooperative Education**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**CWE 199 (1-5) C****Work Experience-Cooperative Education**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**CWE 494 (1) N****International Business Internship Preparation**

The International Business B.A.S. curriculum includes a major internship component. This course is designed to help prepare online students to find and secure appropriate internship positions. Students will develop internship search skills which include identifying and using resources, writing targeted resumes and cover letters, creating a professional online profile and practicing interview skills. Hybrid class meets in person 3 times for 2 hour sessions. See instructor notes for specific dates/times. Online students will have phone contact with instructor 1-2 times during the quarter by appointment. Prereq: enrollment and good standing in the International Business B.A.S.

**CWE 495 (1-8) N****Baccalaureate Internship**

In completing an internship, Bachelor of Applied Science (BAS) students apply knowledge from BAS classes to an outside workplace environment. Students write learning objectives, complete internship documentation, participate in online discussions, prepare oral presentations and write reflection essays. Hybrid sections meet twice on campus. See Instructor notes for dates/times. Students may register for CWE 495 two times. Credits variable (1-8). Prerequisite CWE 494 or BAS Internship Guide.

**Core Employment Readiness****COR 120 (3) C****Comm and Prof**

Focuses on the methods and practices of developing and maintaining helpful and effective professional relationships with patients, clients, and coworkers. Prereq: PSG 110 with a 2.0 or higher; or, Instructor, Director, or Dean's permission.

**COR 131 (3) C****Employment Skills**

Offers instruction in developing oral and written communication skills needed for success in the employment and career search process. Focuses on developing resumes, writing cover letters, creating career portfolios, conducting employment searches, preparing for interviews, making public presentations, and developing business communication and etiquette skills. Prereq: Permission.

**Corporate & Customized Training****CCT 100 (1-8) S****Computer Skills**

Customized course instruction in the area of basic computer and software usage with varying curriculum dependent on client's request/needs. Example topics may include using computer controls, the Microsoft Office Suite, advanced software usage, or other software training specific to the clients needs.

**CCT 102 (1-8) S****Manufacturing**

Customized course instruction in the area of manufacturing with varying curriculum dependent on client's request/needs.

**CCT 104 (1-8) S****Communications**

Customized course instruction in the area of workplace communications with varying curriculum dependent on client's request/needs.

**Culinary Arts****CUL 101 (6) C****Food Theory I**

Foundational class for Seattle Culinary Academy introducing the foodservice industry from a culinary perspective. Includes kitchen operations, cooking techniques, food reactions to heat, and food categories. Prereq: Permission.

**CUL 102 (5) C****Food Theory II**

Continued introduction to professional cooking, particularly theory relating to quantity food production. Includes trade terminology, heavy equipment (relating to quantity food production), tool identification, mise en place, salads, meats, fish, poultry, vegetables, starches, sandwiches, butchering, garnishes and presentation. Prereq: Successful completion of 1st quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

**CUL 103 (4) C****Food Theory III**

Covers professional restaurant cooking and international cuisines. Explores European, Asian and US cooking, culture, and eating traditions. Includes menu writing, recipe development, flavor building and plate presentation and the study of a variety specific techniques: soufflé, consommé, pasta, fish butchery, gumbo, Chinese dumplings & antipasto. Prereq: Successful completion of 2nd quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

**CUL 104 (6) C****Food Theory IV**

Emphasizes international fine-dining cooking theory. Focus on classical and contemporary Northwest, Middle Eastern, Mexican, Spanish, French and Pan Asian cuisines. Includes menu writing, vegetarian cuisine, advanced sauces, ingredient identification, advanced cooking methods, advanced plate presentation, fine dining kitchen organization, whole animal fabrication, and charcuterie. Prereq: Successful completion of 3rd quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

**CUL 106 (2) C****Introduction to Culinary Arts: Theory**

Introduction to the theory of culinary arts covering the various methods of moist and dry heat cooking as well as product knowledge and identification, knife skills, and foundational cooking techniques. Prereq: Permission.

**CUL 111 (6) C****Introduction to Professional Cooking: Practicum**

A hands-on introduction to the fundamentals of professional cooking. Includes kitchen safety operations, knife skills, basic food cooking and stock preparation, teamwork, leadership, general housekeeping, sanitation, clean up, and inventory. Prereq: Permission.

**CUL 112 (8) C****Quantity Cooking: Practicum**

Preparation of international quantity cooking meals. Includes mise en place, item marketing, equipment operation and preparation of meals from the Italian, Asian, Middle Eastern, Mexican, Creole, Indian, French and American traditions. Prereq: Successful completion of 1st quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

**CUL 113 (8) C****Restaurant Cooking: Practicum**

Prepare meals for on-campus casual American restaurant. Work all kitchen stations. Use traditional and contemporary culinary techniques to produce a culturally diverse selection of soups, salads and casual entrees. Practice fabrication of various meats, seafood and vegetables and various wet and dry cooking methods. Includes concepts of mise en place, collaboration and seasonality. Develop skills in organization, speed, plate presentation and evaluation of finished product.

**CUL 114 (8) C****International Cooking: Practicum**

Provides hands-on training in cooking and preparing meals for fine dining. Gain experience in classical and contemporary Northwest and international cuisines. Skill focus will be placed on plate presentation, accuracy, good working habits, palate development, care for ingredients, safety, professionalism, and organization. Students work collaboratively to present dishes in a full service restaurant. Menus utilize seasonal, sustainable and non GMO ingredients.

**CUL 116 (1) C****Introduction to Culinary Arts: Practicum**

Covers fundamentals of culinary arts. Rotate into a different kitchen each day and prepare a variety of dishes in each area. Includes various types of moist and dry heat cooking methods and preparation methods for breakfast items, poultry or rabbit, fish, soups, stocks, sauces, vegetables and side dishes, salads and dressings. Prereq: Admission to program.

**CUL 120 (1) C****Introduction to Wine**

Covers the fundamentals of grape growing and winemaking, including table, sparkling and fortified wines. Includes sensory evaluation of classic grape varieties and their growing regions with emphasis on Washington state wines. Learn strategies for food and wine pairing. BAK 103 or CUL 104 with a minimum GPA of 2.0.

**CUL 151 (1) C****Sustainable Food Systems Practices I**

Introductory course exploring the current ecological, economical and political issues relating to the food system. Raises awareness of issues of the food system from producer to consumer, exploring agriculture, fisheries, dairy, meat and poultry production, water and waste. Includes trade, health and social justice issues within the food system. Prereq: Admission into Culinary Arts Program.

**CUL 152 (1) C****Sustainable Food Systems Practices II**

Continuation of CUL 151. Introductory course exploring the current ecological, economical and political issues relating to the food system. Raises awareness of issues of the food system from producer to consumer, exploring agriculture, fisheries, dairy, meat and poultry production, water and waste. Includes trade, health and social justice issues within the global food economy. Successful completion of 2nd quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

**CUL 153 (1) C****Sustainable Food Systems Practices III**

Explore the issues relating to a sustainable food system: globalization, food politics, food security and social justice. Examine climate change as it relates to the food system, water and waste issues, heritage foods, and practical application of ideas in the kitchen. Learn how to navigate and purchase from the local producer market. Prereq: Permission.

**CUL 205 (1) C****Advanced Culinary Theory**

Students refine the practical skills for managing and running kitchens, dining rooms and other areas of the food service industry. The technical background of designing menus and menu items for specific target populations with an emphasis on high end and specialty dining will be explored through cooking demonstrations, product sampling and lectures. Prereq: Successful completion of 4th quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

**CUL 215 (5) C****Advanced Culinary Practices**

Culminate culinary experience in 4 capstone projects. Create and serve own menus in private dining room; create meals with nutrition focus; practice advanced technique; and build culinary competition skills. Lead others while practicing professionalism and commitment to producing quality food. Prereq: CUL 114.

**CUL 251 (4) C****Buffet Catering & Garde Manger: Theory**

Basic cooking methods covering garde manger applications such as charcuterie, forcemeats, curing and smoking, and hors d'oeuvres. Learn to design a show platter and relate to buffet catering & garde manger principles, and understand the relationship of theory to the menus and recipes in the practicum show platter. Learn about produce farming, sustainability, and seed to plate food production while visiting Skagit Valley Farm.

**CUL 255 (8) C****Buffet Cater/Garde Manger: Practicum**

Prepare foods for a buffet setting including salads, sandwiches, street food, hot entrées, and desserts. Produce a variety of charcuterie items. Implement recipes and cooking methods presented in class. Work on a show platter for buffet presentation. When applicable, utilize weekly harvests from the Skagit Valley Farm to execute seed-to-plate philosophy in menus and recipes. Prereq: CUL 112 or permission.

**CUL 291 (5) C****Sca Travel 1 - Spain Culinary Immersion**

Intensive international culinary immersion program. Travel and learn history, language, culture, traditional and modern cuisine of a specific country through Seattle Culinary Academy's international partners. Enhance cultural knowledge and language skills via research and travel to historic sites, cultural events, food producers and exhibits. Practice skills learned in a professional kitchen abroad. Prereq: Permission.

**CUL 299 (1-5) C****Independent Projects/Culinary Arts**

Permission required.

**FSD 100 (3) S****Health and Sanitation**

Intro survey for food service students. Covers sanitation guidelines as suggested by the National Restaurant Association's ServSafe program and Fundamentals of Hazard Analysis of Critical Control Point (HACCP) management. Online fees apply.

**FSD 101 (1) S****Orientation to Culinary Arts**

Two-week module introducing the culinary kitchen lab areas. Includes equipment operation, safety and sanitation. Practice beginning knife skills.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**FSD 160 (5) S**  
**Culinary Fundamentals**

Introduction to culinary fundamentals. Covers theories and techniques of classical cooking, stocks and sauces. Explores pantry techniques including sandwiches, salads, and dressings. Prereq: Enrollment in Culinary Arts or permission.

**FSD 165 (15) S**  
**Fundamentals of Classical Techniques**

Focuses on fundamental concepts, skills and techniques in basic cookery. Special emphasis is given to the study of ingredients, cooking theories to include Sauté, braise, grilling and poaching. Introduction to cold and basic salads, vegetable cookery, starch cookery, preparation of stocks, soups, and thickening agents. Fundamental meat and poultry production, lectures and demonstrations include organizational skills in the kitchen, work coordination and knife cuts. Concurrent enrollment FSD 100.

**FSD 170 (5) S**  
**Theory 2 - Advanced Culinary Fundamentals**

Covers intermediate culinary fundamentals including stocks and sauces, soups, meat and poultry cookery and meat, poultry and game identification. Prereq: FSD 160 with 2.0 or higher or permission.

**FSD 175 (15) S**  
**Advanced Classical Techniques**

Advanced knife skills are emphasized focusing on efficiency and consistency. Large batch protein cookery is introduced, with an emphasis on par production. Advanced soup and sauce making. Storeroom management, inventory, ordering and product issuing, with an emphasis on daily costs. Introduction to customer service is introduced with a counter service focus. Prerequisite: FSD 100 and FSD 165 with 2.0 or higher or instructor permission.

**FSD 180 (5) S**  
**Garde Manger and Menu Development**

Examines organization, equipment, and techniques of the cold kitchen including hors d'oeuvres and charcuterie items. Prepares future leaders by examining the role menu planning plays within operations. Examines contemporary plating styles. Prereq: FSD 170 with 2.0 or higher or permission. Corequisite: Concurrent enrollment in FSD 185.

**FSD 185 (15) S**  
**Restaurant Production 1**

Proficiency in short order and ala carte cooking, emphasis on technique, speed, consistency. Protein butchery is covered. Advanced customer service is introduced. Simple pastries and plated desserts along with quick and yeast risen breads. Advanced garde manger topics covered. Small plate preparations: canapés and amuse bouche. Into to food costing, inventory control are covered with an emphasis on plate costing and menu mix. Prerequisite FSD 175 with 2.0 or higher or instructor permission.

**FSD 190 (5) S**  
**Cost Controls**

Examines the manager's role in cost control and the relationship between operational standards and controlling costs. Prereq: FSD 180 with 2.0 or higher or permission. Corequisite: Concurrent enrollment in FSD 195.

**FSD 195 (15) S**  
**Restaurant Production 2**

Advanced ala carte cooking in the Alhadeff Grill, menu planning, concept development, food costing are covered emphasizing local, seasonal sustainable ingredients. Management theory is introduced; employee hiring, training and retention and communication are included as well as team building. Interviewing skills and looking for the right job are also covered. Advanced butchery and artisanal breads are covered. FSD 185 with 2.0 or higher or instructor permission.

**FSD 200 (5) S**  
**Theory 5 - Management Techniques**

Covers human resource management concepts and techniques related to the supervisor, sous chef and restaurant manager, including diversity, communication and standard operating procedures. Also examines menu and restaurant design. Prereq: FSD 190 with 2.0 or higher or permission.

**FSD 205 (15) S**  
**Leadership Practicum**

Practicum in functioning as kitchen supervisor/front of house supervisor/Sous Chef, practicing teamwork and leadership and skills while overseeing all kitchen and front of house production. Emphasizes daily assignments, production sheets, menu planning and product utilization. Includes capstone projects for Black Box Practical and banquet style luncheon. Prerequisite: FSD 195 with 2.0 or higher or instructor permission.

**FSD 215 (15) S**  
**Banquets and Catering**

Final course in Banquet & Catering Track includes advanced garde manger, baking concepts and Sous Chef position training, supervising, and coordination for the Pantry and Prep stations. Capstone practicum involves the planning and execution of a formal banquet or buffet. Prereq: FSD 195 with 2.0 or higher or permission.

**FSD 299 (1-15) S**  
**Special Topics in Culinary Arts**

Independent study on an individual basis in the Culinary industry. Prereq: Permission.

**Dental Assisting**

**DAST 110 (1) C**  
**Introduction to Dental Assisting**

Designed to help students develop a foundation for a life-time of study skills combined with strategies for optimizing their effectiveness in the classroom setting. In addition, this course will cover the history of dentistry and the components of the dental healthcare team.

**DAST 111 (6) C**  
**Foundations of Dental Assisting**

Students are introduced to dental biosciences with emphasis on the head, neck, and oral health sciences. The course includes dental terminology, as well as OSHA and other regulatory agency standards impacting dental practice.

**DAST 112 (4) C**  
**Pre - Clinical Chairside Assisting**

Designed to introduce the student to clinical and laboratory settings while applying infection control and universal precautions according to OSHA and other regulatory agencies' standards. Students will apply knowledge of dental sciences and employ preventive dentistry as well as demonstrate safe handling of sharps according to OSHA and other regulatory agencies' standards.



**DAST 113 (1) C**  
**Dental Practice Management**

Designed to introduce dental software programs that support aspects of office procedures.

**DAST 114 (2) C**  
**Preventive Dentistry**

The study of dental disease prevention, nutritional impact on oral diseases, and community dental health.

**DAST 121 (4) C**  
**Fundamentals of Chairside Procedures I**

A study of pre-clinical chairside assisting procedures. Composition, properties, procedures and safety standards related to dental materials.

**DAST 122 (7) C**  
**Clinical Chairside Procedures I**

This lab and clinical course is an introduction of basic concepts and principles of chairside dental assisting.

**DAST 123 (2) C**  
**Dental Assisting Law and Ethics**

Focuses on ethics and law in dentistry, and modeling of the American Dental Assistants Association's professional Code of Ethics.

**DAST 124 (2) C**  
**Fundamentals of Dental Imaging**

Designed to provide a foundation of the principles and application of dental radiology. Students learn about theory, safety, and application of oral radiographic techniques.

**DAST 125 (2) C**  
**Dental Imaging Laboratory**

Designed to create radiology proficiency. The student will safely expose, process, and mount dental radiographs while professionally interacting and ensuring patient ease and comfort.

**DAST 131 (3) C**  
**Fundamentals of Chairside Procedures II**

Provides the foundational knowledge to acquire the skills necessary to assist in general and dental specialty practices, including advanced dental assisting functions.

**DAST 132 (10) C**  
**Clinical Chairside Procedures II**

This lab/clinical course is designed for the student to apply chairside four-handed dentistry in a clinical setting while continuing to develop advanced dental assisting functions necessary in general and specialty practices.

**DAST 133 (2) C**  
**Professional Preparations**

Prepares the student to take the DANB for CDA certification, as well as self-market.

**DAST 140 (12) C**  
**Experiential Dental Assisting**

This final program course is designed to provide the student with the opportunity to perfect dental assisting competence through experiential practicum.

**Dental Hygiene****DHY 245 (1-5) C**  
**Applied Practice in Dental Hygiene**

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

**DHY 250 (2) C**  
**Oral Biology**

Study of oral histology including developmental origins and microscopic organization of selected oral and facial structures. Includes embryonic development of the face and palate, and common craniofacial malformations. Examines the formation, eruption and histological organization of the teeth and their supporting tissues as well as the oral mucosa and salivary glands.

**DHY 251 (3) C**  
**Human Pathophysiology**

Study of human pathophysiology includes the etiology, predisposing factors, mechanisms of disease, and characteristics of the disease process in each body system. Emphasizes specific disease entities most commonly seen in the clinical dental hygiene setting or that may influence an individual's dental care.

**DHY 252 (3) C**  
**Fundamentals of Dental Hygiene I**

Examines the theory and scientific principles underlying the clinical practice of dental hygiene. Emphasis on oral screening, infection control, and professionalism.

**DHY 253 (3) C**  
**Clinical Dental Hygiene I**

Apply the theory and scientific principles underlying dental hygiene practice. Covers professionalism, clinical preparation of the examining area, safety, patient privacy, documentation, and screening techniques.

**DHY 254 (2) C**  
**Health Promotion**

Intro to dental health education, patient education, health promotion, and the process of health-related behavioral change. Emphasizes assessment of educational needs, client-provider interaction, communication skills, cultural competence in healthcare delivery, and motivation to change.

**DHY 255 (2) C**  
**Dental Radiology I**

Principles of oral radiology imaging stressing the physics of x-ray production and biologic effects of ionizing radiation. Includes radiation safety and protection, dental radiographic examination, and radiographic interpretation of anatomical structures of the head and oral cavity.

**DHY 256 (2) C**  
**Dental Radiology I Practice**

Intro to dental x-ray equipment, processes and techniques. Emphasizes patient and operator safety, evaluation of technique and imaging quality, darkroom and digital operations, beginning level proficiency in exposing and analyzing intra-oral dental radiographs.

**DHY 257 (2) C**  
**Head and Neck Anatomy**

Didactic sessions teaching anatomy and function of the head and neck. Course draws on concepts taught in general anatomy and physiology classes. Students are introduced to the location, characteristics and function of all anatomical structures, including all hard and soft tissues and all components of the circulatory system and cranial nerves. Prereq: Permission.

**DHY 258 (2) C**  
**Dental Anatomy & Morphology (Didactic)**

Intro to nomenclature, anatomy, morphology and functions of the primary and permanent dentition. Focuses on healthy, normal end of the health/disease continuum and provides foundation for further dental science, clinical and restorative dental hygiene practice.

**DHY 259 (1) C**  
**Dental Anatomy & Morphology (Lab)**

Apply the theory and scientific principles of specific anatomical characteristics to lab drawings and wax carving. Intro to fine hand-skills and basic instrumentation used for hygiene and restorative procedures.

**DHY 260 (1) C**  
**Emergency Management**

Introduced to the role of the dental team in the identification and treatment of medical emergencies, including prevention, patient assessment, stress reduction protocol, safe use of emergency drugs and equipment. Participate in class simulations of emergency treatment for common medical emergencies in the dental office.

**DHY 261 (2) C**  
**Preventive Dentistry**

Intro to primary prevention methods within the scope of dental hygiene practice. Emphasizes the relationship between oral disease processes and oral health preventive measures, home-care education of the patient, and methods of preventive care implemented by dental hygienists.

**DHY 300 (4) C**  
**Clinical Dental Hygiene II**

Apply the theory and scientific principles underlying dental hygiene practice. Intro to assessment of gingival and oral soft tissues, selected instrumentation, and periodontal and dental charting.

**DHY 301 (4) C**  
**Clinical Dental Hygiene III**

Apply the theory and scientific principles underlying dental hygiene practice. Intro to patient management, treatment planning, and dental hygiene treatment techniques.

**DHY 302 (8) C**  
**Clinical Dental Hygiene IV**

Apply the scientific principles underlying the assessment, planning and implementation of clinical procedures. Emphasizes biochemistry of food, nutritional counseling in dental hygiene practice and personal, professional and community issues related to HIV/AIDS.

**DHY 303 (3) C**  
**Fundamentals of Dental Hygiene II**

Examines the theory and scientific principles underlying the clinical practice of dental hygiene with emphasis on integration of screening information to formulate goals for planning dental hygiene treatment needs.

**DHY 304 (2) C**  
**Fundamentals of Dental Hygiene III**

Examines the theory and scientific principles underlying the clinical practice of dental hygiene with emphasis on principles of instrumentation, dental hygiene diagnosis, and professional development activities.

**DHY 305 (2) C**  
**Fundamentals of Dental Hygiene IV**

Focuses on the fundamental scientific principles underlying the assessment, planning and implementation of nutrition in dental hygiene. Emphasizes biochemistry of nutrients, nutritional counseling in dental hygiene practice, and personal, professional, and community issues. Prereq: Permission.

**DHY 306 (2) C**  
**Restorative Practice & Materials I (Didactic)**

This is the first of two didactic courses focusing on the physical, chemical, mechanical and biological properties of dental materials used in both direct and indirect restorative procedures. Prereq: Successful completion of previous quarter's BAS in Allied Health Dental Hygiene courses with a minimum grade of 2.5 in each course or permission.

**DHY 307 (1) C**  
**Restorative Practice & Materials I (Lab)**

Covers clinical restorative dentistry focusing on the chemical, physical, mechanical properties of commonly used dental materials and their uses, manipulation and application. Learn to handle and manipulate different types of restorative filling materials into prepared cavities.

**DHY 308 (2) C**  
**Restorative Practice & Materials Theory II**

This is the second and final didactic course focusing on the physical, mechanical, chemical and biological properties of dental materials commonly used in direct and indirect restorative procedures, and basic knowledge in materials used in preventive, periodontics, restorative and other specialty fields in dentistry. Prereq: Permission.

**DHY 309 (1) C**  
**Restorative Practice & Materials II**

This is the second lab course focusing on the physical, mechanical, chemical and biological properties of dental materials commonly used in direct and indirect restorative procedures, and basic knowledge in materials used in preventive, periodontics, restorative and other specialty fields in dentistry. Prereq: Permission.

**DHY 310 (2) C**  
**Advanced Restorative Practice I**

Covers restorative dental practice and materials, focusing on correct placement of dental restorations on mannequins and in the clinic on patients. Practice and develop manipulative and carving skills in the placement of amalgam and composite restorations as allowed by Washington State law.

**DHY 311 (2) C**  
**Pain Control Anesthesia**

Curriculum under development at time of printing.

**DHY 312 (2) C**  
**Pain Control Anesthesia Practice**

Curriculum under development at time of printing.

**DHY 313 (3) C**  
**Periodontology I**

Examines periodontal structures of the mouth from health to disease including clinical and histological aspects of periodontal disease. Includes various classifications of periodontal diseases, and disease progression as it relates to microbiology, etiology, and host response. Learn techniques of periodontal therapy using adjunctive chemotherapeutic agents and oral hygiene aids. Prereq: Instructor's permission.

**DHY 314 (2) C**  
**Dental Radiology II**

Study of dental radiology including the principles and application of a full range of intra-oral, extra-oral, digital and film radiographic examinations, advanced interpretation for diagnosis of dental anatomy, trauma, lesions, caries and pathology.

**DHY 315 (1) C**  
**Dental Radiology II Practice**

Learn application of basic radiographic examination techniques for dental patients stressing adaptation of techniques, consideration of presenting problems, variations of normal, supplemental radiographic procedures, analysis of outcomes, and advanced interpretation of diagnostic information.

**DHY 318 (2) C**  
**Oral Pathology**

Study lesions, pathologies, and abnormal conditions of the head, neck and oral cavity of significance in the clinical practice of dental hygiene

**DHY 323 (3) C**  
**Pharmacology**

Study the general pharmacological and therapeutic actions of drugs with emphasis on those used in dentistry. Includes nomenclature, dosage, routes of administration, drug interactions, drug effects on the oral cavity, indications, contraindications, factors in patient treatment planning and legal factors involved in dispensing.

**DHY 382 (1-8) C****Applied Practicum in Dental Hygiene**

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

**DHY 384 (1-8) C****Applied Practicum in Dental Hygiene**

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

**DHY 391 (1) C****Community Dental Health I**

Introduction to public dental health. Presents strategies to improve oral health outcomes through evidence-based research techniques, planning, and implementation of public health program models. Provides a foundation for a group community oral health project. Emphasis on community needs assessment and choosing a target population. Prereq: Completion of BAS in Dental Hygiene previous quarter's courses with a minimum grade of 2.5 in each course or permission.

**DHY 400 (8) C****Advanced Practicum in Dental Hygiene I**

Supervised clinical experiences with patient care involving the assessment, planning, implementation, and evaluation of clinical procedures in dental hygiene. Prereq and Coreq: Enrollment into the dental hygiene program.

**DHY 401 (8) C****Advanced Practicum in Dental Hygiene II**

Supervised clinical experiences with patient care involving the assessment, planning, implementation, and evaluation of clinical procedures in dental hygiene. Prereq and Coreq: Enrollment into the dental hygiene program.

**DHY 402 (8) C****Advanced Practicum in Dental Hygiene III**

Supervised clinical experiences with patient care involving the assessment, planning, implementation, and evaluation of clinical procedures in dental hygiene. Prereq and Coreq: Enrollment into the dental hygiene program.

**DHY 404 (3) C****Principles of Dental Hygiene Practice I**

This course focuses on the scientific principles underlying the assessment, planning and implementation of clinical procedures in dental hygiene. This course emphasizes higher level concepts needed for successful board certification and national examinations. Course pre- and co-requisite: enrollment into the dental hygiene program.

**DHY 405 (2) C****Principles of Dental Hygiene Practice II**

This course focuses on the scientific principles underlying the assessment, planning and implementation of clinical procedures in dental hygiene. This course emphasizes higher level concepts needed for successful board certification and national examinations. Course pre- and co-requisite: enrollment into the dental hygiene program.

**DHY 406 (1) C****Principles of Dental Hygiene Practice III**

This course focuses on the scientific principles underlying the assessment, planning and implementation of clinical procedures in dental hygiene. This course emphasizes higher level concepts needed for successful board certification and national examinations. Course pre- and co-requisite: enrollment into the dental hygiene program.

**DHY 407 (1) C****Strategies of Capstone Project**

This course is an introduction to a culminating educational experience whereby students have the opportunity to demonstrate mastery of learning in the field of dental hygiene. The course integrates experiential learning, coursework knowledge, clinical application, self-analysis along with strategies for completion and presentation of a Capstone project. Prereq and Coreq: Enrollment into the dental hygiene.

**DHY 408 (1) C****Capstone**

This course concludes the culminating educational experience whereby students have the opportunity to demonstrate mastery of learning in the field of dental hygiene. The course integrates experiential learning, program coursework knowledge, clinical application, self-analysis allowing the student to integrate and evaluate their overall educational experience. Prereq and Coreq: Enrollment into the dental hygiene.

**DHY 409 (2) C****Ethics and Jurisprudence**

Focuses on the ethical, legal and regulatory issues facing the dental hygienist practicing in a private dental office, in a community agency, or in independent practice. Examines professional traits, theories of moral development, ethical principles, the state dental practice act, the relationship with patients and employers, and risk management.

**DHY 410 (2) C****Advanced Restorative Practice II**

Focuses on correct placement of dental restorations on mannequins and in the clinic on patients. Students practice and develop manipulative and carving skills in the placement of amalgam and composite restorations as allowed by Washington State law.

**DHY 411 (2) C****Advanced Restorative Practice III**

Focuses on correct placement of dental restorations on mannequins and in the clinic on patients. Students practice and develop manipulative and carving skills in the placement of amalgam and composite restorations as allowed by Washington State law.

**DHY 412 (2) C****Advanced Restorative Practice IV**

Focuses on correct placement of dental restorations on mannequins and in the clinic on patients. Students practice and develop manipulative and carving skills in the placement of amalgam and composite restorations as allowed by Washington State law.

**DHY 413 (2) C****Periodontology II**

Study of advanced periodontal diseases, including cause, recognition, prevention, and treatment planning. In addition, this course covers periodontal surgery and implant care. Reviews periodontal concepts through case studies. Prereq: Enrollment in the dental hygiene program.

**DHY 414 (1) C****Selective Populations**

Introduction to etiologies, signs and symptoms, prognoses, medications, and oral healthcare strategies to optimize oral health outcomes for patients with selective medical conditions. Prereq: Successful completion of previous quarter's BAS in Allied Health Dental Hygiene courses with a minimum grade of 2.5 in each course or permission.

**DHY 415 (1) C****Selective Populations Practice**

This course consists of various laboratory externships through existing community organization affiliate agreements which provide supervised student experiences. Students will adapt the Dental Hygiene Process of Care for medically compromised high-risk patients to optimize oral health outcomes and provide caregiver oral health education as appropriate. Enrollment into the dental hygiene program: course pre- and co-requisite.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**DHY 416 (1) C**  
**Professional Issues**

This course will explore issues encountered in a variety of dental hygiene employment settings including resume preparation, interview success techniques, malpractice insurance, employment contract negotiation, conduct and professional licensure, fundamentals of dental practice business concepts, employment team concepts, personal practice philosophy development, and the creation of a personal professional development plan. Prereq: Enrollment into the dental hygiene program.

**DHY 419 (2) C**  
**Community Dental Health II**

This course is the study of public and community health methodologies in oral disease prevention and program development. Students will establish contact with populations to develop presentations targeted to a specific demographic as a community health program or project. Students will learn the basics of research including data collection, dental indices application, biostatistics utilization, and program evaluation. Prereq and Coreq: Enrollment into the dental hygiene program.

**DHY 420 (1) C**  
**Community Dental Health III**

This course is the advanced study of public and community health methodologies in oral disease prevention and program development. Students will present an oral health program to target populations addressing a specific need and demonstrate research methodologies including data collection, dental indices application, biostatistics utilization, and program evaluation. Prereq and Coreq: Enrollment into the dental hygiene.

**DHY 482 (1-8) C**  
**Applied Practicum in Dental Hygiene**

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

**DHY 483 (1-8) C**  
**Applied Practicum in Dental Hygiene**

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

**DHY 484 (1-8) C**  
**Applied Practicum in Dental Hygiene**

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

**DHY 485 (1-8) C**  
**Applied Practicum in Dental Hygiene**

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

## Diesel and Heavy Equipment

**HDM 100 (8) S**  
**Preventive Maintenance and Inspection**

This course focuses on skills required by the National Automotive Technicians Education Foundation (NATEF) including safety procedures compliant with OSHA regulations, hand tools, power tools, measuring tools, and equipment used in the repair of both trucks and equipment in the heavy duty diesel mechanic industry. Inspection and maintenance are also a major part of this course. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110. Coreq: HDM 105.

**HDM 102 (6) S**  
**Electrical-Electronics, Basic**

Covers safety procedures when working with electricity and fundamental electrical theory. Includes types of circuits, Ohm's law, use of common test equipment and reading wiring diagrams. Prereq: HDM 101 or permission.

**HDM 104 (6) S**  
**Batteries, Generators and Alternators**

Diagnose and repair charging systems commonly used in heavy-duty truck and equipment maintenance. Prereq: HDM 102.

**HDM 106 (5) S**  
**Cranking and Lighting Systems**

Covers theory, operation and repair of starter motors commonly used in the industry, including control devices and wiring used with these motors. Covers troubleshooting and the use of common test equipment. Includes knowledge of truck equipment lighting systems and the hardware to control them. Prereq: HDM 102.

**HDM 107 (9) S**  
**Hydraulics and Pneumatics**

Covers theory, basic operation principles, design, function, testing and repair of selected types of hydraulic and air pumps, motors, hoses and accessories used on mobile equipment, as well as application and repair of pressure, flow and directional control valves and actuators. Prereq: HDM 101 or permission.

**HDM 108 (8) S**  
**Heavy Duty Diesel Welding**

This course focuses on skills required by the National Automotive Technicians Education Foundation (NATEF) including safety in welding, oxy-acetylene welding, oxy-acetylene brazing, oxy-acetylene cutting, arc welding as well as MIG welding. Identify the type of welding process to be used when joining various types of metals in different situations. Prereqs: MVM 101, BUS 159, MAT 110. Coreq: HDM 100.

**HDM 110 (8) S**  
**Introduction to Electrical**

This course introduces students to skills necessary for the National Automotive Technicians Education Foundation (NATEF) certification including electrical theory, diagnosing electrical system problems, removal, repair and installation of electrical components from vehicles. The function and construction of each component, diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 115.

**HDM 115 (8) S**  
**Advanced Electrical**

Building on the introductory course, students will focus independently on electrical theory, data scan tools, and diagnosing electrical and electronic system problems including truck accessories necessary for NATEF certification. The function and construction of each component, and diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 110.



**HDM 120 (8) S**  
**Tires, Alignment, Steering and Suspension**

This course will cover diagnostic theory, systems problems and evaluations, removal, repair and installation of tires, alignment, steering and suspension components of heavy duty diesel vehicles to meet NATEF certification. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 125.

**HDM 123 (12) S**  
**Diesel Engine Repair and Performance**

Study and perform diagnosis, repair, tune-up and servicing procedures on current diesel engines used in the heavy-duty truck and equipment industry. Disassemble, clean and inspect engines and components, installing replacement parts as needed. Prereq: HDM 101 or permission.

**HDM 124 (5) S**  
**Preventive Maintenance**

Learn preventive maintenance practices commonly found in the trucking and equipment industry. Includes inspection and determination of failures along with the necessary repairs. Covers proper handling and disposal of hazardous material. Prereq: HDM 101 or permission.

**HDM 125 (8) S**  
**Hydraulic and Air Brakes**

Contents of this course include: diagnostic theory; systems problems and evaluation, removal, repair and installation of hydraulic, air brake and ABS components from vehicles to meet NATEF certification. The function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 120.

**HDM 127 (8) S**  
**Drive Train**

Covers diagnosis and repair of Drive Train components, including mechanical clutches, flywheels, standard transmissions, torque converters and automatic/power shift transmissions. Learn to troubleshoot, diagnose, disassemble and reassemble transmissions common to the industry; and to check universal joints, drivelines, differential assemblies and final drive units. Prereq: HDM 101 or permission.

**HDM 128 (4) S**  
**Basic Gasoline Engines**

Study the basic operation of gas engines, diagnosing their condition by disassembling various types of current model engines. Prereq: HDM 101.

**HDM 130 (8) S**  
**Hydraulics & Pneumatics**

This course will focus on theory, systems problems and evaluation, reading and reviewing diagrams, and removal, repair and installation of hydraulic and pneumatic components of heavy duty diesel vehicles to meet NATEF certification. The function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 135.

**HDM 135 (8) S**  
**Drive Train**

Contents include: Theory, diagnosing system problems and evaluation, and removal, repair and installation of heavy duty diesel drive train components from vehicles to meet NATEF certification. The function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 130.

**HDM 138 (15) S**  
**Steering, Suspension and Brakes**

Study components and systems relating to truck or equipment running gear. Covers theory, operation, diagnosis and repair of wheels, tires, brakes, steering and suspension systems. Prereq: HDM 101 or permission.

**HDM 140 (8) S**  
**Heating, Ventilation and Air Conditioning**

This course focuses on theory, diagnosing system problems and evaluation, and removal, repair and installation of heating, ventilation and air conditioning (HVAC) components from vehicles to meet NATEF certification. The function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 145.

**HDM 145 (8) S**  
**Gasoline Engines**

This course focuses on theory, diagnosing system problems and evaluation, and removal, repair and installation of gasoline engine components from vehicles to meet ASE standards. The function and construction of each component, and diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 140.

**HDM 150 (8) S**  
**Diesel Engine Diagnos/Remove and Replace**

Contents of this course include: Diesel engine theory, diagnosing system problems and evaluation, and removal and installation of a diesel engine from a vehicles to meet NATEF certification. The function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 155.

**HDM 155 (8) S**  
**Diesel Engine Rebuild**

This course covers advanced theory, diagnosing systems problems and evaluation, and the rebuilding of a diesel engine to meet NATEF certification. The advanced function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 150.

**HDM 171 (2) S**  
**Lift Truck Operator**

Learn current regulations and practical fork lift operation in order to obtain a lift truck operator's safety certification card. Prereq: HDM 101 or permission.

**HDM 191 (4) S**  
**Advanced Gasoline Engines**

Theory and operation of fuel and ignition systems used on industrial gas engines commonly found in the heavy-duty industry. Covers common types of ignition and carburetion systems. Prereq: HDM 128 or permission.

**HDM 193 (6) S**  
**Heating, Ventilation and Air Conditioning**

Study the operation, system diagnosis and repair of heating, ventilation and air conditioning systems related to trucks and equipment. Covers retrofit of R-12 systems to R-134a refrigerant. Prereq: HDM 101 or permission.

**HDM 197 (1-7) S**  
**Internship - Heavy Duty Diesel**

Gain experience and practice with mechanical repair procedures and skills performed regularly on the job site. Tasks, skills content, format and projects vary depending on the job site. Prereq: Permission.



**HDM 201 (6) S**  
**Shop Practices**

Apply the knowledge and tasks learned in prior mechanical skills units, including repair and service work on a variety of heavy-duty trucks and equipment. Repair procedures and shop policies will simulate work site situations. Students electing to work within the industry will complete a minimum of 66 supervised hours in trade-related employment. Prereq: Permission.

**HDM 298 (1-10) S**  
**Advanced Special Topics - Heavy Duty Mech Repair**

Advanced study of selected procedures and skill tasks for truck and heavy equipment technicians. Course content, format and projects vary. Prereq: Prior work site experience and permission.

**Drama****DRMA& 101 (5) C | N**  
**Introduction to Theatre**

Intro to theatrical experience through play analysis, acting, directing, critique, stage and costume design, with emphasis on theatre as a performance art.

**DRMA 105 (5) C | S**  
**Introduction to World Theater**

Intro to theatrical practices from different cultures. Analyze scripts, videotapes and live performances through theoretical, cultural, and historical readings. Examine how the performance or script reflects on the culture that produced it. Relate current theatrical practices to the larger global society. Prereq: ENGL& 101 eligibility.

**DRMA 108 (1-5) C**  
**Rehearsal and Performance**

Participation in rehearsal and performance process culminating in performance. Audition or instructor permission.

**DRMA 120 (5) S**  
**Introduction to Acting**

Builds a foundation of theory and application with the broad use of improvisational techniques and movement for the actor.

**DRMA 121 (5) C | N**  
**Acting**

Theory and practice of acting fundamentals. Exercises in voice, movement, observation, imagination and script analysis. Culminates in scene study, production and performance process. Recommended: DRMA& 101 or DRMA 120.

**DRMA 122 (5) C**  
**Acting**

Continuation of DRMA 121 with emphasis on characterization and further scene study. May culminate in public performances. Prereq: DRMA 121.

**DRMA 123 (5) C**  
**Acting**

Continuation of DRMA 122 with further emphasis on scene study, critical analysis and scoring scripts. May culminate in public performances. Prereq: DRMA 122.

**DRMA 125 (5) S**  
**20/21st Century U.S. Theater & Race**

Course explores the cultural, critical, and artistic works of Native American, Black, Arab American, Asian American, and Latinx theater artists/performers from the 20/21st centuries. Course considers the socio-historical, aesthetic, and political contexts engaged through these artists' works. Course explores the relationship between the construction of identity and strategies of performance to describe race, gender, sexuality, class, subjectivity, and ideas of belonging in the U.S. imagination.

**DRMA 131 (5) C**  
**Introduction to Technical Theater**

Intro to the technical aspects of theatre: lights, sets, props and sound. Learn how these areas are created and managed and how each impacts a production. Work on the technical aspects of mainstage productions.

**DRMA 204 (5) C**  
**Introduction to Concert Dance - Jazz I**

Intro to the world of concert Jazz dance. Includes basic concepts and principles of Jazz technique, muscle strengthening and flexibility exercises, building vocabulary of connective movements and skills for basic auditioning and memorizing choreography.

**DRMA 205 (5) C**  
**Introduction to Concert Dance - Jazz II**  
Continuation of DRMA 204.**DRMA 206 (5) C**  
**Introduction to Concert Dance - Jazz II**  
Continuation of DRMA 205.**DRMA 284 (5) C**  
**Playwriting I**

Develop writing skills for one-act plays by exploring dramatic structure, character development and the author's stylistic voice. Learn the roles of director, dramaturge, actor and other theatrical artists in the writing process. Includes critical analysis of published plays, readings and critiques of student work. Prereq: ENGL& 101 placement or permission.

**DRMA 298 (1-5) C**  
**Individual Projects in Theater**

Individual projects in set design, lighting, costuming, directing, house management and acting, as determined by advanced drama students and the drama faculty. Prereq: Advanced standing, permission.

**Early Childhood & Family Studies/BAS****ECE 305 (3) N**  
**Early Childhood Education Approaches and History**

This course examines changes in early care and education over time; including social, political and societal trends. Current local, state, national and global trends will be compared and critiqued. Using a historical approach, students will analyze key influences in the field and reflect upon the diversity embedded in this field. Students will observe and differentiate between models of early care and education, and develop a personal teaching philosophy.

**ECE 310 (5) N**  
**Cognition and General Knowledge**

This course focuses on using learning theory and key concepts of cognition development in young children to design math/science curriculum. Students will describe how learning occurs for young children and critique learning theory. They will learn to apply learning theory to their instruction, and design strategies to teach math and science content based on the understanding of cognition and state guidelines for early learning. Prerequisite: Entry into the BAS program.

**ECE 315 (5) N**  
**Language, Literacy and Communication**

Examines methods of communication for children aged 0-8 years. Covers the development of communication skills and foundations of language and literacy. Using developmentally appropriate practice, students design and implement strategies to promote development of language, literacy and communication skills in an early learning setting. Includes analysis of approaches to instruction, development of curriculum and assessment of communication abilities. Prerequisite: Admission into ECE. Questions: Anne.garrett@seattlecolleges.edu or 206.934.4587.

**ECE 320 (3) N**  
**Creative Expression**

Students will analyze the meaning of creativity using music, art, movement, and imaginative play to promote development across domains (physical, cognitive, social-emotional). Students will examine different approaches to creativity, design curriculum incorporating creativity and demonstrate developmentally appropriate practices supporting creativity in the classroom. Prerequisite: entry into the ECE BAS program. Class meets at Seattle Central College, Broadway Edison Building, Room BE 3193. Questions: Anne.garrett@seattlecolleges.edu or 206.934.4587.

**ECE 350 (4) N**  
**Practicum: Interactions**

Students will analyze the meaning of creativity using music, art, movement, and imaginative play to promote development across domains (physical, cognitive, social-emotional). Students will examine different approaches to creativity, design curriculum incorporating creativity and demonstrate developmentally appropriate practices supporting creativity in the classroom. Prerequisite: entry into the ECE BAS program. Class meets at Seattle Central College, Broadway Edison Building, Room BE 3193. Questions: Anne.Garrett@seattlecolleges.edu or 206.934.4587.

**ECE 355 (5) N**  
**Anti-Bias Education**

Explore equity issues in early childhood education and reflect on biases present in ourselves, communities of practice and the systems in which our children live. Includes study of embedded bias and its impact on identity development and strategies to counter structural bias. Prerequisite: Entry into the ECE BAS program. Class meets at Seattle Central College, Broadway Edison Building, Room 3193. Questions: Anne.garrett@seattlecolleges.edu or 206.934.4587.

**ECE 405 (3) N**  
**Partnership and Collaboration in ECE**

Examines the impact of family and community on child development. Using the ecological theory, students will integrate family and community into an early learning program and demonstrate culturally responsive interactions with others. Explores the demographics of our communities and design and implementation strategies for partnership and collaboration with family and community organizations that support child development.

**ECE 410 (4) N**  
**Inclusive Early Childhood Education**

Examines models of inclusion in early learning settings across age groups. Covers the process for early identification of children with special needs and the development of strategies for providing appropriate education to a variety of learners (including children with disabilities, dual language learners, and children undergoing adverse childhood experiences). Compliance with state law and policy is included.

**ECE 415 (3) N**  
**Children and Media**

Examines appropriate use of media and technology in early learning settings. Explores various perspectives on using electronic media (computers, tablets, television, etc.) in early childhood programs using current research and recommendations. Policies on classroom use of media/instructional technology and strategies for communication of policies to families are included.

**ECE 420 (5) N**  
**Social and Emotional Foundations Early Learning**

Explores the dimensions of social and emotional development in children birth-8 and the relationship between social and emotional development and behavior. Students develop and apply strategies to support positive social and emotional development and demonstrate competency in teaching practice that promote positive behavior in early learning settings. Prereq: Entry into the ECE BAS program.

**ECE 430 (3) N**  
**Linguistically Diverse Learners**

Focuses on the language, literacy and communication skills of children who are dual language learners, ages birth through 8. Assessment and instruction strategies applied to early learning settings. Emphasis is placed on identifying, strengthening and building upon the family and community connections of young children who are dual language learners. Prerequisite: Entry into the ECE BAS program. Questions: Anne.garrett@seattlecolleges.edu or 206.934.4587.

**ECE 450 (5) N**  
**Child Development and Assessment**

Examines child development holistically and across physical, cognitive social and emotional domains. Includes the importance of play in child development. Covers planning and preparing an effective system of ongoing assessment to support child development and the appropriate use of screening and assessment tools. Prereq: Entry into the ECE BAS program.

**ECE 480 (5) N**  
**Leadership and Professional Community**

Examine the professionalization of the early care and education field. We will identify professional organizations and examine how they support children, families and early care and education professionals. We will look at national, state and local standard development and implementation as well as address the importance of advocacy for vulnerable populations. We will explore and contribute to professional development in a variety of formats in the ECE field. Prerequisite: Entry into the ECE BAS program.

**ECE 490 (5) N**  
**Capstone**

The culminating course in the Early Childhood Education BAS. Students will use an inquiry approach to research a specific area for improvement, and design and implement significant change in an educational setting. Students will reflect upon previous coursework, research and teaching practice to produce a culminating document that will include a revised teaching philosophy.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

## Early Childhood & Family Studies

### CFS 101 (2) C M.E.R.I.T. Seminar

A series of workshops and classes designed to support The Managed Education and Registry Information Tool known as MERIT, Washington State's system for professionals in the field of early care and education and school-age professionals. Meets the initial 20-hour State Training & Registry System (STARS) training requirement. (This course was previously numbered CFS 299.)

### CFS 215 (3) C Math and Science with Young Children

Explores the many ways young children integrate math and science concepts into their daily lives and how to support their classroom learning. Emphasis on promoting cognitive development, basic concepts of math and science taught during the early years, ways for supporting those groups typically underrepresented in the STEM fields. Prereq: Eligible for ENGL& 101 and MATH 084.

### CFS 225 (3) C Assessment & Programming

Covers approaches for assessing of the individual child, the family, an agency, and community, and developing programming for utilizing strengths and meeting needs. Prereq: Eligible for ENGL& 101 and MATH 084.

### CFS 228 (3) C Childhood/Adolescent Sexuality & Education

Explores biological sexual development and culturally specific responses to myths and misinformation common among children, youth and families. Covers strategies for incorporating accurate, culturally-sensitive information with families, children and youth. Explores issues of sexual-identity development including gender roles, sexuality, stereotypes and the impact of the media. Examines responses to teen-pregnancy and sexual abuse. Prereq: Eligible for ENGL& 101 and MATH 084.

### CFS 252 (3) C Violence Prevention

Examines the nature of violence in our community, including institutionalized violence, media violence, domestic violence, bullying, and gangs. Covers impact of prevention programs, strategies and methods for community-building and empowerment. Prereq: Eligible for ENGL& 101 and MATH 084.

### CFS 263 (3) C Children with Disabilities

Focuses on the social, emotional, physical, legal, historical and environmental issues which may affect children and youth with disabilities and their families. Explores strategies for supporting an inclusive learning environment for children, youth, and families. Prereq: Eligible for ENGL& 101 & MATH 084.

### CFS 280 (3) C Methods Cultural Relv/Anti-Bias:Child & Families

Specific strategies for working with all families and creating holistic, inclusive learning communities. Includes awareness and strategies for addressing bias. Prereq: HUM 105 and Eligible for ENGL& 101 and MATH 084.

### CFS 284 (3) C Literacy Development for Children & Families

Understanding and practical strategies for literacy development, home -to-school connection and supporting English language learners. Prereq: Eligible for ENGL& 101 and MATH 084.

### ECED& 105 (5) C | N Introduction to Early Childhood Education

Explore the foundations of early childhood education. Examine theories defining the field, issues and trends, best practices, and program models. Observe children, professionals, and programs in action. Students are required to work or volunteer directly with children.

### ECED& 107 (5) C | N Health, Safety, and Nutrition

Develop knowledge and skills to ensure good health, nutrition, and safety of children in group care and education programs. Recognize the signs of abuse and neglect, learn about responsibilities for mandated reporting, and learn about available community resources. This course requires students to work or volunteer directly with children outside of class time.

### ECED& 120 (2) C | N Practicum: Nurturing Relationships

In an early learning setting, students will engage in establishing nurturing, supportive relationships with all children and professional peers. Focus on children's health & safety, promoting growth & development, and creating a culturally responsive environment. This course requires students to spend time in an early learning setting outside of class.

### ECED 121 (4) C Practicum: Nurturing Relationships II

This is the second of three field practicum classes. Apply best practices for engaging in nurturing relationships with children in an early learning setting. Focus on keeping children healthy and safe while promoting growth and development. Prerequisite: ECED 120.

### ECED 122 (4) C Practicum: Nurturing Relationships III

This is the third of three field practicum classes. Apply best practices for engaging in nurturing relationships with children in an early learning setting. Focus on keeping children healthy and safe while promoting growth and development. Prerequisite: ECED 121.

### ECED& 132 (3) C | N Infants and Toddlers

Examine the unique developmental needs of infants & toddlers. Study the role of the caregiver, relationships with families, developmentally appropriate practices, nurturing environments for infants and toddlers, and culturally retentive care. Work/volunteer directly with children outside of class time.

### ECED& 134 (3) C | N Family Child Care

Learn how to manage a family child care program. Topics include: licensing requirements, record-keeping, relationship building, communication strategies, guiding behavior, and promoting growth and development. Students must spend time in an early learning setting outside of class.

**ECED& 139 (3) C | N**  
**Administration**

Develop administrative skills required to develop, open, operate, manage, and assess early childhood education and care programs. Explore techniques and resources available for Washington State licensing and National Association for the Education of Young Children (NAEYC) standard compliance.

**ECED& 160 (5) C | N**  
**Curriculum Development**

Investigate learning theory, program planning, tools and methods for curriculum development promoting language, fine/gross motor, social-emotional, cognitive and creative skills and growth in children birth through age 8 utilizing developmentally appropriate and culturally responsive practice.

**ECED& 170 (3) C | N**  
**Environments-Young Child**

This class focuses on the adult's role in designing, evaluating, and improving indoor and outdoor environments that ensure quality learning and nurturing experiences, and optimize the development of young children. This course requires the student to directly work/volunteer with children.

**ECED& 180 (3) C | N**  
**Language and Literacy Development**

Teaching strategies for language acquisition and literacy skill development are examined at each developmental stage (birth-age 8) through the four interrelated areas of speaking, listening, writing, and reading. This course requires the student to directly work/volunteer with children.

**ECED& 190 (3) C | N**  
**Observing and Assessment**

Collect and record observation and assessment data in order to plan for and support the child, the family, the group, and the community. Practice reflection techniques, summarizing conclusions, and communicating findings.

**ECED 250 (5) N**  
**Infant/Toddler Mental Health**

This course examines the dynamics of infant and toddler mental health development including attachment, trauma, toxic stress and lasting impacts of childhood experiences. Students will identify protective and risk factors for mental health in children from prenatal - 3 years of age. We will compare screening, and collaborative treatment strategies.

**Early Childhood Education****CCE 145 (1-4) N**  
**Music and Creative Expression**

Stimulates both beginning and experienced early childhood teachers to provide a wide variety of musical activities for children's active participation in movement and music making. Develop ease in supporting and leading musical activities while learning a method for selecting and planning a fun, creative and skill-developing music education program for preschool children and older toddlers.

**CCE 195 (3) N**  
**Art for Young Children**

Paint, draw and use clay to discover personal expression. After exploring these media themselves, class members review the components providing art experiences to young children, 3 to 8 years old. Class members conduct a series of art classes for children to practice facilitating children's self-expression in these fundamental art media. Students enrolling in this course should have access to early childhood settings and preschool-aged children. Observations of children and their environments is a requirement of the ECE Curriculum.

**CCE 200 (3) N**  
**Children and Nature**

Discover the joys of connecting young children with nature. Nature influences social skills, enhances learning, fuels imagination, instills a reverence for the environment and helps children with sensory integration deficit.

**CCE 240 (3) N**  
**Multicultural Dialogues in Early Childhood Educ**

Examines the concept of multiculturalism and how it relates to the ECE classroom. Through dialogues, readings and projects, students assess their beliefs, teaching environment and style in order to identify changes and promote respect for differences that accompany children and families.

**CCE 261 (1-6) N**  
**Readings in Early Childhood Education**

Individualized program of study relating to specific problem or content area under faculty supervision. Credits based on work accomplished. Prereq: Permission.

**Economics****ECON 100 (5) C | N**  
**Survey of Economics**

Examines basic principles of economics, determination of national prosperity, income distribution, the role of government, price determination, allocation of resources, economic systems and market behavior.

**ECON 101 (5) N**  
**Introduction to Economics in the World of Work**

Intro to economics. Covers how the process of work, job creation and compensation are affected by changing conditions, markets and institutional constraints.

**ECON& 201 (5) C | N | S**  
**Micro Economics**

Covers the concepts of production, consumption and distribution with emphasis on price determination, production costs and market structures. Application of economic reasoning to public issues and business.

**ECON& 202 (5) C | N | S**  
**Macro Economics**

Intro to the macroeconomic measures in the economy: GDP, unemployment and inflation. Examines monetary and fiscal policies and their effects on the interest rate and inflation. Covers economic growth and business cycles.

**Education****EDUC& 115 (5) C | N**  
**Child Development**

Build foundation for explaining how children develop in all domains, conception through early adolescence. Explore various developmental theories, methods for documenting growth, and impact of brain development. Topics and issues addressed: stress, trauma, culture, race, gender identity, socioeconomic status, family status, language, and health.

**EDUC& 130 (3) C | N**  
**Guiding Behavior**

Examine the principles and theories promoting social competence in young children and creating safe learning environments. Develop skills promoting effective interactions, providing positive individual guidance, and enhancing group experiences. Work/volunteer directly with children.



**EDUC& 136 (3) C | N****School-Age Care**

Develop skills to provide developmentally appropriate and culturally relevant activities and care, such as preparing the environment, implementing curriculum, building relationships, guiding academic/social skill development, and developing community outreach. Work/volunteer directly with children outside of class.

**EDUC& 150 (3) C | N****Child Family and Community**

Develop understanding about the family and community contexts in which a child develops. Explore cultures and demographics of families in society, community resources, strategies for involving families in the education of their child, and tools for effective communication. This course requires the student to directly work/volunteer with children outside of class time.

**EDUC 197 (1-5) C****Work Experience-Education**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply education knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**EDUC 198 (1-5) C****Work Experience-Education**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply education knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**EDUC 199 (1-5) C****Work Experience-Education**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply education knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**EDUC 200 (1-5) C | N****Peer Tutoring**

Tutor training and/or experience. Focus on tutoring techniques and problems in any setting. For more information contact Division offices in Humanities, Math & Science, Allied Health, Business, or Education on your campus.

**EDUC& 202 (5) C****Introduction to Education**

Intro to the Elementary Education profession. Overview of the education profession and U.S. educational system, including historical development, social foundations, and diversity of educational institutions. Focus on the K-8 system. Includes current theories, trends and issues in education and the community, roles and responsibilities of teachers, learners, and other school personnel. Prereq: ENGL 080 or permission.

**EDUC& 203 (3) N****Exceptional Child**

Formerly CCE 113 Human Exceptionalities) Requirement for Early Childhood Education degree. This course emphasizes diversity and a value-based approach to human exceptionality and disability using a lifespan view. An historical perspective covers current trends and practices in early intervention, special and general education, and life-long supports for individuals with disabilities and their families. For questions contact the Health and Human Services Division at (206) 934-3783.

**EDUC& 205 (5) C****Introduction to Education with Field Experience**

Intro to K-12 education. Explores the complexity and dynamics of today's K-12 education environment. Includes suggestions for all-inclusive teaching methods geared toward the increasingly diverse multi-ethnic, multi-cultural and multi-lingual student population. Covers the new federal education bill, as well as the state of Washington student learning goals including the Essential Academic Learning Requirements (EALRS) for student learning.

**EDUC 219 (5) N****Practicum: Instructional Interactions**

This is the second practicum course in the early childhood education program. In an early learning setting, students will apply developmentally appropriate practices to engage in supportive relationships and instructional interactions with children. Focus on positive interactions that promote child outcomes across early learning domains. Requires the student to directly work/volunteer with children. Prerequisites: ECED& 105, ECED& 107, and ECED& 120.

**EDUC 222 (5) N****Math and Science Methods in ECE**

Explores the development of math and science concepts in young children. Methods for supporting key foundational skills in math, science and cognition will be researched and applied to early learning settings. Culturally and developmentally appropriate assessment techniques will be discussed and practiced. Focus on promoting positive math and science identities, particularly for traditionally underrepresented groups in STEM fields.

**EDUC 234 (3) N****Relationship Based Peer Mentoring in ECE**

This course examines the foundations of relationship based peer mentoring in early care and education settings. Students will discuss and apply best practices in relationship based adult learning, communication, cultural responsiveness, reflective practice, ethics and professionalism.

**EDUC 271 (5) C****ESL Reading/Language Arts**

Learn methods of assessment, placement and instruction of ESL students in reading and language arts. Focuses on instructional techniques for the literacy level and age of the ESL student and on integration of reading and language arts.

**EDUC 272 (5) C****Integrating ESL in the Mainstream Classroom**

Specifically for the teacher with bilingual and monolingual students in the same classroom. Overview of current theories of language acquisition with a focus on practical instructional strategies. Covers a wide repertoire of strategies drawn from bilingual, ESL and mainstream methodologies.

**EDUC 291 (1-10) C****Using the World as a Classroom**

Provides a unique opportunity to earn credit for various travel/study experiences in an international setting.

**Electrical Engineering****EEL 152 (1-9) S****Puget Sound Electrical JATC-3rd Year Apprentice**

Covers aspects of the electrical industry in theory, pipe bending motor control, N.E.C., electronics, transformers, safety, first aid, and wiring methods. Prereq: indentured in the Seattle Construction Electrician apprenticeship program. EEL 152A: 6 credits; EEL 152B: 6 credits; EEL 152C: 3.5 credits.



**EEL 153 (1-9) S**  
**Puget Sound Electrical JATC-4th Year Apprentice**

Covers aspects of the electrical industry in theory, pipe bending motor control, N.E.C., electronics, transformers, safety, first aid, and wiring methods. Prereq: indentured in the Seattle Construction Electrician apprenticeship program. EEL 153A: 6 credits; EEL 153B: 6 credits; EEL 153C: 3.5 credits.

**EEL 154 (1-10) S**  
**Puget Sound Electrical Apprentice - 5th Year**

To cover aspects of the electrical industry in theory, pipe bending motor control, N.E.C., electronics, transformers, safety, first aid, and wiring methods.

**EEL 201 (5) N**  
**Energy Generation, Conversion and Sustainability**

This first course in Industrial Power and Control Technology covers the principles of electrical machines (AC and DC rotating equipment, including wind turbine technology) used in electrical generation and conversion to mechanical energy. The course reviews fundamentals of electricity, magnetism, transformers, and single-phase circuits: three-phase circuits are introduced. Prerequisites: EET109 or MATH&141 and EET 162.

**EEL 202 (5) N**  
**Industrial Motor Controls and Drives**

This Industrial Power and Control Technology course covers electromagnetic and electronic control and drive devices and circuits used for starting, accelerating, stopping, reversing, and protecting industrial AC and DC motors. Prerequisites: EET 109 or MATH&141 or equivalent, and EET 161.

**EEL 203 (5) N**  
**Programmable Logic Controllers**

This course describes the fundamentals of programmable logic controller (PLC) systems, including how PLCs work and providing practical information and skills about installing, programming, and troubleshooting PLC systems.

## Electronics

**EET 105 (2) N**  
**Introduction to Technology**

Survey disciplines within the field of electronics and technologies related to electronic occupations to give students a knowledge of the standards, practices and skills necessary for employment in electronic-related occupations. Guest speakers, field visits, reading, media or general discussion with class members. Computer Fee.

**EET 106 (1) N**  
**Introduction to Soldering**

Beginning electronics support course providing the student with information and skills to safely perform soldering tasks in the field. The student will acquire skills to remove components and replace them without causing damage to either the component or the Printed Circuit Boards (PCB's). The student will learn the techniques to select the proper solder, soldering aids, tools, and other associated test equipment. Prerequisite: EET 160 or EET 161 or instructor permission.

**EET 107 (5) N**  
**Introduction to Aviation Electronics**

Presents an overview of aviation electronics and the instrumentation commonly found in commercial aviation. Includes an introduction to schematic reading, OSHA/FAA/Basic electrical safety, tools and basic connectors, plugs, cables and wiring, shielding. Prerequisite: EET 162 or instructor permission to take EET 162 concurrently during the same quarter.

**EET 108 (5) N**  
**Introduction to Fiber Optics**

Introduces fiber optics theory and maintenance as applied to Information Technology, Aerospace, Broadband and generic use. Emphasis on hands on labs using industry standard diagnostic test equipment, safety, routing, installation, cleaning, measurement, and inspection processes. Prepare for FOA certification. Prerequisites: Math 081 or placement into Math 084 or instructor permission. Computer Fee.

**EET 109 (5) N**  
**Mathematical Applications for Circuit Analysis**

This is an overview of basic mathematical applications for electronic circuit analysis. Includes fundamental concepts of operations with numbers, the metric system, fundamental algebraic concepts, graphing, exponential and logarithmic functions, right angle triangles, basic trig functions, vectors and complex numbers. Prerequisite: MATH 081 or equivalent.

**EET 112 (5) N**  
**Fundamentals of Fluid Power**

Introduction to fluid power systems used in industry. Covers fundamentals of hydraulic and pneumatic systems including fluid power components and schematic diagrams. Includes electrical/electronic control of fluid power systems and information on several electro-hydraulic servo systems. Prereq. EET 109 or MATH& 141 or higher.

**EET 114 (5) N**  
**Applied Physics**

Physics for students in a vocational technical field. Covers the basic laws of physics as applied to mechanics, matter and heat, wave motion and sound, electricity and magnetism, light and modern physics. Includes physical concepts as applied to industrial-technical fields. Prereq: EET 109 or MATH& 141.

**EET 131 (5) N**  
**IT Essentials I - A+ Certification**

This course is part one of a two course series that addresses the body of knowledge required for the current CompTIA A+ Certification test. The emphasis is on the fundamentals of installing, maintaining and configuring, computer hardware, operating systems, networks and security.

**EET 132 (5) N**  
**IT Essentials A+ Certification Advanced**

Part two of A+ Certification. The emphasis is on advanced aspects of installing, maintaining and configuring, computer hardware, operating systems, networks and security systems. Prerequisites: EET 131 or permission.

**EET 135 (5) N**  
**Introduction to Broadband**

Introduction to broadband cable technologies, theory and skills required for technicians working in the broadband industry, including HDTV, high speed internet and telephony. Training is adapted from the Society of Cable and Telecommunications Engineers (SCTE) with input from local cable providers. Prerequisites: EET 131, EET 160 or EET 161 or instructor permission.

**EET 137 (5) N**  
**Introduction to Robotics**

**\*\*Please Note:** This course replaces EET 136\*\* This course introduces foundational concepts in building and programming robots. Students build, program and configure a robot using various electronic devices to enable a wide variety of robotic activity. Prereq. MATH 081 or placement into MATH 084 or higher. Computer Lab Fee

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**EET 138 (5) N**  
**Industrial Robotics**

An introduction to industrial robotics, including the application, programming, troubleshooting, and servicing of state-of-the-art industrial robots and associated end effectors, sensors, and systems. Prerequisite: EET 137 or instructor permission.

**EET 160 (5) N**  
**Introduction to Electricity and Electronics**

This course provides a survey of electricity and electronics fundamentals through theory presentations and hands-on laboratory experiments. It is intended for students pursuing the mechatronics degree (offered in conjunction with Shoreline Community College) or certificate options, as well as those interested in what electricity and electronics are about. EET 160 also is valuable as a refresher course for those with related previous knowledge who wish to return to the field.

**EET 161 (5) N**  
**Principles of DC Electronics**

Covers physics as applied to electricity and magnetism, electrical and electronic terms and units. Intro to electronic measuring devices, electrical circuits, magnets, magnetism, meter movements and DC circuit analysis. Prereq: High school algebra.

**EET 162 (5) N**  
**A.C. Principles of Electronics**

Second course in a series designed for an in-depth study of electronics. Covers the sinusoidal waveform, its generation and measurement, and basic AC topics including frequency, inductance, capacitance, reactance, resonance, filters, transformers. Computer models, as well as labs with the oscilloscope, are used throughout. Prerequisite: EET 161 and EET 109 or MATH& 141 or instructor permission to take EET 109 or Math& 141 concurrently during the same quarter.

**EET 163 (5) N**  
**Solid State Electronics**

Analysis of characteristics of analog semiconductor devices and their applications in common electronic circuits. Course begins with construction of simple power supplies and moves to more complex amplifier circuits. Construction and measurement of devices and circuit parameters verify math analysis of circuits explored. Prerequisites: EET 162 or instructor permission.

**EET 165 (5) N**  
**Analog Circuits and Devices**

Continued analysis of characteristics of semiconductor devices and their applications in common electronic circuits. Explanation and analysis of field-effect transistors (FETs), thyristors, and operational amplifiers, their nomenclature and identification, characteristics, parameters, and basic circuit applications. Explanation and analysis of special-purpose diodes (particularly the zener) and their applications. Prerequisite: EET 163 or instructor permission. Computer Fee.

**EET 166 (5) N**  
**Analog Circuits and Devices II**

Further study of common analog devices, circuits and subsystems in the fields of communication and industrial controls. Prereq: EET 165 or equivalent.

**EET 170 (5) N**  
**Digital Electronics & Plcs I**

Fundamentals of digital electronics and interface circuits. Course covers number systems, logic gates, Boolean algebra and logic simplification (including DeMorgan's theorems and Karnaugh maps), encoders and decoders, multiplexers and demultiplexers, and an introduction to flip-flops, and an introduction to programmable logic controllers (PLCs). Prerequisite: EET 161 or instructor permission. Computer fee.

**EET 171 (5) N**  
**Digital Electronics & Plcs II**

Fundamentals of digital electronics and interface circuits, continued. Course covers flip-flops, shift registers, counters and state machines, multivibrators (including the 555 timer IC), programmable logic, data storage and memory, analog-to-digital and digital-to-analog conversion and interfacing applications, introduction to microprocessors and programmable logic controllers (PLCs). Prerequisite: EET 170 or instructor permission. Computer fee.

**EET 201 (5) N**  
**Energy Generation and Conversion**

This course covers principles of AC and DC rotating equipment used in electrical generation and conversion to mechanical energy. The course reviews fundamentals of electricity, magnetism, transformers, and single-phase circuits; three-phase circuits are introduced. Prerequisites: EET 109 or MATH&141 or equivalent, and EET 162. Course Prerequisite(s): EET 109 or MATH&141 or equivalent, and EET 162

**EET 202 (5) N**  
**Industrial Motor Controls and Drives**

This Industrial Power and Control Technology course covers electromagnetic and electronic control and drive devices and circuits used for starting, accelerating, stopping, reversing, and protecting industrial AC and DC motors. Prerequisites: EET 109 or MATH& 141 or equivalent, and EET 161.

**EET 203 (5) N**  
**Programmable Logic Controllers**

This course describes the fundamentals of programmable logic controller (PLC) systems, including how PLCs work and providing practical information and skills about installing, programming, and troubleshooting PLC systems. Prerequisite: EET 161 or instructor permission.

**EET 219 (3) N**  
**Metrology and Measurement Science**

This course provides an introduction to the foundational knowledge and skills required for the Certified Calibration Technician Certification administered by the American Society for Quality (ASQ). The ASQ has additional requirements for work experience that candidates must fulfill before they are eligible to take the exam; check with the ASQ for more information. Prereqs: EET 114 and EET 162 or instructor permission.

**EET 285 (3) N**  
**Electronics Tech Project**

Team project course serving as a capstone experience in the electronics technology and related specialty programs. Plan, design, implement, and present an electronics-oriented project of suitable complexity. Prereq: EET 171 and 166

**EET 286 (5) N  
Biomedical Equipment I**

This course covers the devices, circuits, and concepts specific to the healthcare environment, including theory and operation of equipment used for patient care. Emphasis is given to patient-connected equipment, including monitors for cardiovascular, respiratory, and neurological parameters; thermometry; and electrical safety. Lab exercises emphasize maintenance, troubleshooting, repair, and calibration of such equipment. Prerequisites: EET163, AMA 117, CHEM 121, and AMA 119 or BIOL 128.

**EET 287 (5) N  
Biomedical Equipment II**

This course continues the study of medical technology begun in EET 286, with a focus on equipment specific to the surgical setting, medical video, medication pumps, medical lasers; an overview of various imaging modalities; and technology used in the clinical laboratory. Lab exercises emphasize maintenance, troubleshooting, repair, and calibration of such equipment. Prerequisite: EET 286 with a grade of 2.5 or higher.

**EET 291 (1-6) N  
Electronics Internship**

On-the-job training for electronics students who have finished their electronics certificate requirements and would like to improve their skills before actively seeking a job. (55 hours of job-related work experience = 1 credit.) Prereq: Completion of appropriate amount of designated program and permission.

**EET 297 (4) N  
Biomedical Technician Externship**

Work experience in a hospital, clinic, equipment manufacturer or laboratory is critical to job placement in the biomedical field. This course is designed to supply students with that experience.

**EET 298 (1-5) N  
Special Topics-Electronic Technology**

Selected topics in electronics technology. Content and projects vary depending on topics. Instructor permission required.

**Emergency Department Tech****EDT 101 (4) N****Emergency Department Technician Fundamentals**

Provides the theoretical background needed for emergency department technicians to provide basic patient care and assist with the various procedures common to the emergency department. Permission required. For questions and to register contact: Doug.harrell@seattlecolleges.edu or (206) 934-3749

**EDT 102 (2) N****Emergency Department Tech Phlebotomy Basics**

This course will provide the students with the skills and techniques used by Emergency Department Technicians (EDT) Daily. This covers basic responsibilities, procedures, and diagnostics testing. Prereq: Successful completion of EDT 101 and EDT 103 with a 2.0 or better or permission from EDT coordinator. Corequisite: EDT 104 Emergency Department Technician Lab Skill II and EDT 105 Practicum.

**EDT 103 (4) N****Emergency Department Technician Lab Skills**

Provides the students with the skills and techniques used by emergency department technicians on a daily basis. Permission required. For questions and to register contact: Doug.harrell@seattlecolleges.edu or (206) 934-3749

**EDT 104 (3) N****Emergency Department Tech Advanced Phlebotomy**

This course will provide the students with the advanced skills and techniques used by Emergency Department Technicians (EDT) in an Emergency Department (ED) or Urgent Care setting. Prereq: Successful completion of EDT 101 and EDT 103 with a 2.0 or better, and permission of EDT coordinator. Corequisite: EDT 102 Emergency Department Technician Skills II and EDT 105 Practicum.

**EDT 105 (4) N****Emergency Department Technician Skills II**

This course will give the student the opportunity to apply theory and practice skills acquired in the program - while gaining experience in an actual emergency department. Working in this clinical environment, the student will be supervised by a member of the emergency department. The students will also interact with each other, through guided discussions, to share and learn from the experience of others. Prereq: Successful completion of EDT 101 and EDT 103 with a 2.0 or better, currently enrolled in EDT 102 and EDT 104 with a 2.0 or better, and permission of EDT coordinator. Corequisite: EDT 102 and EDT 104.

**EDT 106 (3) N****Emergency Department Technician Practicum**

This course will give students the opportunity to learn theory and apply practice skills acquired in the program by participating in clinical practice in an Emergency Department (ED) or Urgent Care setting as an EDT. While working in the clinical environment, students will be supervised by a site preceptor or a staff member of the ED.

**Employment Training****WET 100 (1) C | N | S****Employment and Education Preparation**

This course covers a variety of job-hunting and educational planning techniques: how to identify personal skills and focus a job search, where and how to look for jobs, resume writing, cover letters, job applications, interviewing techniques, portfolio preparation, preparing and submitting the FAFSA, a survey of the resources and services provided by the college, educational interests and styles, barriers to education, and educational goal setting.

**WET 102 (1) S****Roadmap to Success**

This course introduces work habits and skills development, along with workshop practice on resumes, interviewing, financial literacy, and goal setting.

**WET 105 (1-10) C | S****Education and Career Exploration**

Provides effective strategies and skill building to make informed academic and career decisions. Students explore education programs and careers compatible with skills, interests, values, and goals. Career resources are explored, evaluated, and implemented in the development of an education and work plan and portfolio. Prereq: ENGL 092 or ESL 093 with a minimum GPA of 2.0.

**WET 150 (1-12) S****Computer/Employment Training**

140 contact hours of computer training, employment readiness, study skills, skill and interest assessment for dislocated workers.

**Engineering****ENGR 110 (2) C | N | S****Engineering Orientation**

Covers fields of engineering, career options and general information.

**ENGR& 111 (4) S****Engineering Graphics I**

Covers principles of orthographic projection, freehand sketching, pictorials, lettering, scales and use of instruments, basic dimensioning and descriptive geometry. Intro to computer-aided and designed drafting. Prereq: MATH& 141.

**ENGR& 112 (4) S****Engineering Graphics 2**

Continuation of ENGR& 111. Includes basic principles of revolution and principles used to solve problems relating to curved and warped surfaces; intersection of surfaces; development of common shapes and surfaces; and procedures for finding the locus of a line. Prereq: ENGR& 111.

**ENGR 115 (5) S****CAD Cnc Plasma Table Programming and Operation**

Programming, maintenance and proper use of computerized cutting system such as CNC plasma cutters, laser cutters, routers, and mills using G code. Includes basic 2D and 3D CAD instruction.

**ENGR 116 (4) S****Engineering Design and Creativity**

Examine the nature of creativity and its process. Intro to analysis and solution of engineering problems, applications of vectors and calculus in statics and dynamics.

**ENGR 141 (5) S****Scientific Programming**

Covers problem analysis, algorithm design, numerical techniques and the elements of programming using MATLAB or similar high-level programming language. Emphasis on learning how to write clean, efficient and well-documented programs for modeling of scientific and engineering problems. Prereq: MATH& 142 or higher.

**ENGR 142 (5) C****Computer Programming**

Central: Learn the general principles of modern programming, including how to design, implement, document, test and debug computer programs. Based on Java. Covers objects, messages, expressions, statements, methods, classes, conditionals, iterations, arrays and collections. Prereq: CSC 110 and MATH& 141 (C). ENGR 142 may be taken as CSC 142. South: Intro to computer science for scientists and engineers. Emphasizes design, algorithms (variables, expressions, statements), abstraction (data types, functions) and analysis (correctness, efficiency). Prereq: CSC 110 and MATH& 141 (S). ENGR 142 May be taken as CSC 142.

**ENGR& 204 (5) C | N | S****Electrical Circuits**

Covers basic circuit and systems concepts. Includes resistors, sources, capacitors, inductors and operational amplifiers. Includes solution of first- and second-order linear differential equations associated with basic circuit forms. Prereq: PHYS& 222 and MATH& 152. Transfer class

**ENGR& 214 (5) C | N | S****Statics**

Basic concepts, resultants, force-couple relationships, equilibrium analysis, three-dimensional structures, two-dimensional frames, trusses, beams, friction, and geometric properties of area. Vector algebra used.

**ENGR& 215 (5) C | N | S****Dynamics**

An in-depth treatment of the dynamics of particles and rigid bodies using vector analysis. Topics include kinematics, kinetics, momentum, and energy principles for both particles and rigid bodies. A required course for numerous engineering programs. PREREQUISITE: ENGR& 214, MATH& 152 and PHYS& 221. Transfer class.

**ENGR& 224 (5) C | N****Thermodynamics**

Intro to thermodynamics from a macroscopic point of view. Development of the laws of thermodynamics and application to energy transformations and state changes. Prereq: MATH& 153, PHYS& 222 and CHEM& 161.

**ENGR& 225 (5) C | N | S****Mechanics of Materials**

Covers basic relationships between axial, torsional, bending, and shear loads acting on solid elements such as rods, shafts, columns, and beams and their allowable stress, strains and deformations(axial deformation, angle of twist, and deflection). Mohr's circle of stress.

**ENGR 240 (5) C | N****Introduction to Numerical Methods**

Covers numerical solutions to engineering problems using modern scientific computing tools. Includes intro to MATLAB programming, matrix algebra, finding roots, curve-fitting, integration, differential equations. Prereq: MATH& 152 and CSC 110.

**ENGR 299 (1-5) C | N****Independent Study**

Independent study of approved engineering topics. Prereq: Permission.

**Engineering Graphics & Design Technology****TDR 100 (5) N****Basic BIM for Design and Construction**

Introduces basic Building Information Management/Modeling(BIm) practices using Autodesk's Revit and Bentley's Microstation programs. Focuses on familiarization with BIM environment including drawing commands, efficiencies of CAD vs. BIM and integration of green analysis software with BIM software. Emphasis placed on developing production skills.

**TDR 101 (5) N****Intermediate BIM for Design and Construction**

Covers drafting techniques for structural design using BIM with Autodesk's Revit Structure. Work with beam, column, structural details, schedules and analysis of all structural members. Lab. Prereq: TDR 100 or permission.



**TDR 102 (5) N****Advanced BIM for Design and Construction**

Focus on whole commercial building creation, including details, construction drawings, building management and plotting as they relate to construction, design and sustainable applications. Focuses on Revit Architecture, MEP and Structure. Lab. Prereq: TDR 101 or permission.

**TDR 103 (4) N****Energy Analysis Fr Building Information Modeling**

Continuation of TDR 102. Focuses on building Life Cycle Assessment (LCA), Building for Environmental Economic Stability (BEES), building envelope considerations, achievable green performance and use of green analysis software. Prerequisite: TDR 100, 101 and 102 or permission.

**TDR 105 (1) S****Technical Employment Preparation**

Intro to the pre-employment components of the CAD / Design program. Covers job search techniques including resume writing, cover letters, job applications, interviewing techniques, industry visits, and portfolio preparation. Prereq: ENGL 105. Coreq: TDR 123.

**TDR 109 (1) N****Architectural Engineering Lab**

A supervised drafting development lab where students can work on class projects to increase speed and competency and hands-on skills using software or hand drafting techniques. May be repeated. Computer Fee.

**TDR 111 (5) N****Basic CAD Drafting for Construction and Design**

Introduces basic Computer Aided Drafting practices using Autodesk's AutoCAD program. Focus will be on drawing commands, layering, scaling, dimensioning and text styles as used in construction/design applications. Emphasis placed on developing production skills. The first of a two-class sequence. Open Lab. Computer Fee.

**TDR 112 (5) N****Intermediate CAD Drafting/Construction & Design**

Continuation of TDR 111. Focuses on team usage of external sources, creation of blocks, paper space/model space, file management and exchange and plotting as it relates to construction/design applications. May introduce isometrics and 3-D concepts. Emphasis on production skills. PLEASE NOTE: This class is typically offered only ONE time per year: Winter quarter (typical class offerings may change depending on student enrollment and other factors).

**TDR 113 (5) N****Basic Drafting**

Learn the basic fundamentals of hand drafting. Focus on drafting equipment and its use, basic linework, hand lettering, orthographic projections, isometrics and basic sheet layout. Select discipline options including structures for construction/design or basic mechanical drawings. Open lab.

**TDR 115 (5) N****Civil and Site Drafting**

Study development of site plans including basic contours, utility features, simple road layout and storm drainage features. Perform simple calculations.

**TDR 121 (4) S****Drafting Technology I**

Covers basic drafting knowledge, skills and standards required to prepare three-view and pictorial drawings to current industry standards. Prereq: COMPASS or SLEP test.

**TDR 123 (4) S****Drafting Technology II**

Covers basic principles and practices involved in the creation of production drawings including dimensions and tolerancing, sections and auxiliary views. Emphasizes standard practices and variations permitted when required for clarity. Prereq: TDR 121 or permission.

**TDR 124 (5) N****Materials and Methods of Construction**

Introduces the basic materials used in construction, with discussion on manufacturing, fabrication, design and assembly processes for large and small buildings. Focus on steel, concrete wood and masonry construction.

**TDR 125 (4) S****Drafting Technology III**

Advanced principles, techniques and application of engineering graphics including advanced dimensioning & tolerancing, detail and assembly drawings. Emphasis on standard practices ANSI, ASME or ISO and variation permitted when required for clarity. Prereq: TDR 123.

**TDR 126 (4) S****Space Geometry**

Covers basic principles of space geometry and use of direct projection techniques to resolve spatial relationships. Emphasizes projection techniques and application of principles to problem solutions. Prereq: TDR 121 or permission.

**TDR 129 (3) S****Industrial Blueprint Reading**

Primarily for the machinist. Covers the detail drawing page, title block, dimensioning, tolerancing, views of a drawing, drawing notes, drawing changes and geometric tolerancing.

**TDR 131 (4) S****Introduction to CAD 2-D**

Learn the features, limitations and considerations associated with the operation of a computer-aided design/drafting (CAD) system. Practice using the AutoCAD micro-based CAD software. Prereq: TDR 121 or concurrent enrollment.

**TDR 133 (4) S****Intermediate CAD 2-D**

Builds on skills developed in TDR 131, providing students with additional instruction on advanced commands of the AutoCAD micro-based CAD software. Prereq: TDR 131.

**TDR 134 (5) N****Systems in Buildings**

Focuses on the major building systems including HVAC, water and waste, fire protection, electrical and structural. Introduces the Uniform Building Code, type of construction and history. Includes heat loss calculation and lateral loads and their resisting elements. Includes Earth work and Foundations. PLEASE NOTE: This class is typically offered only ONE time per year: Winter quarter (typical class offerings may change depending on student enrollment and other factors).

**TDR 135 (4) S****AutoCAD 3-D Modeling**

Intro to computer-based three dimensional modeling. Explores the fundamental concepts and workflows for creating 3-D models using AutoCAD, using industry-specific design scenarios. Prereq: TDR 133 or permission.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**TDR 144 (5) N****Design and Construction Environment**

Introduces basic organizational, business and legal aspects of the construction/design industry. Includes business forms, contractual obligations, employment issues, registration duties to the public, safety and other issues, which may affect business.

**TDR 160 (5) N | S****Applied Mechanics I**

Designed primarily for the non-engineering students, covering basic concepts of force systems, equilibrium, moments, centroids, moments of inertia, and simple beam design as applied to structural steel. Includes loading criteria, tributary loads and deflection.

**TDR 161 (5) N****Applied Mechanics II**

A continuation of TDR 160. Covers basic wood beam design. Includes allowable stress, loading criteria, shear and deflection. Covers basic truss analysis.

**TDR 169 (4) S****CAD - Electrical**

Covers basic skills in electronic schematic drafting using 3D CAD capabilities. Learn drafting styles used in electrical plans, such as power stations, industrial and house wiring. Use layout symbols for electric power systems and plot plans for residential/commercial electrical plans. Emphasis on real world applications to engineering problems. Prereq: TDR 131 and MATH 112 or permission.

**TDR 170 (5) N****Introduction to Design for 3d Printing**

This course will introduce students to Design for manufacturing processes by using 3D models designed in programs such as AutoCAD, Solidworks, etc. This course will also familiarize students with the processes and proper usage of 3D printers and slicing software. Introduction to various new design software used for 3D printing.

**TDR 171 (5) N****Introduction to Solidworks**

Intro to basic parametric solid modeling practices using SolidWorks or comparable programs to industry standards. Learn engineering graphics in the 3D environment including drawing commands, efficiencies of PSM vs. the 2D environment. CAD or 3D experience recommended.

**TDR 172 (5) N****Intermediate Solidworks**

Focuses on the drawing standards for framing plans, sections and details with an emphasis assemblies on structural steel framing reinforced concrete framing, foundations and retaining structures. Prereq: none

**TDR 173 (5) N****Advanced Design for 3d Printing**

Continued application of 3D printing in the creation of prototypes to show ideas and concepts in a tangible way. Attention on advanced post-processing techniques for 3D prints and building sophisticated print jobs in Simplify 3D. Significant practice troubleshooting and problem solving designs and 3D prints. Prerequisite to this course is TDR 170 (Introduction to Design for 3D Printing).

**TDR 176 (4) N****Advanced AutoCAD for Arch & Engineering Drafting**

Student will be introduced to advanced concepts of AutoCAD. Course continues skill-building with the AutoCAD program and offers instruction and hands-on practice in the development of productivity tools such as macros, templates, and system customizing. In addition, students will begin to work in 3D (three dimension). Prerequisite: TDR 112 or Permission of instructor. Computer Fee.

**TDR 179 (4) S****CAD - Mechanical**

Covers techniques used to prepare mechanical engineering drawings: basic mechanism geometry, detail and assembly drawings, emphasis on appropriate presentation of data. Prereq: TDR 123 & TDR 131

**TDR 197 (1-5) S****Internship**

Provides practical work experience and employment contacts by integrating academic studies with actual on-the-job training situations. Orientation to internships required prior to registration. Prereq: Permission.

**TDR 200 (5) N****Introduction to Solidworks**

Intro to basic parametric solid modeling practices using SolidWorks or comparable programs to industry standards. Learn engineering graphics in the 3D environment including drawing commands, efficiencies of PSM vs. the 2D environment. CAD or 3D experience recommended.

**TDR 201 (5) N****Introduction to CATIA**

This course will focus on students wanting to become a technical designer with emphasis in part creation, assemblies and minor surface commands. These are key elements of Catia and will be built upon on subsequent classes. Student should have strong skills in CAD applications that pertain to 3D and Solid Modeling.

**TDR 202 (5) N****Intermediate CATIA**

This course will focus on students wanting to become a technical designer building upon what was learned in TDR 201 with emphasis in advanced surfacing. The student should have advanced skills in various CAD applications as it pertains to 3D and solid modeling. Prereq: TDR 201 or instructor permission.

**TDR 228 (4) S****CAD Sheet Metal/HVAC**

Understand CAD operation including interactive graphics systems start-up, setup of drawing session, menus and commands, geometry, editing, drawing storage and retrieval using the latest version of AutoCAD. Prereq: TDR 123 & TDR 131 or permission.

**TDR 230 (4) S****CAD 3-D Parametric Solid Design I**

Intro to the capabilities of the 3D CAD software, using a feature-based parametric solid modeling design with many industry applications. Covers true 3-D surfaces and 3-D viewing options, the use of X, Y, Z filters and the user-defined coordinate system (UCS). Prereq: TDR 123 and 131.

**TDR 231 (4) S****CAD 3-D Parametric Solid Design II**

Explores 3-D graphics and construction capabilities of 3D CAD. Includes a review of point coordinate entry, X, Y & Z filters and the user coordinate system (UCS). Intro to spherical and cylindrical coordinate entry along with 3-D viewing options, 3-D geometry construction, surface mesh, region and solid modeling. Prereq: TDR 230 or permission.

**TDR 236 (1) S****Design Project Management**

Integration of basic elements of a design project: design process, teamwork, project planning and management and project presentation. Prereq: TDR 233 or 235, TDR 231 and MET 102.

**TDR 237 (2) S****Design Project I**

Practical application course utilizing previously acquired skills. Concentration on the civil aspects of a major design project. Prereq: TDR 236 or permission.

**TDR 238 (2) S****Design Project II**

Practical application course utilizing previously acquired skills. Concentration on the aspects of a major design project.

**TDR 240 (4) S****Introduction to CATIA**

Intro to CATIA (Computer Aided Three Dimensional Interactive Application). Gain understanding of the CATIA interface and how to use CATIA to create solid models of parts, assemblies and drawings. Understand how to manage parts in the context of an assembly. Produce simple parts drawings and assemblies. Prereq: TDR 135 or permission.

**TDR 241 (4) S****Intermediate CATIA**

Expand skills and techniques using advanced features of computer-based 3D modeling. Produce the parts, drawings and assemblies, surfacing and sheet metal drafting. Prereq: TDR 228 and 240 or permission.

**TDR 243 (4) S****Basic Tool Design**

Study locating and clamping of parts so that they can be formed, machined, or assembled with very simple tools or with automated machinery. Design projects include simple jigs and fixtures as well as automatic machinery tooling. Prereq: TDR 179 and 135 or permission.

**TDR 245 (4) S****Design of Machine Elements**

Intro to the vast field of machine design. Covers machine design principles and calculations to determine the strength, size and shape of various machine parts, such as bearings, shafts and couplings, gear drive systems, clutches and brakes. Includes loads of various types. Prereqs: TDR 179 and 272 or permission.

**TDR 263 (4) S****Applied Mechanics I**

Graphical methods for determining resultants and equilibrants in coplanar, parallel and non-parallel force systems, such as beams and trusses. For drafting majors. Prereq: MET 102 or permission.

**TDR 268 (4) S****Architectural/Structural**

Design considerations and drawing preparation required to construct a frame and masonry building. Includes floor plans, elevations, structural details, mechanical and electrical requirements. Prereq: Second-year standing or permission.

**TDR 269 (5) N****Construction Estimating**

Intro to quantity take-offs and pricing of materials by working on problems common to the general contractor. Focus on creating an ordered method of determining material and labor costs and other factors.

**TDR 272 (4) S****Applied Mechanics II**

Covers structural material strength and basic calculations involved when loading structural members and joints. For drafting majors. Prereq: TDR 263.

**TDR 280 (4) S****Geometric Dimensioning & Tolerancing**

Basic interpretation of geometric tolerances on engineering drawings. All studies are based on ANSI Y14.5M-1982. Prereq: TDR 179.

**TDR 297 (1-10) N****Special Topics in Const Design Drafting with CAD**

Students with solid AutoCAD skills will be introduced to Architectural Desktop, one of Autodesk's specialized versions of the AutoCAD program. Focus will be on utilizing the special tools and commands to create flexible computer models and drawing sets for construction/design applications. Emphasis placed on developing production skills. Completion of TDR 174 and 175 OR TDR 111 and 112 OR instructor permission.

**TDR 298 (1-10) N | S****Special Topics, Drafting**

Individual or group study in industrial drafting. Prereq: Permission.

**TDR 299 (1-3) N****Drafting Design Projects**

An independent laboratory course consisting of specially arranged sessions and substantial independent study to explore areas of special interest or expand specific drafting and/or computer skills.

**English****ENGL 040 (5) S****Composition I - Career Link**

Assessment and development of skills in language and communications including spelling, vocabulary, grammar and usage in a pre-technical career-oriented context. Emphasizes sentence and paragraph development to describe situations, objects and basic processes. Prereq: Appropriate testing and counseling.

**ENGL 041 (5) S****Composition II - Career Link**

Assessment and development of language skills and communications skills in a pre-technical career-oriented context. Emphasizes paragraph and multi-paragraph writing and revision in various formats and purposes. Research paper or project relating to educational or career opportunities. Prereq: Appropriate placement testing and counseling.

**ENGL 042 (5) S****Senior Project Research - Career Link**

Assessment and development of language and communications skills in academic and career contexts. Analysis of models of effective writing and speaking. Research paper or project on career-oriented topic integrated with a personal, historical, technical or sociological perspective. Prereq: Appropriate placement testing and counseling.

**ENGL 046 (5) S****American Literature Analysis and Writing C-Link**

Survey of the American heritage through its literature. Includes reading and analysis of fiction, poetry and drama. Write book reviews, biographical sketches and interpretations of characters or verse.

**ENGL 080 (1-5) N**  
**English Skills Shop**

Support class for students enrolled in developmental English programs and students seeking to strengthen their academic writing skills. Individual and small group tutoring to improve listening; speaking; study skills; reading comprehension and rate; vocabulary; phonics and word skills; spelling; grammar; and writing sentences, paragraphs, and essays. Strongly recommended for students enrolled in developmental English courses.

**ENGL 081 (1-5) S**  
**Reading Skills I**

Continuation of ENGL 080. Prereq: ENGL 080.

**ENGL 085 (1-5) C**  
**English Skills for College Success**

Support class for students enrolled in developmental English programs and students seeking to strengthen their academic skills. Develops strategies to improve listening; speaking; study skills; reading comprehension and rate; vocabulary; phonics and word skills; spelling; grammar; and writing sentences, paragraphs, and essays. Strongly recommended for students enrolled in developmental English courses.

**ENGL 090 (1-5) S**  
**Independent Study of Basic English**

Addresses individual learning needs of students in college preparatory reading or writing skills. Credit awarded according to students' mastery of various skills as determined by the successful completion of material specified by the instructor. Prereq: Appropriate placement on English placement test or permission (N). Appropriate placement, contact the Testing Office (S,C).

**ENGL 091 (1-5) S**  
**Basic Reading and Study Skills I**

Covers essential reading and study skills. Includes techniques for developing good reading skills and habits, vocabulary, comprehension, textbook reading and classroom skills. Prereq: Placement Test.

**ENGL 092 (1-5) C**  
**Basic Writing Improvement I**

Emphasis on the sentence. Includes basic sentence grammar and practice in thinking, writing, editing and proofreading. Prereq: Placement Test.

**ENGL 093 (1-5) C**  
**Reading and Study Skills II**

Development of college reading and study skills. Includes strategies for taking lecture notes, studying for exams, improving memory and reading comprehension and participating in small group discussions. Prereq: Placement Test.

**ENGL 094 (1-5) S**  
**Writing Improvement II**

Emphasis on paragraph structure and basic sentence grammar. Practice in thinking, writing, editing and proofreading. Assignments in writing clear sentences and paragraphs. Prereq: Placement Test (S). For students who have completed ENGL 092 but still need more work at that level (C).

**ENGL 095 (1-5) C | N | S**  
**College PREP Reading and Study Skills**

Emphasis on increasing reading speed and vocabulary, identifying the main idea and supporting ideas in expository reading, making inferences and evaluations and understanding figurative language. Includes study strategies for test-taking, note-taking and outlining. Prereq: Placement Test.

**ENGL 096 (1-5) C | N | S**  
**College Preparatory Writing III**

Build writing skills through clear, correct sentences, well-developed paragraphs and coherent short essays. Prereq: Placement Test.

**ENGL 097 (10) C | N | S**  
**English 097: Integrated Reading and Writing I**

This course provides students with opportunities to develop the reading, writing, and critical thinking skills needed to write in academic settings. Topics include reading and writing processes, critical thinking strategies, study skills, and grammar instruction. Upon completion, students should be able to apply those skills toward understanding a variety of academic and career-related texts and composing unified and coherent sentences, paragraphs, and short essays.

**ENGL 098 (10) C | N | S**  
**Integrated Reading and Writing II**

This course provides students with opportunities to further develop the reading, writing, and critical thinking skills needed to write in academic settings. Topics include reading and writing processes, critical thinking strategies, study skills, and grammar instruction. Upon completion, students should be able to apply these skills toward understanding a variety of academic and career-related texts and composing a college-level essay. Prereq: Placement Test or Appropriate Prerequisite.

**ENGL 099 (5) C | N | S**  
**Supporting College Writing**

This course is intended for students who are English 098 ready who wish to move directly into English 101. Any students who choose to bypass English 098 must enroll in a hard-linked English 099 and English 101. The primary focus of this course is to provide students with more in-depth opportunities to acquire the reading, writing, and critical thinking skills needed to write at the career and college ready level.

**ENGL 100 (5) S**  
**Critical Literacy for College Writing**

Tandem course for students who are eligible for ENGL 098 but choose to move directly to ENGL& 101. Material advances and supports college-level academic critical literacy in both reading and writing. Prereq: Eligible for ENGL 098; Coreq: ENGL& 101.

**ENGL& 101 (5) C | N | S**  
**English Composition I**

English 101 is a college-level writing course that emphasizes academic writing and major strategies of reading and writing analytically. Writing assignments focus on engaging with and responding to a variety of texts. Instruction encourages students to develop, through revision and reflection, as readers, writers, and critical thinkers. Prereq: Eligibility for ENGL&101.

**ENGL& 102 (5) C | N | S**  
**Composition II**

Continuation of the composition sequence with further instruction and practice in the writing process, concentrating on critical reading and writing techniques needed for the preparation and completion of documented essays. Prereq: ENGL&101.

**ENGL 103 (5) S**  
**Transitional English**

Improvement of skills required for professional-technical communications. Assessment of reading, writing and oral improvement. Use of computer to teach principles of organizing, drafting and editing technical reports. Prereq: Satisfactory performance on English placement test.

**ENGL 104 (5) C | N**  
**Advanced English Grammar**

Study of rhetoric and grammar of the English sentence. Includes sentence structure, grammar of the paragraph, usage, diction and mechanics. This course is not remedial. Prereq: Eligible for ENGL& 101 or permission.

**ENGL 105 (3) C | S**  
**Applied Composition**

Covers skills and strategies needed to meet writing demands in college and on the job. Prereq: Satisfactory performance on English placement test.

**ENGL 106 (3) C | S**  
**Technical Writing**

Writing strategies geared to target audiences. Emphasis on research and problem-solving requiring critical reading and writing; development of ideas and argumentation. Includes layout and design, use of illustration, schematics and mathematics. Prereq: ENGL 105 or permission.

**ENGL 107 (5) N | S**  
**Applied Composition**

This course designed to help students from a variety of majors to master the composition skills needed for careers in business and industry. Students will learn the principles and conventions of technical writing and practice those conventions in a variety of assignments that would typically be encountered in the work place. Attention will also be paid to strengthening the surface and stylistic aspects of their writing. Prereq: Satisfactory performance on English placement test.

**ENGL 108 (3) S**  
**Technical Report Writing**

Technical writing for the professional or student. Covers technical communication skills needed in industry. Provides examples of written or oral presentations typically required in a technical work setting. Prereq: ENGL 106.

**ENGL& 111 (5) C | N | S**  
**Introduction to Literature**

Study and analysis of fiction, poetry and drama with emphasis on understanding the art and techniques of each genre. Prereq: Eligible for ENGL 099.

**ENGL& 112 (5) C | N**  
**Introduction to Fiction**

Survey of 20th century fiction. Study and analysis of the art, elements, and techniques of short stories, novellas, and novels of American and international authors. Prereq: Eligibility for ENGL 099.

**ENGL& 113 (5) C | N**  
**Introduction to Poetry**

Study, appreciation and analysis of the form, meaning, music and metaphor of poetry. Includes poems from diverse sources. Prereq: Eligibility for ENGL 099.

**ENGL& 114 (5) C | N**  
**Introduction to Drama**

Study and analysis of great works of the theater, including major themes and trends of playwrights from the Greeks to the present. Prereq: Eligibility for ENGL 099.

**ENGL 115 (5) C**  
**Lgbt Literature**

Survey of lesbian, gay, bisexual, and transgender literature. Explores ideas, themes, historical contexts, and social issues in fiction, poetry, drama, creative non-fiction, and essays.

**ENGL 116 (5) N | S**  
**Graphic Novels**

Graphic Novels surveys visual storytelling literature such as graphic novels, manga, and comics. Covers a variety of genres (e.g. fantasy, science fiction, dystopian, classic literature, plays, short stories, autobiography, historic fiction, etc.) presented in graphic formats. Examines complex and culturally relevant literary themes related to history, politics, gender identity, ethnic diversity, sexuality, and many social justice issues.

**ENGL 120 (5) C**  
**Digital Literature**

Exploration of digital literature and authors who use digital media to present their work. Overview of history of digital literature and emerging digital literary forms such as hypertext, interactive fiction, blogs, social media, apps, video games, and multimedia formats. No specialized software knowledge required. Access to computer and internet recommended. Eligible for ENGL 099.

**ENGL 125 (5) C**  
**Writing About Science**

Explore and create works of non-fiction literature about the Physical, Earth, and Life Sciences, technology, the environment and related themes, contexts, and issues. Exploration of the role of science and science writing in public discourse, policy, debate, news reporting, and a variety of media presentation formats. No specialized science knowledge required. Prereq: ENGL&101 Placement.

**ENGL 130 (5) C**  
**Literature and the City**

Introduction to fiction, non-fiction, poetry, and drama that illustrate life in American cities and issues such as race, politics, gender, class, family, education, and media. Prereq: ENGL&101 Placement.

**ENGL 151 (5) C | N | S**  
**Creative Writing**

Creative writing with focus on development of language, imagery, style, voice and emphasis on techniques. Prereq: ENGL& 101 or permission.

**ENGL 152 (5) C | N | S**  
**Creative Writing**

Continuation of ENGL 151. Prereq: ENGL 151, ENGL& 101 or permission.

**ENGL 153 (1-5) C | N | S**  
**Creative Writing**

Continuation of ENGL 152. Emphasis on writing, editing and proofreading manuscripts. Includes literary magazine production experience in editing, design and layout. Prereq: ENGL& 101, ENGL 151 and ENGL 152 or permission (N). Includes workshops and seminars for those with writing experience (C).

**ENGL 197 (2) N**  
**Writing Workshop**

Augments instruction in writing within a collaborative environment geared towards understanding how and why we learn most effectively. Provides additional writing support to students in all stages of the reading and writing processes, and for a range of writing contexts and tasks across disciplines. Intended to support students in writing-intensive courses (50% or more of course grade determined by written assignments).

**ENGL 198 (1-3) C**  
**English Workshop**

Emphasis on building skills in a variety of areas: vocabulary development, reading comprehension, grammar, punctuation, sentence structure and strength. Addresses diagnosed student needs individually, with a mixture of workshop and lecture techniques.

**ENGL 199 (2) N**  
**College Applications & Personal Statements**

Focuses on writing effective Personal Statement essays, and other college or scholarship application essays. Students will research application requirements, and write essays that contribute to an engaging and effective application. Class sessions will focus on intensive essay work and support from college advisors. 8-week course; students will work on a schedule that fits their specific application deadlines. Prerequisites: Completion of ENGL& 101 or instructor permission.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**ENGL 201 (5) S**  
**Advanced Composition**

Reading and writing exposition with emphasis on context, audience and rhetorical options. Provides critique experience for own and others' writing. Prereq: ENGL& 101 or permission.

**ENGL 204 (5) C**  
**English Language & Linguistics**

Overview of the fundamental structures of English from the perspective of linguistic studies. Emphasis on the basic principles and tools of the field of linguistics, contemporary theories of morphology, syntax (grammar), semantics, and study of historical, geographical, and socioeconomic variations of the English language.

**ENGL 205 (5) C | N | S**  
**Creative Nonfiction**

Designed to familiarize students with the techniques and narrative structures of creative nonfiction. Reading and writing will focus on personal essays and memoir, but may also cover related sub-genres such as science writing, travel writing, and profiles/biography. Prereq: Completion of ENGL&101.

**ENGL 210 (5) C**  
**Translation for Global Competence**

Introduces the practice of translation but without foreign language competency. Students actively practice global competence, learning about and communicating across cultural differences. Students produce collaborative translations from a world language into English. Designed for both mono and multilingual students. Prerequisite: ENGL&101 eligibility.

**ENGL 218 (5) C**  
**Holocaust Literature: Voices From the Holocaust**

Examines literature written by survivors of the Holocaust or the Shoah. Read accounts written by people who survived to write and publish their memories. Meet one of the authors. Develop an historical context for World War II and the rise of Nazi Germany to understand the literature.

**ENGL 219 (5) C**  
**Between the Wars**

Explores the character, mood and atmosphere of post-WWI American writers, including African-American, Native-American, Asian-American and European-American. Considers the implications and nature of their work in the context of their time. Prereq: Eligible for ENGL& 101.

**ENGL& 224 (5) C | N**  
**Shakespeare I**

Study of a representative selection of Shakespeare's comedies, tragedies, romances, and history. Covers the range of Shakespeare's career (without duplication of materials from ENGL& 225). May take one or both classes. Prereq: ENGL&101 Placement.

**ENGL& 225 (5) C**  
**Shakespeare 2**

Study of a representative selection of Shakespeare's comedies, tragedies, romances, and history. Covers the range of Shakespeare's career. Continuation of ENGL& 224. May take one or both classes. Prereq: ENGL&101 Placement.

**ENGL& 226 (5) N**  
**British Literature I**

The early Celtic period, the Roman occupation, the Anglo Saxon period, the Norse invasions, the Middle Ages to the English Renaissance before Shakespeare. Emphasizes the historical forces, social shifts and significant cultural clashes that form the context for this literature. Prereq: Eligible for ENGL& 101 (N).

**ENGL& 227 (5) N**  
**British Literature II**

From 1540 -1800. Covers Shakespeare and the English Reformation and Renaissance, English global expansion, growing awareness of science and The Age of Reason. Emphasizes the historical forces, social shifts and cultural differences that form the context for this literature. Prereq: Eligible for ENGL& 101.

**ENGL 231 (5) C | S**  
**Children's Literature**

Explores a representative collection of children's and young adult literature from multiple cultures within the Western literary tradition. Includes close reading of texts such as fairy tales, traditional tales, illustrations, picture books, realistic and historical fiction, and fantasy. Emphasizes historical context, literary themes, cultural implications for reading audiences, and the role of children's narratives in the social construction of childhood. Recommended: Completion of ENGL&101.

**ENGL 232 (5) C | N | S**  
**Young Adult Literature**

Exploration of young adult literature that represents culturally diverse populations within the United States with emphasis on the societal values reflected in the genre and the powerful influence of well-crafted stories. Prerequisite: Eligibility for ENGL 099.

**ENGL& 235 (5) N | S**  
**Technical Writing**

Explores basic formats and content of technical communication. Covers writing process; analysis of purpose and audience for various reports and documents; research, documentation, presentation of technical material; and communication in digital media. Projects include writing and editing, digital communication, and collaboration. Prereq: ENGL& 101.

**ENGL 240 (5) C | N**  
**Reading and Writing Autobiography**

Read autobiographies of well-known people and write your own. Involves both critical and personal writing assignments, with an emphasis on the personal dimension of writing. Prerequisite: ENGL&101 Placement.

**ENGL& 244 (5) C**  
**American Literature I**

Survey of literature of the United States from Colonial times to the early 19th century. Prereq: Placement into ENGL&101.

**ENGL& 245 (5) S**  
**American Literature II**

Covers 19th century writers in all written forms. Prereq: Eligible for ENGL& 101.

**ENGL& 246 (5) C | N | S**  
**American Literature III**

Covers late 19th and 20th century writers with emphasis on modern fiction, drama, poetry and trends in literature. Practice of critical techniques. Prereq: Eligibility for ENGL 099.



**ENGL 247 (5) C****21st Century American Literature**

Survey of 21st Century United States literature with emphasis on contemporary fiction, drama, poetry and literary trends. Prereq: Placement into ENGL&101.

**ENGL 252 (5) S****Novels of Western Literature**

Emphasis on European and American novels from the past two centuries viewed in the philosophical and historical contexts. Prereq: ENGL&101 Placement.

**ENGL 253 (5) C****Studies in the Novel**

Continuation of ENGL 252. Prereq: Eligible for ENGL& 101 (N).

**ENGL& 256 (5) C | S****World Literature III**

Cross-cultural survey of contemporary world literature from Latin America, Africa, Asia, the Middle East, Europe and the United States from the 20th Century to the present. Prereq: Placement into ENGL&101.

**ENGL 258 (5) C | N | S****Literature of American Culture**

Survey of literature from a variety of U.S. cultures including Asian American, African American, European American, Chicano and Latino American, Middle Eastern American, Native American, and others. Emphasis on analysis of social, cultural, political, and historical contexts. Prereq: Placement into ENGL&101.

**ENGL 260 (5) S****Asian American Literature**

Focuses on fiction and poetry of Asian-Americans, covered in order of their immigration: Chinese, Japanese, Filipino, Korean, Southeast Asian and the recent groups from Asia and the Pacific Islands. Prereq: Eligible for ENGL& 101.

**ENGL 263 (5) C****the Bible as Literature**

Studies the Bible as an anthology of literary texts expressing the religious ideas of ancient Israel. Emphasizes reading the Old Testament and New Testament with literary and historical understanding. Prereq: Eligible for ENGL& 101.

**ENGL 265 (5) C | N****Literature and Society**

Studies patterns of literary expression as a guide to social attitudes and value systems, the part society plays in shaping literature, and the degree to which literature reflects society.

**ENGL 266 (5) C****Postcolonial Literature**

Surveys literatures from Africa, Asia, the Pacific, and/or the Americas in a postcolonial context, which explores the ways in which the processes of colonization and de-colonization have influenced peoples and cultures. Prereq: Recommended completion of ENGL& 101.

**ENGL 270 (5) C****the Beat Generation Writers**

Focus on the literature of the Beat Generation writers in the U.S. in the 1940s, such as Jack Kerouac, Allen Ginsberg and William Burroughs, who continue to have an influence on American society today. Prereq: Eligible for ENGL& 101.

**ENGL 291 (5) C | N****Literature by Women**

Surveys literature by culturally diverse American women authors. Analyzes fiction and non-fiction texts of various genres. Examines the ways in which women's literary voices have shaped society, culture, politics, and gender roles in the United States. Prereq: Eligible for ENGL 099.

**ENGL 293 (5) C****Science Fiction**

Examines selected readings in science fiction and fantasy from the 19th century to present. May include American, British, continental European, and other international writers.

**ENGL 296 (1-3) N****Special Topics in English**

Special courses developed by instructors. Prereq: permission.

**ENGL 298 (5) C | N****Special Topics**

In-depth examination of current and emerging topics and themes relevant to the study of English. Consult Humanities & Social Sciences Division and quarterly class schedule for the specific topic to be offered. Prerequisite: Placement Into ENGL&101.

**ENGL 299 (1-5) C | N | S****Independent Study**

Create an individual project, syllabus and outcomes with instructor. Prereq: Permission.

**English as a Second Language****ESL 007 (1-15) C****English as a Second Language-Pre-Literacy**

For true beginners – students who are unable to read, write, speak or listen in English and who are pre-or-non-literate in their native language. Introduces beginning concepts of reading and writing and spoken English for aural comprehension to help students use English for meeting classroom and personal needs.

**ESL 010 (1-15) C | N | S****English as a Second Language 1**

Emphasis on basic vocabulary, simple sentence structure, pronunciation, basic reading and writing needed for daily functioning. Concentrates on developing oral and listening skills through drills, dialogues, role-playing, dictation and conversation. Work on literacy skills. Prereq: ESL placement test or instructor permission.

**ESL 011 (1-15) C | N | S****English as a Second Language-Level 1A**

For preliterate ESL students or very low-beginning students literate in a written language based on a non-Roman alphabet. Learn very basic English vocabulary and grammar. Practice very basic reading, writing, listening, and speaking skills in the context of daily life, jobs, and school.

**ESL 012 (1-15) N | S****English as a Second Language-Level 1B**

For low-beginning ESL students. Learn basic English vocabulary and grammar. Practice basic reading, writing, listening, and speaking skills in the context of daily life, jobs, and school.

**ESL 013 (1-15) N | S****English as a Second Language Level 1C**

For low-beginning ESL students. Learn more basic English vocabulary and grammar. Practice more basic reading, writing, listening, and speaking skills in the context of daily life, jobs, and school.

**ESL 015 (1-15) C | N | S****ESL Reading and Writing 1**

Designed for low-beginning ESL students, this practice-based course introduces basic English reading and writing skills in the context of daily life, jobs, and school for more success living in the United States. Prerequisite: Appropriate score on placement test, or Instructor's permission.

**ESL 016 (1-15) C | N**  
**ESL Speaking and Listening 1**

Designed for low-beginning ESL students, in this course students practice basic English speaking and listening skills in the context of daily life, jobs, and school for more success living in the United States. Prerequisite: Appropriate score on placement test, or Instructor's permission.

**ESL 020 (1-15) C | N | S**  
**English as a Second Language 2**

ESL 020 is a high-beginning level English as a second language course which utilizes an integrated skills approach to language teaching. This class is intended for students who understand and use very basic oral and written phrases, statements, and questions. The content focus is on employability and readiness for vocational and academic programs. Prereq: ESL placement test, successful completion of ESL 010 or instructor permission.

**ESL 021 (1-15) C | N | S**  
**English as a Second Language-Level 2A**

For beginning ESL students. Learn beginning English vocabulary and grammar. Practice beginning reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

**ESL 022 (1-15) N | S**  
**English as a Second Language-Level 2B**

For high-beginning ESL students. Learn more beginning English vocabulary and grammar. Practice more beginning reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

**ESL 023 (1-15) S**  
**English as a Second Language Level 2C**

Intermediate-level course for non-native speakers of English. Continued emphasis on vocabulary development, reading and writing needed to function effectively in a job or daily situations. Prereq: ESL 022 or placement.

**ESL 025 (1-15) C | N | S**  
**ESL Reading and Writing 2**

Designed for beginning ESL students, this practice-based course focuses on beginning English reading and writing skills in the context of daily life, jobs, and school for more success living in the United States. Prerequisite: Appropriate score on placement test; ESL 015 with an S grade; or Instructor's permission.

**ESL 026 (1-15) C | N**  
**ESL Speaking and Listening 2**

Designed for beginning ESL students, this practice-based course focuses on beginning English speaking and listening skills in the context of daily life, jobs, and school for more success living in the United States. Prerequisite: Appropriate score on placement test; ESL 016 with an S grade; or Instructor's permission.

**ESL 027 (1-5) N**  
**Introduction to Digital Literacy for ESL**

Introductory digital literacy course for non-native speakers of English with emphasis on improving vocabulary, reading with understanding, and conveying ideas in writing. Prerequisite: instructor permission.

**ESL 030 (1-15) C | N | S**  
**English as a Second Language 3**

ESL 030 is an intermediate level, English as a second language course which utilizes an integrated skills approach to language teaching. This class is intended for students who understand and use basic oral and written phrases, statements, and questions. The content focus is dependent on the specific contextualization of each ESL 030 course. Prereq: ESL placement test, successful completion of ESL 020 or instructor permission.

**ESL 031 (1-15) C | N | S**  
**English as a Second Language Level 3a**

For low-intermediate ESL students. Learn low-intermediate English vocabulary and grammar. Practice low-intermediate reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

**ESL 032 (1-15) N | S**  
**English as a Second Language Level 3b**

For low-intermediate ESL students. Learn more low-intermediate English vocabulary and grammar. Practice more low-intermediate reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

**ESL 035 (1-15) C | N | S**  
**ESL Reading and Writing 3**

Designed for low-intermediate ESL students. Focuses on practicing low-intermediate English reading and writing skills in the context of daily life, jobs, and school for more successful living in the United States. Prereq: Appropriate score on placement test, successful completion of ESL 025, or Instructor's permission.

**ESL 036 (1-15) C | N**  
**ESL Speaking and Listening 3**

Designed for low-intermediate ESL students. Provides practice of low-intermediate English speaking and listening skills in the context of daily life, jobs, and school for more successful living in the United States. Prereq: Appropriate score on placement test; ESL 026 with an S; or Instructor's permission.

**ESL 037 (1-5) C | N**  
**Beginning Digital Literacy for ESL**

Beginning digital literacy course for non-native speakers of English with emphasis on improving vocabulary, reading with understanding, and conveying ideas in writing. Prerequisite: Completion of ESL 027.

**ESL 039 (1-15) C | N | S**  
**Vocational ESL 3**

Intermediate level for non-native speakers of English. Focuses on workplace and survival English and beginning academic English. Includes career planning, test-taking, study skills, interview skills, résumé writing, and computer and math skills. May also cover health, finances, college/training programs and/or citizenship.

**ESL 040 (1-15) C | N | S**  
**English as a Second Language 4**

ESL 040 is a high intermediate level, English as a second language course which utilizes an integrated skills approach to language teaching. This class is intended for students who understand and use familiar oral and written phrases, statements, and questions with some difficulty. The content focus is dependent on the specific contextualization of each ESL 040 course. Prereq: ESL placement test, successful completion of ESL 030 or instructor permission.

**ESL 041 (1-15) C | N | S**  
**English as a Second Language-Level 4a**

For intermediate ESL students. Learn intermediate English vocabulary and grammar. Practice intermediate reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

**ESL 042 (1-15) N | S**  
**English as a Second Language-Level 4b**

For high-intermediate ESL students. Learn high-intermediate English vocabulary and grammar. Practice high-intermediate reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

**ESL 045 (1-15) C | N | S**  
**ESL Reading and Writing 4**

For intermediate ESL students. Provides practice of intermediate English reading and writing skills in the context of daily life, jobs, and school for more success living in the United States. Prereq: Placement Test, ESL 035, or Permission.

**ESL 046 (1-15) C | N**  
**ESL Speaking and Listening 4**

For intermediate ESL students. Provides practice of intermediate English speaking and listening skills in the context of daily life, jobs, and school for more success living in the United States. Prereq: Placement Test, ESL 036, or Permission.

**ESL 047 (1-5) C | N**  
**Intermediate Digital Literacy for ESL**

Intermediate digital literacy course for non-native speakers of English with emphasis on improving vocabulary, reading with understanding, and conveying ideas in writing. Prerequisite: Placement at ESL 031 or higher and completion of ESL 037 or instructor permission.

**ESL 049 (1-15) C | S**  
**Vocational ESL Level 4**

Supports vocational, technical and employment training.

**ESL 050 (1-15) C | S**  
**English as a Second Language 5**

ESL 050 is a low-advanced level, English as a second language course which utilizes an integrated skills approach to language teaching. This class is intended for students who understand and use familiar oral and written phrases, statements, and questions. The content focus is dependent on the specific contextualization of each ESL 050 course. Prereq: ESL placement test, successful completion of ESL 040 or instructor permission.

**ESL 051 (1-15) N | S**  
**English as a Second Language - Level 5a**

For very high-intermediate ESL students. Learn very high-intermediate English vocabulary and grammar. Practice very high-intermediate reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States. Begin to focus more on academic English skills to prepare for transitioning into college academic or professional/technical classes.

**ESL 052 (1-15) N | S**  
**English as a Second Language - Level 5b**

For low-advanced ESL students. Learn low-advanced English vocabulary and grammar. Practice low-advanced reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States. Continue to focus more on academic English skills to prepare for transitioning into college academic or professional/technical classes.

**ESL 055 (1-15) C | N | S**  
**ESL Reading and Writing 5**

For low-advanced ESL students. Provides practice of English reading and writing skills needed for successful transition into college academic and professional-technical courses. Prereq: Placement Test, ESL 045, or Permission.

**ESL 055A (1-15) C**  
**ESL 5A R/W**

For students who want to improve their writing skills. Study English word order, spelling problems, sentence boundaries, some persistent grammatical problems and simple paragraph writing. Prereq: Placement at Level 5 or teacher recommendation.

**ESL 055B (1-15) C**  
**ESL 5B R/W**

For students who want to improve their writing skills. Study English word order, spelling problems, sentence boundaries, some persistent grammatical problems and simple paragraph writing. Prereq: Placement at Level 5 or teacher recommendation.

**ESL 056 (1-15) C | N**  
**ESL Speaking and Listening 5**

For low-advanced ESL students. Provides practice of English speaking and listening skills needed for successful transition into college academic and professional-technical courses. Prereq: Placement Test, ESL 046, or Permission.

**ESL 056A (1-15) C**  
**ESL 5A L/S**

Upon completion, be able to listen actively and speak so others can understand and participate effectively and independently in conversations on everyday survival, work and social situations, in person and on the telephone.

**ESL 056B (1-15) C**  
**ESL 5B L/S**

Upon completion, be able to listen actively and speak so others can understand and participate effectively and independently in conversations on everyday survival, work and social situations, in person and on the telephone.

**ESL 057 (1-5) C | N**  
**Advanced Digital Literacy for ESL**

Advanced digital literacy course for non-native speakers of English with an emphasis on improving vocabulary, reading with understanding, and conveying ideas in writing. Prerequisite: ESL 041 or higher and completion of ESL 047 or instructor permission.

**ESL 058 (1-10) N**  
**English for Business and Accounting Preparation**

This course is designed to prepare ESL students for study in Business and Accounting programs. Topics will include business and workplace vocabulary. Also covers skills related to computers, studying, job searches, and employability.

**ESL 059 (1-15) C | N | S**  
**Vocational ESL**

For students currently enrolled in the ESL Program. Provides specific support in vocational ESL and assists students pursuing career and professional technical programs. Prereq: Permission.

**ESL 060 (1-15) S**  
**English as a Second Language 6**

ESL 060 is an advanced level, English as a second language course which utilizes an integrated skills approach to language teaching. This class is intended for students who understand and use every day oral and written phrases, statements, and questions comfortably. While detailed content focus is dependent on the specific contextualization of each ESL 060 course, the overall focus is transition to Prof/Tech or Academic college programs. Prereq: ESL placement test, successful completion of ESL.

**ESL 061 (1-15) N**  
**English as a Second Language - Level 6a**

For advanced ESL students. Learn advanced English vocabulary and grammar. Practice advanced reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States. Focus especially on academic English skills to prepare for transitioning into college academic or professional/technical classes.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**ESL 062 (1-15) N**  
**English as a Second Language - Level 6b**

Emphasis on composition, reading a variety of texts, grammar and vocabulary expansion. Prereq: ESL 061 or placement.

**ESL 065 (1-3) N | S**  
**Focus On Writing Level 6**

For students who want to improve their writing skills. Study English word order, spelling problems, sentence boundaries, some persistent grammatical problems and simple paragraph writing. Prereq: Placement at Level 6 or teacher recommendation.

**ESL 066 (1-15) N**  
**ESL Speaking and Listening Level 6**

On completion, be able to listen actively and speak so others can understand.

**ESL 068 (1-3) C | N | S**  
**Educational Interviewing for ESL Students**

Helps ESL students at all competency levels identify their current abilities, characteristics, styles and readiness to learn. Intro to campus resources.

**ESL 069 (1-15) N | S**  
**Vocational ESL**

For ESL students concurrently enrolled in a professional-technical program. Provides specific support in content courses and vocational ESL and assists students in completing their programs and building job-related language skills. Prereq: Permission.

**ESL 075 (1-3) N**  
**English Pronunciation 2**

Intro to the basics of accurate English pronunciation such as vowel and consonant sounds and sentence intonation. Prereq: Placement in Level 3, 4, or permission.

**ESL 076 (1-5) C | S**

**English Pronunciation**

Intro to some of the basics of accurate English pronunciation for non-native speakers of English: some stressed and unstressed vowel sounds, basic word stress patterns, sentence stress and rhythm and other features.

**ESL 078 (1-15) N**  
**Advanced English Pronunciation 2**

Advanced course on accurate English pronunciation: troublesome vowel and consonant sounds, word stress and sentence intonation. Prereq: Placement into ESL 061 or 092/093 or instructor permission.

**ESL 081 (1-15) C**  
**College and Career Readiness ESL**

Provides ESL students with practice of integrated English reading, writing, listening, and speaking skills for the workplace and successful transition into college academic and professional-technical courses. Prereq: Placement Test, or Completion of ESL 055A and ESL 056A with an S, or permission.

**ESL 083 (1-5) C | N | S**

**Strategic Learning in a Content Area**

Supports strategic learning in a college credit class through concurrent enrollment in the college class and ESL 083. Learn appropriate study skills such as metacognitive strategies, previewing, skimming and scanning of written materials, summarizing and paraphrasing, note-taking, revision and expansion of notes and research techniques. Understand and meet content teacher expectations.

**ESL 085 (5) C | S**  
**Survey of English Grammar: Verb Review**

For students under-prepared for college level English. Covers basic English grammar with a focus on writing simple, compound and complex sentences and paragraphs. Learn and practice academic English vocabulary to enhance writing skills. Prereq: Placement on ESL COMPASS test.

**ESL 086 (5) C | S**  
**Survey of English Grammar II**

Covers intermediate to advanced English grammar with an emphasis on sentence and paragraph writing using simple, compound and For students under-prepared for college level complex sentences. Continue developing academic English vocabulary to enhance writing skills. Prereq: Placement on the ESL COMPASS test.

**ESL 090 (1-5) C**

**Standard Pronunciation for Non-Native Speakers**

Emphasizes improving pronunciation and comprehension of spoken English by non-native speakers. Focuses on general and individual pronunciation problems, especially stress and intonation. Includes class presentations and group communications. Prereq: Permission.

**ESL 091 (1-5) C**  
**Listening & Note-Taking Skills for ESL Students**

Improve listening, speaking and note-taking skills necessary for college lecture courses. Participate in lectures, workshop and video-taped lectures. Prereq: Placement on ESL COMPASS test.

**ESL 093 (1-5) C**  
**Grammar for Academic Writing**

Provides English language learners the opportunity to master control of the English sentence, with a strong focus on incorporating grammar into paragraph writing. Through the combination of lectures and workshops, students will build awareness of specific problems in their writing and will learn strategies for reducing them. Prereq: placement on ESL COMPASS Test (C).

**ESL 095 (5) S**  
**English for Non-Native Speakers II-Writing**

For non-native speakers of English. Focuses on mastering sentence control and developing clear, coherent paragraphs. Prereq: Placement on ESL COMPASS test. Coreqs: ESL 085 and 094.

**ESL 096 (5) C**  
**College PREP English for Non-Natives I- Reading**

For non-native speakers. Increase reading comprehension and speed, improve vocabulary, and build confidence using college preparatory materials. Respond to readings using academic vocabulary in writing. Prereq: minimum passing grade of 2.5 in ESL 094, English Placement Test or Instructor Permission (S). Prereq: ESL 081 with a grade of S, or ESL 055B with a grade of S and ESL 056B with a grade of S, or ESL 093 with a 2.5 or higher, or placement on English placement test, or permission (C).



**ESL 097 (5) C | S****College PREP English for Non-Native Speakers I**

For non-native speakers. Practice developing coherent, multiple paragraph compositions. Review English writing styles and their application to academic writing. Prereq: minimum passing grade of 2.5 in ESL 095, ESL COMPASS placement or instructor permission (S); Prereq: ESL 081 with a grade of S, or ESL 055B with a grade of S and ESL 056B with a grade of S, or ESL 093 with a minimum grade of 2.5, or placement on the English placement test, or permission (C).

**ESL 098 (5) C****College PREP English for Non-Natives II**

Focuses on developing reading strategies, increasing reading comprehension, speed and fluency, engaging in critical reading and analysis, integrating outside sources, and expanding vocabulary. Uses college-level reading materials. Prereq: ESL 096 and ESL 097 with a minimum grade of 2.5 in each course, placement on the English placement test, or permission.

**ESL 099 (5) C****College PREP English for Non-Natives III**

Develop coherent paragraphs and short essays. Emphasis on complex paragraphs using appropriate style and techniques of paraphrasing and summarizing. Includes library research skills. Preparation for college-level writing. Prereq: ESL 097 and ESL 096 with a minimum grade of 2.5 in each course, placement on the English placement test, or permission.

**Environmental Science****ENVS& 100 (5) C | N | S****Survey of Environmental Science**

Covers natural principles governing operation of the environment, including interaction between humans and the environment, emphasizing approaches and actions to maintain a healthy ecosystem.

**ENVS& 101 (5) C | N****Intro to Environmental Science W/Lab**

Covers natural principles governing operation of the environment including interaction between humans and the environment, emphasizing attitudes and actions to maintain a healthy ecosystem. This course has a lab component focusing on major topics in environmental science. Not open for credit to students who have taken ENVS 150 or ENVS&100. Prereq: ENGL& 101 eligibility and Math 098 (C); Prereq: ENGL& 101 recommended (N).

**ENVS 150 (5) C | N | S****Environmental Issues and Problems**

Covers natural principles governing operation of the environment including interactions between humans and the environment, emphasizing attitudes and actions to maintain a healthy ecosystem. Prereq: Eligibility for MATH 084 and ENG& 101.

**ENVS 160 (5) C | S****Principles of Environmental Sustainability**

Explores past and present contributions from major events and leaders to the sustainability movement. Principles of sustainability are used to analyze action on challenges such as urbanization, climate change, food systems and pollution. Prereq: Eligibility for ENGL& 101 and MATH 088 (or MATH 091).

**ENVS 170 (5) N | S****Energy and Resources - Now and Future**

Study of energy and material resources, both personal and worldwide production and consumption. Investigates the impact on the natural environment from production of coal, wind, solar and hydropower; gasoline, electricity and hydrogen fuel transportation; and natural gas and biomass heating options. Focus on sustainable alternatives to meet energy and material needs.

**ENVS 196 (2) C****Spring Practicum in Sustainable Agriculture**

Hands-on practical experience managing an urban farm enterprise for aspiring practitioners. Apply weekly on-farm education and training to spring operational and production tasks at the SAgE King County Student Farm. Prerequisites: Instructor's permission.

**ENVS 197 (1-5) C****Internship in Sustainable Agriculture**

Practical work experience at sustainable agriculture enterprises, including urban, small farm, and food system businesses, organizations, and agencies, that applies and builds upon the knowledge and skills derived from program coursework. Students establish learning objectives and outcomes with the internship providers. Prerequisites: Instructor's permission; and, must be employed or interning in a position approved by the Instructor or the Cooperative Education Office of SCC.

**ENVS 198 (2) C****Summer Practicum in Sustainable Agriculture**

Hands-on practical experience managing an urban farm enterprise for aspiring practitioners. Apply weekly on-farm education and training to summer operational and production tasks at the SAgE King County Student Farm. ENVS 196 recommended. Prerequisites: Permission.

**ENVS 199 (2) C****Fall Practicum in Sustainable Agriculture**

Hands-on practical experience managing an urban farm enterprise for aspiring practitioners. Apply weekly on-farm education and training to fall operational and production tasks at the SAgE King County Student Farm. Prior enrollment in ENVS 196 and 198 recommended. Prerequisites: Instructor's permission.

**ENVS 200 (2) C****Careers Seminar in Sustainable Agriculture**

Encompasses a series of presentations and panel discussions with professionals related to sustainable agriculture career options, work profiles, and the knowledge and skills required to be successful. Students identify career interests and resources, and develop education and career goals. Prereq: Eligibility for ENGL&101.

**ENVS 201 (5) N****General Ecology**

Covers the nature of ecosystems, energy flow, bio-geochemical cycles, population dynamics, organization and dynamics of communities and identification of environmental problems.

**ENVS 202 (5) C****Agroecology: Ecological Approach to Agriculture**

Survey of agroecology, a multi-disciplinary field that applies ecological principles to the analysis and management of agriculture systems. Explore ways to create abundance and reduce external inputs by enhancing nutrient cycling, energy flow, and beneficial interactions. Field trips are an integral part of this course. Optional 2-credit service learning.

**ENVS 204 (5) C****Soil Science & Conservation**

Examines soils as living ecosystems, including their physical, chemical, and biological properties. Nutrient cycling, fertility management, soil building, and site diagnosis and classification are also examined. Satisfies lab science requirement for the A.A. degree.

**ENVS 216 (5) C****Urban Vegetable Production**

Design and implement a productive Pacific Northwest garden, focusing on site/crop selection, layout, soil building, intercropping, succession planting, crop rotation, season extension, harvesting and storage, cover cropping, and an analysis of production results and conservation values. Integration of urban livestock also considered. Field trips are an integral part of this course. Prior ENVS and/or BOT course recommended. Prerequisites: Eligibility for ENGL&101 and MATH 084, 087 or 091.



**ENVS 298 (1-5) N****Special Topics**

Seminar of selected topics and/or activities. Prereq: Variable, dependent on topic.

**ENVS 299 (1-5) C | N****Special Problems**

Independent study of approved topics in environmental sciences. Prereq: Permission.

**French****FRCH& 121 (5) C | N | S****French I**

Highly interactive class fostering communicative skills where the language is situated within francophone cultural contexts and emphasis is placed on meaning as well as grammatical forms. Develops reading, writing, listening, and speaking at the novice level. Exercises are assigned outside of class to increase oral and written proficiency. Intended for students with little or no college-level French.

**FRCH& 122 (5) C | N | S****French II**

Intended for students who have completed French 121 or its equivalent. Continued study of the fundamentals of grammar and syntax, pronunciation, reading and conversation, and cultural aspects of the countries in which French is spoken. Emphasis on written and oral communication.

**FRCH& 123 (5) C | N****French III**

Intended for students who have completed French 121 and French 122 or their equivalents. Continued study of the fundamentals of grammar and syntax, pronunciation, reading and conversation, and cultural aspects of the countries in which French is spoken. Increased emphasis on oral communication. Requires oral and listening practice with CD'S outside of class.

**FRCH& 221 (5) C****French IV**

Detailed review of French grammar and syntax. Focus on writing, conversation and discussion of literary texts. Includes oral presentations on aspects of francophone cultures. Prereq: FRCH&amp; 123 or permission.

**FRCH& 222 (5) C****French V**

Continuation of FRCH&amp; 221. Prereq: FRCH&amp; 221 or permission.

**FRCH 298 (1-5) C****Independent Study/French**

Independent study of selected topic(s) in French. To be arranged with instructor. Prereq: Permission.

**FRCH 299 (1-5) C****Independent Study/French**

Independent study of selected topic(s) in French. Prereq: Permission.

**Gender & Women's Studies****WMN 140 (5) C | N****Women in American History**

Focuses on the role of women in American history, with emphasis on frontier women, the industrial revolution, women's rights movements and the new feminism.

**WMN 200 (5) C | N****Introduction to Gender & Women Studies**

Introduction to interdisciplinary field of Gender and Women Studies, focusing on how intersections of gender, race, class, sexuality, religion, nationality, age, and ability shape people's lives. Emphasizes the construction and enforcement of gender differences and inequalities in relation to race, class, sexuality and culture. Readings include both narrative and analytical approaches.

**WMN 205 (5) C | N****Women in the Global Context**

Interdisciplinary intro to the study of women in Asia, Africa, Latin America, the Middle East and/or indigenous women in some Western societies. Explores commonalities and differences among women in various societies and cultures. Focuses on women from specific societies or regions varying by instructor.

**WMN 213 (5) N****Women and Politics**

Intro to concepts of power and policy issues as they relate to women. Covers theoretical, historical and empirical studies of women's participation in social and political movements nationally and internationally. Includes women's diverse roles in relation to family, economics, labor, government and law.

**WMN 257 (5) C | N****Psychology of Gender**

Explores major psychological theories of sex differences. Examines studies of sex-role development and biological and environmental influences that may determine and maintain sex differences in aggression, cognitive abilities, achievement, motivation, affiliation and sexuality. May be taken as PSYC 257.

**WMN 298 (1-5) N****Special Topics in Gender and Women Studies**

Independent research and writing on selected women studies topics under faculty supervision.

**General Educational Development (GED)****GED 050 (1-15) C | N | S****Basic GED Preparation 5**

Interactive course where students learn and apply knowledge of math, reading, and writing skills in academic content areas that will help them pass the GED exams. Reasoning and critical thinking skills are also emphasized. Prerequisite: Successful completion of GED Level 5 with an S grade; appropriate score on ABE Department Math Placement Test and/or CASAS; or, Instructor's permission.

**GED 051 (1-10) C | N | S****Basic GED Preparation Math Level 5**

Prepares learners to use the math concepts and applications needed to pass the math portion of the official GED test.

**GED 052 (1-15) C | N | S****Basic GED Preparation Communication Level 5**

An interactive lecture or hybrid course to learn and apply knowledge of reading and writing skills in academic content areas to pass the GED exams in Language Arts. Includes learning reasoning and critical thinking skills to improve success in passing GED exams in the content areas.

**GED 060 (1-15) C****Advanced GED Preparation Level 6**

Interactive course where students learn and apply knowledge of math, reading, and writing skills in academic content areas that will help them pass the GED exams. Reasoning and critical thinking skills are also emphasized. Prerequisite: Successful completion of GED 050 with an S grade, appropriate score on ABE Department Math Placement Test, CASAS, or Instructor's permission.

**GED 061 (1-10) C****Advanced GED Preparation Math Level 6**

Prepares learners to use the math concepts and applications needed to pass the math portion of the official GED test.

**GED 062 (1-15) C | N**  
**Advanced GED Preparation Communication Level 6**

An interactive lecture or hybrid course to learn and apply knowledge of reading and writing skills in academic content areas to pass the GED exams in Language Arts. Includes learning reasoning and critical thinking skills to improve success in passing GED exams in the content areas. Prereq: Student intake testing placement, successful completion of pre-GED communication class, or instructor permission.

**GED 064 (1-15) S**  
**Adv Computer Assisted GED Preparation Level 6**

Improves general reading, writing, math and test-taking skills for the GED tests through the use of micro-computers and relevant basic skills software.

## Geography

**GEOG& 100 (5) C | S**  
**Introduction to Geography**

Introduction to major concepts of geography, climate, landforms, and biogeochemical processes. The course also concentrates on analysis of population demographics, culture, language and religion, food production, patterns of urbanization, paths to economic growth, resource use, and environmental concerns in a globalized world. Prereq: ENGL& 101.

**GEOG& 200 (5) C | S**  
**Human Geography**

Intro to human patterns on the Earth's surface, distribution, political divisions and economic activities. Emphasis on the role of geography in understanding the developments and diffusion of value systems and cultural differences in the 20th century.

**GEOG 230 (5) C**  
**Urbanization in Developing Nations**

Focus on cities in their cultural and economic contexts, geographical patterns, internal structure, current problems in rapidly growing cities and selected policy solutions.

## Geology

**GEOL& 101 (5) C | N | S**  
**Intro Physical Geology**

Explores the physical properties and processes of the Earth, including: mineral and rock identification, the rock cycle, plate tectonics, surface processes, and natural hazards related to geologic features such as earthquakes, tsunamis, landslides, and others.

**GEOL& 103 (5) N**  
**Historical Geology: Evolution of the Earth**

Studies the formation and development through time of the solid Earth, atmosphere, and biosphere. Covers past movements and locations of the continents and interpretation of past environments as recorded in rock and fossil records. Lab included. Field trips may be required. Transfer class.

**GEOL 105 (5) C**  
**Introductory Field Geology**

Survey of physical geology, including the Earth's interior and exterior. Covers the origin and evolution of the Earth, rocks and minerals, surface processes such as glaciation, river erosion and transport and mass movement. Field exercises involve data collection and analysis. Course may require extended overnight stays. Lab included.

**GEOL 106 (5) C | N | S**  
**Dinosaurs**

Studies dinosaurs and the world they lived in. Covers origins, evolution, biology, behavior and extinction of dinosaurs and their relationship to birds and mammals. Intro to history of the biosphere, Earth's climate and its changes.

**GEOL 108 (5) S**  
**Minerals Gems and Fossils**

Intro to the nature of earth materials, including minerals, with an emphasis on gem minerals and fossils. Covers mineral composition, structure, physical properties, and origins, along with gemology, color mechanisms, history and lore of gems, and uses of gems. Covers fossil identification, preservation and interpretation. Lab class.

**GEOL& 110 (5) N | S**  
**Environmental Geology: Geology and the Human Env**

Covers the effects of geologic processes and materials on human activity, and the effects of human activity on the Earth. Emphasizes awareness of geologic aspects of our everyday environment including the identification of problems, and the formulation and evaluation of solutions. Lab included.

**GEOL 111 (1) C | N**  
**Geology Field Day**

A one-day field trip and five-hour lecture on active and ancient geology in the Pacific Northwest. Topics include faults, glaciers, fossils, landslides, and the Cascade Mountain Range. Lab credit. Also offered as SCI 111.

**GEOL& 115 (5) N**  
**Geology National Parks**

Study of the geology and geologic history of selected national parks and monuments in the context of the geologic history of North America, the Pacific Basin, and the Atlantic Ocean. Labs deal primarily with geologic maps. At least two field trips required.

**GEOL 118 (1) C | N**  
**Volcano Field Day**

Introduction to the origin and destruction of the Cascade volcanoes such as Mount St. Helens, Mount Rainier and Glacier Peak. Includes five hours of lecture and a one-day field trip. Lab credit. Also offered as SCI 118.

**GEOL 207 (5) N**  
**The Ice Ages**

This course explores the remarkable story of the ice ages in the Pacific Northwest over the last three million years, with special attention to how these events have sculpted the modern landscape of this area. Other topics include the evolution of plants and animals over this dramatic period, and the earliest appearance of people in this area. This course includes lab and field experience, and two full-day field trips. Lab science credit lab and field trip fees apply. Transfer course.

**GEOL& 208 (5) N**  
**Geology of the Pacific Northwest**

Covers the geologic history of the Pacific Northwest including Washington, Oregon, Idaho, and Alaska. Emphasis on use of geologic principles to interpret present landscapes. Lab included. Prereq: GEOL&101 or instructor permission.

**GEOL 299 (1-5) N**  
**Independent Study**

Independent study of selected geology topics. Prereq: GEOL& 101 and permission.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**German****GERM& 121 (5) C | N  
German I**

Covers fundamentals of grammar and syntax, oral and written exercises, pronunciation, reading and conversation, and cultural aspects of the countries in which German is spoken. Requires oral practice with online audio programs. For students who have not previously studied German.

**GERM& 122 (5) C | N  
German II**

Continued systematic study of German focusing on listening, speaking, reading, writing, and cultural understanding. Prerequisite: GERM& 121 or permission.

**GERM& 123 (5) N  
German III**

Continuation of GERM& 122. Emphasis on speaking, reading, writing and grammatical concepts and cultural discussions. Prereq: GERM& 122 or permission.

**GERM 299 (1-5) N  
Independent Study in German**

Further skills beyond the level of GERM& 123. Uses an intermediate text of contemporary short stories. Prereq: Permission.

**Graphic Design****DES 110 (4) C  
History of Graphic Design**

Explores the global history of visual communication and the graphic arts in media, commerce, and the social sphere. The field of graphic design, in particular, has continually evolved to align with and ultimately elevate the ever-changing landscape of technology and culture. Prereq: Successful completion of the program through preceding quarter.

**DES 121 (4) C  
Typography I**

Learn basic principles of micro typography, including the anatomy of letters, adapting letter forms, letter and word spacing, line spacing, and simple hierarchy of text. Create expressive typography.

**DES 122 (4) C  
Typography II**

Focuses on using the grid for page construction. Explores page structure and hierarchy principles and grid systems.

**DES 131 (4) C  
Graphic Design I**

Introduces students to the terminology, process, and social context of graphic design. Students will utilize traditional image making techniques and learn the language of graphic design for building communication and presentation skills. Prereq: Acceptance into the Graphic Design program.

**DES 132 (4) C  
Graphic Design II**

Intro to color and its application to design, including the mechanics of light, the physiology of vision and the psychology of color. Study ways color is used in culture and methods designers employ in making their work effective.

**DES 133 (4) C  
Graphic Design III**

Covers the design of packaging: three-dimensionality, marketing insights and innovations in technology. Study consumption and how packaging communicates to consumers. Projects may include soda bottles, folding box packages and a line of products, with high quality mockups.

**DES 145 (4) C  
Graphic Production I**

Intro to the basic skills, concepts and techniques of successfully using the vector-based graphics program Adobe Illustrator. .

**DES 146 (4) C  
Graphic Production II**

Intro to the basic skills, concepts and techniques of successfully using the page layout program Adobe InDesign.

**DES 147 (4) C  
Graphic Production III**

Intro to the basic skills, concepts and techniques of successfully using the pixel-based program Adobe Photoshop. Learn to color correct a photo using curves and levels, create a non-destructive work flow and select the correct tool for the job.

**DES 151 (4) C  
Interactive I**

This course will address the considerations needed when designing an interface and the differences and similarities between screen-based media and print-based media. This course is intended for the beginning to intermediate graphic design student who has an interest in designing interfaces for websites, mobile devices, kiosks, computer applications, and more.

**DES 152 (4) C  
Interactive II**

Covers the basics of webpage design and development. Addresses the challenges of developing a series of webpages using the structural elements of HTML and the stylistic elements of CSS.

**DES 153 (4) C  
Interactive III**

Design the user-experience for a website and build the final site using HTML and CSS. Includes the User-Centered Design process, designing a site architecture, conducting usability studies, producing task-flows and wireframes, and creating responsive site layouts.

**DES 197 (1-3) C  
Work Experience-Graphic Design**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply graphic design knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**DES 223 (4) C  
Typography III**

Interpret an author's written language into a meaningful visual form using the basic principles of traditional book design and typographic conventions. Create a case-bound book that eloquently expresses the author's words filtered through the student's interpretation.

**DES 231 (4) C  
Graphic Design IV**

Explore advertising, art direction and photo direction, emphasizing expressive, creative and collaborative problem solving. Develop further research skills. Learn techniques for creating engaging ads for a variety of media and targeting the right market with the right messages.

**DES 232 (4) C**  
**Graphic Design V**

Explores typographic rules, design principles, and grid formats for long documents as applied to print and screen-based media. Students research, strategize, and design long documents for both print medium and screen-based media. Prereq: Successful completion of the program through preceding quarter.

**DES 233 (4) C**  
**Graphic Design VI**

Covers poster design as a form of visual communication. Emphasizes conceptual visual problem-solving for various audiences and outcomes. Solve various poster design problems with a variety of visual approaches, including typography, graphics, illustration and/or photography.

**DES 234 (4) C**  
**Graphic Design VII**

Design and produce a corporate identity system, including trademark or logo and applied graphics, for a mix of visual applications for a business. Covers research, mind-mapping, creative development, contemporary design approaches, and creating a complete system.

**DES 235 (4) C**  
**Graphic Design VIII**

Design and install the SCCA Portfolio Show. Working in teams, explore creative options to the layout and navigation of the show. Include 2-D and 3-D display installation options, print and web portfolios displays, motion graphics, internal and external signage in the planning.

**DES 236 (4) C**  
**Graphic Design IX**

Acquire work contracts with a client and apply design skills in exchange for a fair wage or equitable trade. Gain practical experience with pricing and negotiating fees, writing proposals and design briefs, organizing efficient timelines, managing workflows, and applying basic accounting and business practices.

**DES 249 (4) C**  
**Graphic Production IV**

Use InDesign and Acrobat for organization, layout and production of long documents such as magazine and books. Use guides, styles, master pages, editing tools and PDF options in simple and complex layouts. Organize files with Adobe Bridge, preflighting and packaging.

**DES 251 (4) C**  
**Interactive IV**

Learn to design interfaces such as websites, mobile devices, kiosks, computer applications. Study the differences between screen-based media and print-based media.

**DES 252 (4) C**  
**Interactive V**

Study a variety of content management systems, focusing on the popular, free, open-source WordPress blogging platform. Build an entire WordPress website for a community non-profit client.

**DES 253 (4) C**  
**Interactive VI**

Covers User Experience (UX) design, rapid prototyping, usability testing, and Interface design challenges for smaller screens. Create animated mock-ups of mobile applications and build functional websites with HTML5 and CSS3 media queries.

**DES 260 (4) C**  
**Portfolio PREP**

Develop, design and prepare a portfolio that represents individual creativity and demonstrates skills for seeking employment in the Graphic Design field. Develop a personal business card and stationery.

**DES 270 (5) C**  
**Environmental Graphics I**

Explore graphics designs that are sensitive to human scale in built and natural environments, including way-finding systems, informational signs and symbols, exhibit design and ornamental solutions.

**DES 280 (4) C**  
**Special Projects I**

First of three courses that expand current graphics design knowledge and skills through work on a major self-initiated design project. Emphasizes research and design process to reach a successful design solution.

**DES 281 (4) C**  
**Special Projects II**

Second of three courses that expand current graphics design knowledge and skills through work on a major self-initiated design project. Emphasizes research and design process to reach a successful design solution.

**DES 282 (4) C**  
**Special Projects III**

Third of three courses that expand current graphics design knowledge and skills through work on a major self-initiated design project. Emphasizes research and design process to reach a successful design solution.

**DES 298 (1-5) C**  
**Special Topics**

Designed to provide a flexible format for offering in-depth studies in new and emerging technologies relevant to the Graphic Design Program.

**DES 299 (1-5) C**  
**Independent Study - Graphic Design**

Independent study on selected graphic design topics.

**Health****HEA 025 (5) S****Health - Career Link**

Covers physiology for understanding body functioning, including organic and functional disease and disease prevention. Prereq: Appropriate placement on English and Basic Skills tests.

**HEA 090 (5) S**  
**Health**

The Health Education Course is designed to enhance the awareness and knowledge of healthy lifestyle choices. The six adolescent risk behaviors (tobacco use, dietary patterns that contribute to disease, sedentary lifestyles, sexual behaviors, alcohol and drug use, and behaviors that result in intentional and unintentional injury) will be addressed while advocating for the students to make healthy choices for their overall health. We will also cover mental and emotional health, and nutrition.

**HEA 125 (5) C | S**  
**Health and Wellness**

Overview of health as an individual and community-based social construct. Analyzes health determinants and health outcomes as a function of genetics, culture, environment and health behaviors. Emphasizes a holistic model and intellectual inquiry into what constitutes health and well-being.

**HEA 150 (5) N | S**  
**Health and Human Sexuality**

Wellness is examined as a multidimensional subject, with topics including but not limited to behavior, stress management, communicable and non-communicable disease, nutrition, physical activity and fitness, psychoactive substances, contraception, human sexuality, and aging. Issues related to diversity and inclusion are incorporated into the above topics from both local and global perspectives.



**HEA 160 (5) S****Human Wellness and Fitness**

A comprehensive study of human fitness and wellness. Fully explores topics in physical fitness, including exercise physiology and training concepts. In addition, the course explores basic concepts in nutrition, weight management, chronic disease prevention, and health promotion. Students will assess one's fitness level and will design an individual program to achieve and/or maintain fitness.

**HEA 225 (5) C | S****Global Health**

Examines global patterns of health and disease as a function of economic, social and cultural determinants. Includes measurement of health outcomes, comparative analysis of health care systems, health and disease patterns of epidemiology, transnational disease, health inequalities and major players in global health.

**HEA 226 (2) C****Advanced Global Health Seminar**

Self-directed study, including research and presentation, of an area of global health. Prereq: HEA 225 or MATH 084, ENGL& 101 and permission.

**HEA 299 (1-5) C****Independent Study**

Independent study in health education. Prereq: Permission.

## Healthcare Services Management Bachelor of Applied Science

**HSM 301 (5) C****Principles of Healthcare Services Management**

Covers basic managerial functions of healthcare services such as planning, organizing, leading, and controlling resources to accomplish organizational goals. Prereq: Permission.

**HSM 322 (5) C****Human Resources**

Introduction to the functions of human resource management in health organizations with an emphasis on the relationship between human resources and organizational strategy.

**HSM 325 (5) C****Financial Management in Healthcare**

Basics of healthcare financial management. Development of knowledge and skills to manage a departmental budget, capital budgets, and productivity and staffing resources.

**HSM 451 (5) C****Healthcare Outcomes and Quality Management**

Overview of continuous quality improvement methods in healthcare systems. Covers the CQI process, data measurement and management, outcomes development, and outcomes assessment. Focuses on using quality data in the effective management of departmental processes and as a tool for the origination of departmental and hospital safety initiatives. Prereq: ENGL&102, MATH&146 (or equivalent), and HSM 301, each with a 2.0 or higher.

**HSM 476 (1) C****Healthcare Services Management Capstone I**

The 1st of 3 successive capstone courses in Healthcare Services Mngmt. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g. education, systems improvement, etc). The 3 qtr. project concludes with a final paper & a presentation. Prereq: All BAS core classes with 2.0 or higher; or concurrent enrollment in any remaining BAS core classes.

**HSM 477 (1) C****Healthcare Services Management Capstone II**

The 2nd of 3 successive capstone courses in the Healthcare Services Management degree. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g. education, systems improvement, etc). The 3 qtr. project concludes with a final paper & a presentation. Prereq: Completion of HSM 476.

**HSM 478 (3) C****Healthcare Services Management Capstone III**

The last of 3 successive capstone courses in the Healthcare Services Management degree. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g. education, systems improvement, etc). The 3 qtr. project concludes with a final paper & a presentation. Prereq: Successful completion of HSM 477.

**HSM 479 (5) C****Healthcare Services Management Capstone**

A capstone course in the Healthcare Services Management degree representing the culmination of student learning. Students will take on a project using a faculty and/or community mentor to showcase their application of the concepts learned in the program. The content varies based on student projects and can take on many forms. Projects will be developed in collaboration with faculty and community mentors and are aligned with student interest.

## Heating, Ventilation and A/C

**HVC 101 (5) N****Essentials of HVAC**

First HVAC course in the HVAC Technician course of study on the fundamental principles of heating, ventilation, and air conditioning (HVAC). Covers safety, basic refrigeration, electricity, combustion and venting, air distribution and indoor air quality (IAQ). Prerequisite: BUS 169 or instructor permission.

**HVC 210 (5) N****HVAC Cooling Systems Installation**

HVC 210 is the second class of a series in Heating, Ventilating and Air-Conditioning installation. The course covers the state, federal, and local codes and requirements on the installation of air conditioners, heat pumps, and hydronic heating systems. Included is the theory of, and hands-on installation of air conditioners, heat pumps, air distribution systems, refrigeration piping, electrical wiring, and basic control systems is covered. Prerequisite: HVC 101 and EET 160. Corequisite: HVC 211.

**HVC 211 (5) N****HVAC Systems Installation II**

Part two of four HVAC Learning Solutions courses. Covers the basic theory and design of heating and cooling systems, including furnace, air handler service and air distribution, AC refrigeration, and heat pumps, electrical control subsystems, temperature control, system wiring, and motors. Prereq: HVC 101.

**HVC 212 (5) N****HVAC System Installation & Nate PREP**

Part three of four HVAC Learning Solutions courses. Covers the repair and maintenance of cooling systems, including air handler service and air distribution, AC refrigeration, heat pumps, electrical control subsystems, temperature control, system wiring, and motors. Prereq: HVC 211.



**HVC 220 (3) N**  
**Green HVAC**

Intro to building science and sustainability with emphasis on HVAC. Includes new code updates, building science concepts, green building strategies, innovative and trending green equipment options. Learn to translate new green HVAC into sales and enhanced comfort. Work on the link between building science and business science.

**HVC 226 (5) N**  
**HVAC Electronics and Control Systems**

Home and Building Automation Systems are centralized, interlinked, networks of hardware and software which monitor and control the environment in residential, commercial, industrial, and institutional facilities. Starting with the basics, this course covers analog and digital sensors and controls in residential and light commercial applications. Prerequisites: HVC 101 and EET 160 or instructor's permission.

**HVC 228 (5) N**  
**Energy Performance for the Field Technician**

Learn the basics of energy performance of homes including analyzing and recording various characteristics of the building envelope; the walls, ceilings, floors, doors, windows, and skylights. Learn how to perform blower door tests, duct blasting and duct air flow tests. Learn the use of infrared thermal imaging cameras to determine high loss/gain areas of the structure's envelope. Prerequisites: HVC 212 and HVC 220 or instructor permission.

**High School Completion****HSC 041 (1-5) C | N | S**  
**Fine Arts Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for fine arts credit toward a high school diploma. Prereq: ABE department placement and/or instructor permission.

**HSC 042 (1-5) C | S**  
**Health Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for health credit toward a high school diploma. Prereq: ABE department placement and/or instructor permission.

**HSC 043 (1-5) C | N | S**  
**Language Arts Portfolio**

Creation of a portfolio that demonstrates the mastery of the learning outcomes required by the Washington State Board of Education for language arts credit toward a high school diploma. Prereq: ABE department placement and/or instructor permission.

**HSC 044 (1-5) C | S**  
**Lab Science Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for lab science credit toward a high school diploma. Prereq: ABE department placement and/or instructor permission.

**HSC 045 (1-5) C | N | S**  
**Physical Education Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for physical education credit toward a high school diploma.

**HSC 046 (1-5) C | S**  
**Math Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for math credit toward a high school diploma. Prereq: ABE department placement and/or instructor permission.

**HSC 047 (1-5) C | N | S**  
**Washington State History/  
Government Portfolio**

Creation of a portfolio that demonstrates mastery of learning outcomes required by the Washington State Board of Education for Washington State History and Government. Course completion will fulfill the Washington State graduation requirement of 0.5 high school credit in WA State History and Government.

**HSC 048 (1-5) C | N | S**  
**Occupational Education Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for Occupational Education credit toward a high school diploma. Course completion will fulfill the Washington State graduation requirement of 1 high school credit in Occupational Education.

**HSC 049 (1-5) C | N**  
**Contemporary World Problems Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for Contemporary World Problems credit toward a high school diploma. Course completion will fulfill the Washington State graduation requirement of 1 high school credit in Contemporary World Problems.

**HSC 050 (1-5) C**  
**United States History Portfolio**

Fosters the creation of a portfolio that demonstrates mastery of learning outcomes required by the Washington State Board of Education for US History. Course completion will fulfill the Washington State graduation requirement of 1 high school credit in US History. Prereq: ABE department placement, or Instructor's permission.

**HSC 052 (1-5) N**  
**U.S. History I**

An introductory United States history and government course which addresses the Washington State Essential Academic Learning Requirements for high school social studies. Students will explore the development of US politics, society, culture, and economy through an analysis of the issues and events surrounding European colonization through Reconstruction. Prerequisite: ABE department placement and/or instructor permission

**HSC 053 (1-5) N**  
**Life Science**

An introductory life science course. Includes an introduction to diversity of life, processes within cells, maintenance and stability of populations, and mechanisms of evolution. Prerequisite: Placement in HS 21+ program or teacher permission.

**HSC 054 (1-5) N**  
**Physical Science**

An algebra-based introductory physical science course. Includes an introduction to scientific inquiry, motion, forces, energy, momentum, gravity, and machines.

**HSC 055 (1-5) C**  
**Science Portfolio**

Creation of a portfolio that demonstrates mastery of learning outcomes required by the Washington State Board of Education for science. Course completion will fulfill the Washington State graduation requirement of 1.0 high school credit in science. Prerequisite: ABE department placement and/or instructor permission.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**HSC 082 (1-5) C | N**  
**Hsc Special Topics**

Designed to allow for special course offerings that are responsive to student need and/or current and emerging topics. Prerequisite: Placement by permission.

**HSC 091 (5) C**  
**EDP Skills Enhancement I**

Assessment portion of the National External Diploma Program (EDP). Measures reading, writing and math skills. Work individually with an instructor to identify skills needed for successful completion of the diploma program. nedp.org

**HSC 092 (5) C**  
**EDP Skills Enhancement II**

Project portion of the National External Diploma Program (EDP). Working with an instructor, complete five projects that demonstrate skills in 65 generalized competencies, including communication and computation. Demonstrate occupational preparedness by completing a sixth individualized project based on employment or other specific experiences. Must complete these projects with 100% accuracy.

**History**

**HIST 035 (5) S**  
**US History I - Career Link**

Reviews the significant contributions of the Colonial period, emphasizing political and constitutional developments from the American Revolution through Reconstruction. Emphasis on the Constitution and causes and consequences of the Civil War. Includes contributions and achievements of the Native American population.

**HIST 036 (5) S**  
**United States History II**

Covers U.S. development from the Civil War to the present. Includes political, social and economic forces affecting the United States during the period of westward movement, industrialization, world wars, economic growth and world dominance. Covers the profound technological developments of the twentieth century in relation to the world of work.

**HIST 037 (5) S**  
**Washington State History - Career Link**

Covers the historical development of the Pacific Northwest, with emphasis on the development of Washington state. Looks at contemporary, economic, political and social problems.

**HIST 090 (5) S**  
**Washington State History**

This course covers the historical development of the Pacific Northwest, with emphasis on the development of Washington State. A major component of the course is the pre-European settlement of the Pacific Northwest, including the geography, geology, and first peoples of the region. An examination of the historical trends and events that led to the settlement of the Pacific Northwest will be covered. Contemporary economic, political, and social problems are considered.

**HIST 091 (5) S**  
**History I**

American History I covers significant events in Northern America from pre-colonial times to the formation of the United States as a new nation. Specific attention will be placed on Native Americans, Colonial Life, the French and Indian War, the American Revolution, and the development of a new American Government.

**HIST 092 (5) S**  
**United States History II**

This course will cover modern world historical events (primarily 20th Century) with a focus on the dominant issues that set the course of world history and the role of the United States in those events.

**HIST& 126 (5) C | N | S**  
**World Civilizations I**

Reviews the historic foundations and development of civilizations from 6000 BCE to 1500 CE with emphasis on social, political, cultural and economic aspects. Studies the nature of history and its role as an intellectual and academic discipline.

**HIST& 127 (5) C | N | S**  
**World Civilizations II**

Reviews the foundations of modern civilization with emphasis on the scientific, industrial and political revolutions that have transformed societies. Emphasis on the period between 1500-1750 and the resulting cross-cultural contact on a global scale.

**HIST& 128 (5) C | N | S**  
**World Civilizations III**

Study of world civilization during the 19th and 20th centuries. Survey of dramatic events and often-conflicting forces and ideologies affecting contemporary life. Analysis of modern peoples' solutions to challenges and problems confronting civilization.

**HIST 131 (5) C**  
**Asian American History**

Surveys the experiences of Chinese, Japanese, Filipino, Korean, Asian Indian and Southeast Asians in the United States from the mid-19th century to the present. Major themes include imperialism, labor migration, racism, exclusionary immigration laws, community formation, and resistance. Prereq: Eligibility for ENGL 099.

**HIST& 136 (5) C | S**  
**US History I**

Reviews U.S. history from the migration of the first Native populations through Reconstruction. Focuses on encounters, territorial expansion and development of political, social, cultural, legal and economic institutions affecting the populations in regions that became the United States.

**HIST& 137 (5) C**  
**US History 2**

Covers U.S. history from the Civil War to the present. Focuses on industrial and urban development, immigration, race, ethnicity and reform, politics, economics, social change and Americans at war.

**HIST 140 (5) C | N | S**  
**Women in American History**

Surveys U.S. women's roles, work, status, accomplishments, issues and movements, from the pre-Colonial period to the present.

**HIST& 146 (5) C | N | S**  
**US History I: America Until 1791**

Study of what is now the USA in its formative period, from its Native, European, and African origins to early nationhood. Emphasis on the American Revolution. Preq: Eligible for English 101 (C).

**HIST& 147 (5) C | N | S**  
**US History II: the 1800s**

Examines changes shaping American society in the 1800s: slavery, sectionalism, the Civil War, the westward movement, industrialization and emergence of the United States as a world power. Emphasizes social change and conflicts, including abolitionism, women's rights, labor, immigration, Manifest Destiny, Reconstruction, and the Gilded Age. Prereq: Eligible for English 101 (C).

**HIST& 148 (5) C | N | S**  
**US History III**

Covers an era of conflict, war, uncertain peace, depression and great social changes. Emphasizes historical, economic, social, racial and political events that have formed the modern U.S.

**HIST 150 (5) C | N**  
**Multicultural Experiences in US History**

Focuses on the history of selected communities of people of color in America. Emphasizes a historical approach to understanding contemporary American issues by examining both the lived experiences of specific people of color and the larger history of race and ethnicity in the United States.

**HIST 200 (5) C**  
**Critical Issues for the 21st Century**

Examines current global issues from global perspectives, using materials from diverse history sources and the research tools of the historian.

**HIST 210 (5) C | N**  
**The Pacific Century**

Study of the transformation of selected Asian Pacific countries and their histories and roles in the modern world. Emphasis on responses to the problems and challenges of economic, political and social development.

**HIST 211 (5) S**  
**History of the Middle East**

Examines the history of the Middle East (Arab countries, Turkey, Iran and Israel) from the emergence of Islam to the present. Includes cultural, economic and political aspects of history with emphasis on the modern period.

**HIST& 214 (5) C | N | S**  
**Pacific Northwest History**

Investigates the history of the Pacific Northwest from earliest human habitation to the present. Focuses on Washington state and the Puget Sound, contributions by diverse populations, environmental developments, and the region's changing roles within the context of national and global developments.

**HIST 221 (5) N**  
**Sports & Social Change in the Twentieth Century**

Examines the development of sports and its importance for United States culture and society. Focuses on the struggles of athletes who resisted social restrictions, prejudices, gender and racial segregation and the role of sports in creating the diverse American society of the 20th century. Also explores the interplay between sports and immigration, technology, and globalization.

**HIST 240 (5) C**  
**Globalization, Power, and Resistance**

Explores globalization, empires, and former colonies. Critiques transnational power dynamics while exploring local resistance to protect small-scale and regional economies. Examines soft power initiatives and diasporic migrations related to regions like Asia (where 60% of the world's population lives). Prereq: Eligibility for ENGL099.

**HIST 251 (5) C**  
**History of China**

Surveys the historical development of Chinese society from ancient times to the present, including social, economic and political aspects. Emphasis on the modern period and China's global role, including the perspectives of Chinese and ethnic minorities in the People's Republic of China.

**HIST 268 (5) C | N**  
**History of Latin America**

Covers the development of the Latin American republics, from indigenous European and African foundations through independence and the 20th century. Focuses on social, economic, cultural and political development.

**HIST 269 (5) C**  
**History of the Holocaust**

Interdisciplinary examination of the context and origins of the Holocaust, using history, film/documentaries and voices from the Holocaust. Emphasizes multiple perspectives, including perpetrators, victims, bystanders, resisters and rescuers. Analysis of modern institutions (nation-states, bureaucracies) and ideologies (anti-Semitism, scientific racism, nationalism) illuminates the meaning, impact and legacies of the Holocaust.

**HIST 298 (1-5) C | N**  
**Special Topics: History**

Independent study in selected history topics under faculty supervision. Prereq: Permission.

**HIST 299 (1-5) C**  
**Special Problems - History**

Small class format to study and discuss selected topics in history. Prereq: Permission.

**Hospitality****HOS 101 (1) C**  
**Customer Service Practicum I**

Application of basic customer service theory in a full service restaurant or pastry case. Includes busing, housekeeping, mise en place for both casual and formal restaurant settings; and customer service and sales techniques in bakery counter settings. Prereq: Permission.

**HOS 102 (1) C**  
**Customer Service Practicum II**

Students refine customer service skills by further practice in a pastry case or full-service restaurant. Includes dining room arrangement, buffet set up, customer service and wait staff duties. In bakery counter settings, students practice product rotation and merchandising. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

**HOS 103 (1) C**  
**Customer Service Practicum III**

Students acquire expertise in customer service by performing opening and closing procedures, training bus staff and using a variety of service techniques including the French, English and Russian styles of table service. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

**HOS 104 (1) C**  
**Customer Service Practicum IV**

Introduction to leadership positions in the front of the house. Includes maître d' duties, managing reservations, cashiering, tableside food preparation and service in a fine dining setting. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

**HOS 105 (1) C**  
**Customer Service for Specialty Desserts Breads**

Students assume responsibility for opening/closing, sales, organization and merchandising of product, and training of first-quarter students at a retail pastry case. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

**HOS 108 (4) C**  
**Dining Room and Kitchen Management**

Students experience supervisory roles in a variety of management situations in both the front and back of the house. This class also includes tableside cooking and service coordination for other students' chef of the day projects.

**HOS 110 (3) C**  
**Principles of Sanitation**

Fundamentals of food service sanitation and its importance to the industry. Includes microorganisms in food spoilage and food-borne illness, ways of limiting microbial contamination and growth, creating a clean and sanitary environment, accident prevention and first aid, Material Safety Data Sheets, sanitation in crisis situations, principles of designing safe and sanitary kitchens and government regulations. Prereq: Admission into the Culinary Arts Program.

**HOS 111 (1) C**  
**Introduction to Customer Service: Theory**

Covers the theory and operation of table service in a variety of dining environments. Includes dining room safety, proper service and etiquette, guest interaction, menu knowledge, ticket writing and use of a variety of dining room equipment. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

**HOS 112 (1) C**  
**Spreadsheet for Hospitality**

Introduces key tools and concepts in using business spreadsheet applications such as Microsoft Excel. Topics include elements of spreadsheet such as cells, rows, columns, and sheets, applying formatting, working with functions, tables, and charts. Focuses will be on Hospitality industry related tools and solutions. Prereq: Enrollment in Culinary Arts program.

**HOS 122 (1) C**  
**Purchasing and Inventory: Theory**

Intro to principles of inventory procedures. Encompasses formal and informal purchasing methods, flow of goods, food buying, legal and ethical purchasing considerations, market analysis, stock rotation, bid specifications, yield and cost comparisons, quality tests and inventory. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

**HOS 123 (1) C**  
**Food Costing Principles and Application**

Explores connection between profit and food cost; discusses product waste and defines costing terms and purchasing units. Use mathematics skills to make conversions, cost bulk and sub-recipes and calculate the selling price of a menu item. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

**HOS 124 (2) C**  
**Computerized Menu Planning**

Learn various menu layouts and designs. Learn and use proper menu language while using word processing and spreadsheet programs in the creation of menus. Perform weight to volume conversions while learning how to cost out recipes. Prereq: Successful completion of 3rd quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

**HOS 197 (1-5) C**  
**Work Experience-Food and Hospitality**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply food/hospitality knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**HOS 201 (2) C**  
**Functions of Management**

Covers management and communication theories and practices within the culinary arts and baking industries. Includes intro to the hospitality industry and overview of the Americans with Disabilities Act, sexual harassment, as well as other legal and human resource topics. Presents communications skills, functions of management, beverage management, financial statement analysis and résumé writing. Prereq: Successful completion of previous quarter's courses with minimum GPA of 2.0 in each course.

**HOS 203 (1-3) S**  
**Commercial Food Nutrition**

Complete overview of the six nutrient categories—carbohydrates, lipids, protein, vitamins, minerals and water. Practical information on how the body uses nutrients, food sources and alternatives for each nutrient and methods of evaluating nutrition information. In evaluating dietary intake use current USDA food guidelines.

**HOS 299 (1-5) S**  
**Individual Projects/Hospitality, Culinary Arts**

To help prepare the student to understand and the theoretical and applied aspects of team hot food competition as outlined by the American Culinary Federation (ACF). The student will be required to participate in weekly team practices and scheduled competitions. The student will work in close supervision with the instructor (coach) through the development of hand skill, menu development and hot food cooking as specified by the ACF competition guidelines. The student will be handling and preparing food items that will be eaten Requirements: Concurrent enrollment into the Culinary Arts Program

## Hospitality Management Bachelor of Applied Science

**HMG 301 (3) S**  
**Introduction to Hospitality**

Survey of the various segments of the hospitality industry, including a brief history and current issues, with an emphasis on service.

**HMG 302 (5) S**  
**Hospitality Management**

Survey of management theories, functions, methods, and concepts applied to hospitality settings.

**HMG 303 (5) S**  
**Hospitality Marketing**

Incorporates theory and practice for an actual business, including elements of local store marketing and sales.

**HMG 310 (3) S**  
**Hospitality Computer Applications**

Explores the technology fundamentals and software applications for business functions and management practices.

**HMG 311 (3) S**  
**Lodging Operations**

Study of each hotel department by function and personnel. Presents concepts of yield management and revenue management in depth.



**HMG 312 (3) S****Legal Issues in Hospitality**

Study of liability, dram shop laws, contracts, and innkeeper laws with the purpose of reducing the risk environment for operators.

**HMG 313 (3) S****Entrepreneurship**

Concepts and issues related to new business ventures, including small businesses.

**HMG 314 (5) S****Diversity and Culture in Travel and Tourism**

Learn the cultural principles and practices in domestic and international travel and tourism and the impact on hospitality businesses. Emphasizes diversity.

**HMG 330 (5) S****Intro to Process Improvement in Operations**

This class explores the use of Business Process Improvement methodology for analyzing and improving operational effectiveness in business. The Course requires students to already have earned an AA Degree or higher or instructor permission.

**HMG 401 (5) S****Cost Controls**

Provides the basics of cost control management in the food and beverage industry within the Hospitality Industry.

**HMG 402 (5) S****Hospitality Accounting**

Explores the use of management tools for creating and analyzing operational effectiveness in the hospitality industry. In addition to credits, successful completion earns widely recognized national certification from the American Hotel and Lodging Association (AHLA).

**HMG 411 (3) S****Human Resource Management**

Policy and practice of human resources utilization: selecting, training, motivating, evaluating and compensating employees; labor relations; EEO legislation.

**HMG 412 (5) S****Service Operations Management**

Design and management of service systems in hospitality operations; control of customer interaction, personnel activities and inventory.

**HMG 420 (3) S****Ethical Leadership**

Nature and sources of ethical conflicts and dilemmas leaders and organizations confront in the hospitality industry.

**HMG 430 (5) S****Sustainable Business Practices in Foodservice I**

Policy and practice in the use of sustainable business practices in the foodservice industry including: Design of Goods and Services, Sustainability in the Supply Chain, Managing Quality, Statistical Process Control, Process Strategy, Capacity and Constraint Management, Location Strategies, Layout Strategies and Human Resources, Job Design, and Work Measurement.

**HMG 489 (1) S****Professional Career Development**

Preparation for industry employment, including résumé writing, interview skills, professional dress, and business etiquette.

**HMG 490 (3) S****Internship Lecture**

Tracks student requirement of 1000 hours of industry experiences.

**HMG 491 (5) S****Hospitality Management Capstone**

Project-based course integrating all components in the curriculum.

**HMG 499 (1-5) S****Independent Study Hospitality Management**

Independent Study Hospitality Management.

**Human Development****HDC 100 (1-3) N****Career Planning and Personal Evaluation**

Intro to a systematic approach to help the individual gain a better understanding of self relating to occupational interests and goals. Includes testing and discussions of values, interests and skills.

**HDC 101 (1-3) C | N | S****Orientation to College Success**

Assists new students in their adjustment to community college. Includes goal-setting, self-motivation skills, identifying college resources, personal development and general study hints.

**HDC 102 (3) C****College Survival Skills**

Assists new and struggling students to identify and develop strategies for success in college and life. Includes learning effective study skills and use of college support services.

**HDC 103 (3) C****Self-Awareness Through Critical Thinking, Etc.**

Covers methods of comparison, inference and deduction to solve abstract and practical problems. Sequential steps in the evaluation of people, knowledge and values, in which thinking becomes more complex and less categorical and absolute. Designed to start a reflecting process that helps in understanding how cultural beliefs, attitudes and values affect the way we think.

**HDC 111 (1) C****Math Study Strategies**

Introduces students to study skills to improve math success. Covers reading, note-taking, test-taking, math anxiety and college resources. Most appropriate for students who struggle with math or have not taken a math class for a long time. PREREQ: Test placement at or higher than ENGL 092, ESL 093/096 or equivalent course completion.

**HDC 113 (1) C****Reading and Textbook Note Taking Strategies**

Become a self-directed learner for reading and thinking academically and personally. Focuses on the development of practical knowledge and strategies to assist students towards that goal.

**HDC 114 (1) C****Listening and Lecture Note Taking Strategies**

Develop ability to take more effective lecture notes through exploration of some well-known note-taking systems. Enhance listening skills and learn to use notes as a study tool.

**HDC 115 (1) C****Test Taking Skills and Anxiety Management**

Strategies for effective test-taking and test anxiety to enhance testing performance and curriculum retention. Includes assessment of personal learning style, test and question types and strategies, study habits and environment, anxiety reduction strategies, resources and planning for testing.

**HDC 119 (1-3) S****Stress Management**

Focus on changing stressful situations and personal responses to them. Includes time management, cognitive restructuring, health and wellness and relaxation training.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**HDC 120 (1-5) C**  
**Introduction to Leadership Theory and Practice**

Explores theory behind visionary, servant and citizen leadership styles. Covers practical leadership skills such as time management, goal-setting and effective communication. Emphasizes involvement in various student activities and programs.

**HDC 190 (1-2) C**  
**Women in Society**

Examines women's changing social roles—locally, nationally, globally—and their effects on women. Explores how these issues relate to college students facing challenges such as achieving goals, balancing responsibilities, overcoming barriers; and establishing inclusiveness. All genders encouraged to enroll.

**HDC 197 (1-3) C**  
**Leadership Practice and Application**

Integrates educational studies with supervised experience with student government, campus clubs/committees, or off-campus leadership activities. Provides individualized opportunities to apply knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**Humanities**

**HUM 104 (5) C | N**  
**Visual Thinking**

Intro to thinking in images to release creativity; using the right brain in concert with the left brain; the focusing power of relaxed attention; idea sketching to generate, express and record ideas; use of new problem-solving strategies for problems defying usual solutions. Prereq: Placement in ENGL 098 or higher.

**HUM 105 (5) C | N | S**  
**Intercultural Communication**

Examines the skills in communication and empathy required for intercultural communication. Includes an interdisciplinary study of diverse cultures and perspectives in the United States in the context of economic, political, and cultural globalization.

**HUM 110 (5) C | N | S**  
**Introduction to American Film**

Examines Hollywood film-making as an art form, a business and a shaper of culture. View, discuss and critically analyze classics, features and documentaries for increased understanding of literary and artistic elements. Covers the impact of films on personal experience, American culture and the world.

**HUM 112 (5) C**  
**Responsibilities & Rights of a Free Society**

Examines individual rights and responsibilities in a free society in the practical context of an individual's roles as a citizen and resident of various levels of government, family member and employee or employer. Distinguishes between legally enforceable rights and obligations and the relationship between responsibilities and legal authority. Adds values to the critical thinking process.

**HUM 120 (5) S**  
**Introduction to Asian Cinema**

Survey of cinema of Asian and Asian Pacific Islander countries, including but not limited to Japan, China, Hong Kong, Taiwan, Korea, Vietnam, Cambodia, Philippines, Samoa, India and Iran. Course satisfies API Emphasis AA requirement at South. Prereq: Placement in ENG& 101.

**HUM 121 (5) S**  
**Issues in the Humanities**

Introduces students to a core humanities issue from multiple and interdisciplinary perspectives. Explores how the humanities intersect with various career, disciplinary, or academic pathways. Teaches the importance of interdisciplinary inquiry in research and provides models for how to formulate, undertake, and present projects. Emphasizes interdisciplinary inquiry and methods in the humanities (visual media, history, literature, philosophy). Includes readings, films, performances, and exhibits.

**HUM 125 (5) C**  
**Hip-Hop Theory and Culture**

Identifies and critically examines the theoretical foundations of hip-hop culture and rap music, the evolution of hip-hop philosophy and the community from which it originated. Analyzes the influences that the background, music and style of the hip-hop generation have upon a multicultural nation and world. Prereq: ENGL& 101.

**HUM 130 (5) C | S**  
**World Cinema**

Survey of 20th and 21st century international films and filmmakers from around the globe. Analyzes how film themes are conveyed through narrative and style. Examines cinema as an art form that represents and influences social, political and cultural movements worldwide. Prereq: Eligible for ENGL& 101.

**HUM 140 (5) N**  
**Transnational Cinema**

Transnational Cinema- examines films from at least four non-Western cultures as means of storytelling, as art form, and as commercial product. Course will look at the financial, political, and ideological conditions that surround the making and reception of these films. Course will also consider how globalization and postcolonialism are reflected in films from these cultures and/or in the ways Western viewers and critics understand and value these films. Prerequisite: Placement into or completion of English 101. Transfer class.

**HUM 145 (5) C | N | S**  
**Film Genre**

Study of a particular film genre through a theoretical lens to discover its historical and cultural roots, significance, and context.

**HUM 150 (5) C**  
**Ways of Knowing**

Students study self-assessment or self-evaluation by writing and talking about their own education. Includes a study of learning styles and an exploration of individual learning styles.

**HUM 155 (5) C**  
**Sports and Culture**

Provides a forum for critical analysis with multiple perspectives of the cultural framework of sports and the sports world. Includes dynamics in sports related to social issues such as race, class, gender and oppression.

**HUM 197 (1-5) C****Work Experience-Humanities**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply humanities knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**HUM 200 (5) C | N****Reading the Media**

Examines the way cultural identities are constructed by and represented in contemporary media such as film, television, radio and newspapers. Prereq: Placement into ENGL& 101 (N).

**HUM 210 (5) C | S****Introduction to Lgbtq Studies**

Introduces key themes and critical frameworks in Lesbian, Gay, Bisexual, Transgendered, and Queer (LGBTQ) Studies. Topics include histories of sexuality; forms of oppression including heterosexism, homophobia, and transphobia; resistance to oppression; violence against LGBTQ people; queer activism; diverse experiences of sexuality; and representations in literature, art, and popular media. Prereq: Satisfactory Completion of ENGL& 101.

**HUM 230 (5) C****Disability Studies: An Introduction**

Introduces a critical framework for recognizing how people with disabilities see their worlds, and suggest new ways of thinking about difference, myths, identity, justice, power, privilege, the body, and society. Explores how disability activists and scholars have reconceptualized disability through an empowering social-political & human rights perspective, rendering it an element of human diversity. Prerequisite: ENGL&101 with a 2.0 or higher.

**HUM 261 (5) C****Japanese Civilization**

Covers the development of Japan as a society and nation including its origins, history, government, literature, economic institutions, material culture, social organizations and religions.

**HUM 270 (5) C****Comic Books, Manga and Graphic Novels**

Survey the history of comic books, manga and graphic novels. Study cartoonists' works as channels of human expression and as evidence of changing and differing cultural conditions. Learn the basics of cartooning. Research self-chosen questions pertaining to sequential art.

**HUM 289 (1-10) C****Chinese Language Through Experiential Activities**

Self-paced experiential education for undergraduates who plan to take advantage of language study opportunities outside the USA, such as living with a family for total language immersion or attending a language school while studying the local cultures. All course requirements must be completed upon return to the USA.

**HUM 290 (1-10) C****German Language Through Experiential Activity**

See course description listed for HUM 289.

**HUM 291 (1-10) C****Spanish Language Through Experiential Activity**

See course description listed for HUM 289.

**HUM 292 (1-10) C****French Language Through Experiential Activity**

See course description listed for HUM 289.

**HUM 293 (1-10) C****Italian Language Through Experiential Activity**

See course description listed for HUM 289.

**HUM 294 (1-5) C****Independent Projects**

Independent projects based on humanities research. Prereq: Permission.

**HUM 297 (1-10) C****Japanese Language Through Experiential Activity**

See course description listed for HUM 289.

**HUM 298 (1-10) C****Portuguese Language Through Experiential Activity**

See course description listed for HUM 289.

**HUM 299 (1-5) C | N | S****Special Problems in Humanities**

An independent study/research course in the interdisciplinary field of humanities. Prereq: Permission.

**Industrial First Aid****IFS 100 (2) S****Industrial First Aid and Safety**

Offered at Duwamish Training Center. Covers mandate of Washington state's Workman's Compensation Act to recognize, treat and utilize advanced life support services available to the general public for ill or injured victims. Focuses on safety and prevention of industrial accidents and infectious disease control. Prereq: Covered by Washington State Workman's Compensation Act.

**IFS 102 (1) S****Industrial First Aid (Renewal)**

This course covers basic information required to perform first aid measures on suddenly ill or injured persons. It also covers the application of CPR (Cardio Pulmonary Resuscitation).

**IFS 105 (1) S****Ind 1st Aid/CPR-AED Bloodborne Pathogens**

Covers Industrial First Aid/CPR-AED instruction per the American Heart Association's Basic Life Support Curriculum. This course will also cover Bloodborne Pathogens using the American Academy of Orthopedic Surgeons curriculum.

**Industrial Technology****INT 100 (3) S****Overview of Manufacturing Processes**

Study how machined parts are fabricated. Includes limited hands-on experience on both lathe and milling machines. For Engineering, Drafting and Quality Assurance majors.

**INT 101 (3) S****Manufacturing Basics I**

Students gain industry-relevant knowledge and applicable topics relevant for work in a diversified manufacturing environment. Topics include but are not limited to: Newton's Law, pressure awareness, energy, force, torque, and gas laws. An introduction to basic electricity and electron flow/charge, circuits, DC & AC, generation and safety practices.

**INT 108 (3) S****Intro to Blueprint Reading for Construction**

Learn to identify, read and interpret construction drawings. Emphasis on practical understanding of the processes involved in construction and interpreting them from drawings.

**INT 109 (1) S**  
**Flagging and Traffic Control**

Covers basic knowledge, information and awareness of directing traffic and setting up traffic control devices within Washington state. Learn to perform flagging and traffic control job duties safely. Covers the Evergreen Safety Council Flagger Handbook. This course is recognized by the Washington State Traffic Control Oversight Committee. Flagger certification earned in this course is good for three years and is recognized in Oregon and Idaho.

**INT 112 (5) S**  
**Manufacturing Tools and Trades**

Covers the use of hand tools, shop and manufacturing tools, shop safety and personal protective equipment needed to work in a diversified manufacturing lab. Includes tours to employer sites with the potential of job shadows with current employees. Complete an individual design and manufacturing project using the lab.

**INT 115 (3) S**  
**Introduction to Lean Manufacturing**

Learn English language communication strategies and tools to grow and more fully participate in the implementation of the concepts of lean. Integrates English language learning with the Lean Manufacturing training environment.

**INT 126 (1-12) S**  
**Introduction to Mechatronics**

This course will provide instruction relating to entry-level positions in diverse manufacturing industries, with a focus on preparation for industrial machine maintenance and mechatronics. Content includes a survey of shop practices, safety standards, mechanical concepts, hydraulics, pneumatics, electronic assembly, and soldering.

**INT 160 (1-3) S**  
**Introduction to Safety and Health OSHA 10**

Covers both Federal OSHA (29 CFR 1910) and State of Washington (WISHA) general industry standards as they apply to the industrial manufacturing industry. Learn the hazards associated with the manufacturing industry and how to apply industry standards to ensure compliance with the Occupational Health and Safety Act of 1970.

**INT 163 (1) S**  
**Hazard Communication**

The goal of this course is to enable students to recognize and understand the required elements of OSHA's written hazard communication program, including how to identify and evaluate chemical hazards using Safety Data Sheets and chemical labels.

**INT 165 (3) S**  
**OSHA 30 General Safety**

Orientation to occupational safety and health standards in general industry. Provides comprehensive safety program knowledge and skills necessary to receive OSHA/MSDS certification and provides complete information on OSHA compliance issues.

**INT 180 (3) S**  
**Introduction to Composites**

Intro to materials science. Learn the properties and processing of solid materials used in manufacturing. Covers composite materials in general and focuses on a variety of materials used in manufacturing, including ceramics, metals, and fiber reinforced polymer composites. Learn the properties and manufacturing techniques of composite fabrications.

**INT 197 (1-5) S**  
**Industrial Internship**

Spend time in the field under the guidance of an instructor and/or mentor to learn about operations, policies, procedures, cultures and behavioral standards in a given private or public sector, paid or non-paid. Meet as a group during the internship. May be used as an internship during ongoing program coursework, upon completing the coursework or both. Prereq: Permission.

**Industrial Vehicle****IVP 100 (2) S**  
**CDL Knowledge Test Preparation**

Preparatory course in order to take Washington State's Class A CDL written knowledge test. Test preparation, study skills, and terminology are covered. Specific topics include vehicle skids, gearing and hills, rollovers, safety, trip inspection, brakes and brake adjustment, coupling, emergencies, collisions, loads, stalls, and accident reporting.

**IVP 101 (6) S**  
**Fundamentals of Commercial Truck Driving**

This course is designed to give student drivers the technical and background knowledge necessary to operate a class A commercial vehicle. With successful completion, students will have basic entry level knowledge necessary to begin class A street driving, backing and maneuvering, trip inspection, and lab, range, and observation.

**IVP 102 (2) S**  
**Class a Street Driving**

This course provides basic and advanced behind-the-wheel instruction. The course deals with common and unique driving situations. Instruction in safety and environmental awareness, starting and stopping, turning, and hills will be covered.

**IVP 103 (2) S**  
**Class a Backing and Maneuvering**

This course is designed to provide CDL class A students with the understanding and ability to safely and successfully back and maneuver class A vehicles. Straight-line backing, angled backing, blind-side backing, and turns will be incorporated.

**IVP 104 (2) S**  
**Class a Trip Inspection**

This class will prepare future class A truck drivers to pass the trip inspection portion of Washington State Department of Licensing Class A CDL exam. The course includes compliance, safety, and accountability procedures from the Federal Motor Carrier Safety Association. Students will learn the 7 step inspection procedure, how to check air brakes, and how to assess tires.

**IVP 105 (7) S**  
**Class a Lab Range and Observation**

This course is designed to prepare student drivers with the technical and background knowledge necessary to test for Washington State Commercial Driver's License skills test. The focus of this course is on backing and maneuvering, street driving, sliding tandem axles, chaining up, coupling and uncoupling, and scaling loads. When successfully completed, students will have the practical driving and operational skills necessary to safely and efficiently operate a commercial motor vehicle.

**IVP 106 (1-3) S**  
**Class a Drive Experience**

This course is designed to prepare student drivers with work experience and background knowledge necessary to test for Washington State Commercial Driver's License skills test. The focus of this course is on work situations, including backing and maneuvering, street driving, sliding tandem axles, chaining up, coupling and uncoupling, and scaling loads.

## Information Technology

### IT 100 (5) C Information Technology Fundamentals

Introduces computers and information systems, including hardware, software, data organization, data communications, systems development, the constantly changing roles of Information Technology (IT) professionals, and the evolving role of computers in society.

### IT 102 (5) N Introduction to Programming

Gain a basic understanding of the programming field. Learn to solve problems through programming logic and design and use efficient troubleshooting techniques to find and correct errors. This class features JavaScript, the language of interactive web pages. Recommended for students considering careers in application development, IT security, or network and server administration.

### IT 109 (1) N ITIL Foundation Certification Preparation

Students will learn how IT services are managed so that they meet and exceed business expectations. Prepares students for the ITIL Foundations Certificate exam. Prereq: EET 131 or instructor permission.

### IT 111 (5) C | N Internet and Web Authoring Using XHTML

Survey of basic Internet services and protocols and a comprehensive intro to web development with HTML5 and CSS3. Also emphasizes web page design and website set up and maintenance.

### IT 112 (1-5) C Web Programming with Python

This hands-on, project driven course uses Python and any contemporary framework, such as Django, to illustrate the creation of data driven web sites. PREREQ: IT 111 W/ 2.0, or instructor permission.

### IT 115 (5) C | N | S Networking 1: Networking Fundamentals

This course explores computer and communications technologies, network hardware and software, protocols, and standards. It is designed to serve the needs of those interested in understanding the field of computer networking and how it relates to other areas of Information Technology (IT). Prereqs: Placement into English 107, Math 136 or Math 146 or by instructor permission. Coreqs: IT 118 Hardware Fundamentals.

### IT 116 (5) C Programming and Web Page Concepts

Covers introductory concepts in html, css, scripting, procedural, and objects oriented programming languages.

### IT 118 (5) S Hardware 1: Hardware Fundamentals

This course explores the inter-relationships between hardware and software at the system level. Topics covered include processors and chipsets, motherboards, memory, storage devices, and multimedia devices. Diagnostic software is used to identify and isolate faulty devices and sub-systems. This course is also for those preparing for (CompTIA) A+ certification exam. Prereqs: Eligibility for English 107; Math 136 or Math 146 or by instructor permission. Coreqs: IT 115; MATH 136 or MATH 146.

### IT 120 (5) C | N Database Development

Designed to provide students with an overview of database design and development. PREREQ: IT100 with a 2.0, or Instructor's permission

### IT 121 (5) C JavaScript 1

Examines computer programming theory and basics with the use of JavaScript language. Uses a hands-on approach to build interactive websites with JavaScript and demonstrates how to simplify the web development process with the use of jQuery. Studies several popular web techniques. Prereq: IT 161 with a 2.0, or instructor permission.

### IT 122 (5) C | N | S JavaScript 2

Covers JavaScript technologies that power a modern full-stack development workflow, including server-side scripting, single-page web applications with Model-View-Controller (MVC) structure, package management, and JavaScript Object Notation (JSON) data storage. Includes building a fully-functional prototype application that can be referenced for job applications or future JavaScript based projects.

### IT 124 (5) N Network OS 2 - Windows Server

For those new to Microsoft Windows Server and responsible for installing, configuring, securing, managing and supporting a network infrastructure using Microsoft Windows Server. Provides knowledge and skills for designing a Microsoft Windows Active Directory Services infrastructure. Prereq: IT 122 or permission.

### IT 125 (5) N Using Structured Query Language and SQL Server

Provides instruction in techniques for creating, modifying, deleting, and querying databases using SQL. Focuses on designing and understanding SQL queries using MySQL, although techniques can also be used with other relational DBMS. Recommended: Work or class (such as IT 101) experience using a DBMS.

### IT 126 (5) N Network OS 3 - Windows Network Infrastructure

Introduces networking features and functionalities available in Windows Server. Students will learn to implement and manage DNS, DHCP, and IPAM; deploy remote access solutions such as VPN and RADIUS; manage DFS and branch cache solutions; and configure high performance network features. Provides the prerequisite knowledge and skills for IT 128. Prerequisites: IT 124 or instructor permission.

### IT 128 (5) N Network OS 4 - Windows Active Directory

Learn to plan, implement, secure, and manage Microsoft Windows Active Directory Services in an enterprise environment. Topics include: Active Directory Configuration; Group Policy Management; Certificate Management; and Digital Rights Management. Prereq: IT 126 or Permission.

### IT 130 (5) C Network Essentials

Provides the background necessary to understand network technologies. The course serves as a general introduction for students who need a foundation in current networking technology for local area networks (LANs), wide area networks (WANs), and the Internet. IT 100 with a 2.0, or instructor permission.

### IT 131 (5) C | S Network OS 1 Install Config Windows Server

Covers the installation and configuration of a managed enterprise client operating system on stand-alone clients/computers that are part of a workgroup, domain, or cloud infrastructure. Includes configuration and implementation skills for creating a client for a LAN/WAN server structure using a directory based network. IaC (Infrastructure as Code) from the client perspective is introduced. Prereq: IT 130 w/ 2.0, or instructor permission



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**IT 132 (5) C**  
**Network Operating Systems 2 - Server**

Covers how to: install managed enterprise-class servers in a LAN\WAN\Cloud configuration; implement a directory service to provide single sign-on; use a console to monitor systems; administer account, group, and enterprise policies; script common tasks; and study network protocols and services. Explores hypervisors, routing and remote access, DHCP, DNS, and business continuity. Prereq: IT 130 w/ a 2.0.

**IT 133 (5) C**  
**Network OS 3 Windows Network Infrastructure**

Focuses on administering enterprise class servers. Investigates IaC (Infrastructure as Code). Students learn to deploy advanced directory services, explore enterprise server tools using PowerShell & Python, and develop a foundation in the use & manipulation of enterprise systems operation applications. Specific attention is given to Authentication, Authorization, and Access to enterprise/Cloud objects.

**IT 135 (5) C | N**  
**Introduction to Linux**

Using Linux, this course provides an introduction to the UNIX operating system. Includes the fundamental UNIX commands, the UNIX file system, vi editor, UNIX shells and shell programming. Experience using a computer and working with the Windows operating system is strongly recommended. Computer Fee.

**IT 138 (5) N**  
**Linux for Network Administration**

Intermediate course. Covers the organization of UNIX-based hardware components and software tools used by the host administrator to control access, tune the system, and account for system resources used. Focuses on UNIX tools, network schedulers, security, remote access, performance monitoring, and networking aspects of UNIX. Includes multi-user, multi-tasking, time-sharing networked communications, and set-up and maintenance of an Internet server. Prereq: IT 135 or permission.

**IT 140 (5) N**  
**UNIX Shell Scripts with Perl**

Includes Unix host administration with shell scripts and the use of Perl for administrative functions, basic Internet operations on Unix systems. Focuses on data collection on the World Wide Web. Prereq: IT 138 or permission.

**IT 141 (5) C**  
**Intro to Hardware CompTIA A+**

Provides a basic understanding of hardware components in personal and portable computers/peripherals and how software interacts with the hardware. Provides hands-on experience installing/configuring components, recognizing problems, logically analyzing symptoms, and developing step-by-step troubleshooting procedures that may be applied to new and unexpected situations. Prereq: IT 100 with a 2.0, or instructor's permission.

**IT 142 (5) C | N | S**  
**Network 2-Interconnecting CISCO Network Device 2**

This course introduces the student to the architecture, components, and operation of switches and routers, as well as the fundamentals of switching, routing, and the primary routing protocols. The course is designed to help students prepare for professional careers in the information and communication technology (ICT) field.

**IT 143 (8) S**  
**Network 3: Interconnect CISCO Network Device 3**

This course will equip students with the knowledge and skills needed to install, configure, operate, and troubleshoot a small enterprise network. It will ensure that students understand and are ready to deploy the latest shifts in technologies and solutions as follows: understanding of Quality of Service (QoS) elements and their applicability; how virtualized and cloud services will interact and impact enterprise networks.

**IT 144 (5) N**  
**Network Management - CISCO II**

The second of three classes, provides instruction in safety, networking, network protocols, LANs, WANs, Ethernet, LAN switching, Router IOS, TCP/IP Addressing, Router configuration, dynamic routing, static routing, and the network administrator's role and function, and the use of decision-making and problem-solving techniques to solve networking problems. Prerequisites: IT 142 or instructor permission. Computer Fee.

**IT 146 (5) N**  
**Network Management - CISCO III**

The third of three classes extends the student's knowledge and practical experience with configuring LANs, VLANs, switching, wireless, Wide Area Networks (WANs), network troubleshooting and management. Protocols covered include 802.1D, 802.11, Point-to-Point Protocol (PPP), BGP, DHCP, NAT/PAT, and Ipv6. Prerequisites: IT 142, IT 144, or instructor permission. Computer Fee.

**IT 150 (5) N**  
**IT Systems Security +**

Introduction to computer network security terminology, technology, and best practices as defined by CompTIA's (Computing Technology Industry Association) vendor neutral Security + Certification and ISC2's (International Information Systems Security Certification Consortium) vendor neutral SSCP (Systems Security Certified Practitioner) Certification. Prepares students to take the CompTIA Security+ and ISC2 SSCP exams. Prerequisites IT 124, IT 135, IT 142 or instructor permission.

**IT 157 (5) N**  
**Ethical Hacking**

Students will learn offensive security techniques according to the Certified Ethical Hacker (CEH) methodology. Tools and testing networks will focus on the Linux operating system. Primary emphasis will be on open source platforms. Prereq: IT 135 and IT 150 or Permission.

**IT 161 (5) C | N**  
**Web Authoring 1**

Covers the fundamental mechanics of web page production starting with the absolute basics of creating properly structured websites using the HyperText Markup Language (HTML) and Cascading Style Sheets (CSS). Students will learn how to write their own code to create web pages that include text, links, images, tables, and forms as well as how to launch their website on the Internet using the File Transfer Protocol (FTP). Prereq: BTM 111 with a 2.0, or appropriate score on SAM Challenge.



**IT 162 (5) C**  
**Web Authoring 2**

Explores how to write code to create modularly-built responsive websites that include a proper page layout, navigational structure, form validation and interactivity, and well-formatted and readable text to ensure accessibility across major browsers and devices. This course follows IT161, building on a student's existing knowledge of creating websites using HyperText Markup Language (HTML) and Cascading Style Sheets (CSS). Prereq: IT161 with 2.0, or instructor's permission.

**IT 164 (4) C**  
**Typography for the Web**

Introduces the elements of traditional typography and brand identity as applied to web design to communicate information effectively using overall typographic principal and scale. Co-requisite: IT 161, or instructor's permission.

**IT 165 (4) C**  
**Graphics for the Web**

Basic to intermediate web production techniques using Adobe's Illustrator and Photoshop. Topics include digital imagery concepts, developing and editing pixel and vector based graphics for the web, integrating text and images, slicing web compositions and creating very basic animation. Prereq: IT 161 with a 2.0; or concurrent enrollment in IT 161.

**IT 166 (3) C**  
**Writing for the Web**

Provides an overview and detailed look at the user-centered design techniques used to write successful, human-readable and machine-readable search engine optimized copy for a website. PREREQ: IT 161 with a 2.0 or higher, or instructor's permission.

**IT 171 (5) C**  
**Theory of Web Design**

Examines the basic principles and practices of professional website design, including: discovery, site structure, page layout, navigation, color theory, typography, and best coding practices. Prereq: IT 161 with 2.0, or Instructor permission.

**IT 174 (5) C**  
**Usability Research Methods for the Web**

Provides an overview of the different design and user research methods that are conducted throughout a web design or redesign process in order to improve designs and experiences for end users. Methods include: Competitive Analysis, Heuristic Evaluation, Card Sorting and Usability Testing. Prereq: IT 161 with 2.0.

**IT 211 (5) C**  
**Object Oriented Programming with JAVA**

Explores how to code basic Java applications using an IDE. Students work with primitive types, control statements, strings, and arrays. They also learn how to use Object Oriented programming skills such as classes, objects, inheritance, and interfaces. Prereq: IT 111 or IT 116 with a 2.0.

**IT 217 (5) C**  
**Android Application Development 2**

Builds on the basic Android development skills from IT 216 and extends Android development to more advanced topics such as working with menus and preferences, fragments, threads, services, notifications, databases and content providers. Prereq: IT 216 with a 2.0.

**IT 220 (5) N**  
**Desktop Management and Virtualization**

Intermediate level. Covers desktop image optimization, image building and deployment, group policy application, DHCP fundamentals, virtualization and cloud computing, virtualization software, and desktop image deployment tools. Prereq: IT 128.

**IT 221 (5) C**  
**SQL**

Introduces the use of the relational database language SQL to access, summarize, and alter database information, as well as to create and alter database objects. Prereq: IT 120 with a 2.0, or Instructor permission.

**IT 222 (5) C**  
**Designing Database Solutions**

Focuses on importing complex data into relational databases, creating database-driven reports, and developing business intelligence solutions. Prereq: IT 120 and IT 221, each with a 2.0, or Instructor's permission.

**IT 223 (5) C | S**  
**Database Administration**

Provides practice with administrative activities, security and backup on a Relational Database Management System (RDBMS), using Administrative SQL and other RDBMS tools offered by the Relational Database Management System. Prereq: IT 221 with a 2.0, or Instructor's permission

**IT 225 (5) C**  
**Systems Analysis**

Analyze complex systems for development using various tools and approaches that reflect current industry practices. Prereq: IT 111 with a 2.0, or instructor's permission.

**IT 228 (5) C**  
**Capstone Project**

Students define a project that summarizes what they have learned in their studies, document the project and the process, and present the results. Includes white-boarding some aspects of their projects as prelude to job interviews. Prereq: Student must be in the last quarter of the program; or, Instructor's permission.

**IT 229 (5) C**  
**Software Development Career Strategies**

Provides resources, strategies, & techniques for software development job search and placement. Learn how to research employers and understand the interview and hiring processes. Create industry-oriented resumes, cover letters, and portfolios. Practice programming interview questions, discuss problem-solving strategies, and learn about online resources. Soft, or behavioral, interview questions are also discussed. Prereq: IT 111 with a 2.0, or IT 116 with a 2.0.

**IT 231 (5) C**  
**Linux Operating System**

Introduces the LINUX operating systems and its basic commands. Explores the unique aspects of Linux and its interoperability with other Operating Systems. Includes fundamental Linux/Unix commands in both the command line interface and graphical user interface. Utilizes hands-on assignments with a Linux-based system. Prerequisite: IT 100 with 2.0, or Instructor permission.

**IT 232 (5) C**  
**UNIX for Network Administration**

An intermediate level course, covering the organization of Unix-based hardware components, and the Unix operating system software and tools the Unix host administrator uses to control access, tune the system, and account for system resources used. Unix tools network scheduler, security, remote access and performance monitoring will be covered. Networking aspects of Unix and the Internet will be examined. Prerequisite: IT 231 with a 2.0.

**IT 241 (5) C**  
**CISCO I**

First of three sequential courses teaching current and emerging network technology. Covers safety, network terminology and protocols, LANs, OSI model, cabling, cabling tools, IT addressing and network standards. Emphasizes decision-making and problem-solving techniques and proper use, care and maintenance of networking software, tools and equipment. Prereq: IT 141 with a 2.0, or instructor permission.

**IT 242 (5) C**  
**CISCO 2**

Continuation of IT 241. Covers safety, networking, network protocols, LANs, WANs, Ethernet, LAN switching, router IOS, TCP/IP addressing, router configuration, dynamic routing, static routing and the network administrator's role and function. Emphasis on techniques to solve networking problems. Prereq: Completion of IT 241 with a 2.0, or instructor permission.

**IT 257 (5) C**  
**Enterprise Applications**

This capstone course will investigate managing and maintaining enterprise applications in a highly integrated computing environment. Students will examine LAN and WAN server applications implementing a user environment from a case study. The focus will be on the user experience as server application access crosses the enterprise LAN/WAN security boundaries. A small business scenario will be the foundation for this survey of software tools and applications. Prereq: IT 133 with a 2.0.

**IT 261 (5) C**  
**Web App Programming 1**

Covers the fundamentals of programming using a server-side scripting language such as Hypertext Preprocessor (PHP). Students learn basic programming skills in order to manage variables, control structures, and arrays, and learn to elegantly incorporate their scripts into their websites, to create dynamic web pages and gather data from HTML forms. PREREQ: IT 161 with 2.0, or Instructor's permission

**IT 262 (5) C**  
**Web Application Programming 2**

This course builds on IT 261 with more advanced server-side scripting. Students learn how to collect data from forms and to store and retrieve data from a database. Proper coding conventions, security, and code organization are emphasized. Prerequisite: IT 261 with 2.0 or higher.

**IT 263 (5) C**  
**Web Application Programming 3**

This course builds on IT 262, with a stronger emphasis on more advanced server-side scripting. Students are introduced to Object Oriented Programming Principles, as well as more advanced database interaction and popular frameworks. Students will create a final project to demonstrate their server-side programming skills. Prereq: IT 262 with a 2.0.

**IT 270 (5) C**  
**Content Management Systems with Wordpress**

Overview of the basic principles and practices of professional website design and development while focusing on content management and custom theme creation using WordPress (an open source technology). Prerequisite: IT 162 or IT 261 with 2.0, or Co-requisite: IT 261

**IT 286 (5) C**  
**Advanced Web Design Project**

Provides both design and development students with the hands-on experience of designing and producing an effective web site for a live client while practicing a team workflow process. Prereq: IT 270, and IT 171, each with a 2.0.

**IT 289 (2) C**  
**Web Career Strategies**

This course provides resources, strategies and techniques for information technology job search and placement. Students create and revise industry-oriented resumes, cover letters and portfolios, and receive feedback from industry professionals and peers. Students learn job search techniques and practice interviews. Students learn to research employers, speak their language, and understand the hiring process from their perspective. IT 161 with a 2.0, or instructor permission.

**IT 296 (2) S**  
**Certification Test PREP Net+**

CompTIA Network+ is a performance-based certification that helps you develop a career in IT infrastructure by validating the hands-on skills needed to troubleshoot, configure, and manage both wired and wireless networks.

**IT 297 (2) S**  
**Certification Test PREP Icd 1**

This course introduces the student to the architecture, components, and operation of switches and routers, as well as the fundamentals of switching, routing, and the primary routing protocols. The course is designed to help students prepare for professional careers in the information and communication technology (ICT) field.

**IT 298 (2) N | S**  
**Certification Test PREP Icd 2**

This course will equip students with the knowledge and skills needed to install, configure, operate, and troubleshoot a small enterprise network. It will ensure that students understand and are ready to deploy the latest shifts in technologies and solutions as follows: understanding of Quality of Service (QoS) elements and their applicability; how virtualized and cloud services will interact and impact enterprise networks.

**IT 299 (2) S**  
**Certification Test PREP Security +**

CompTIA Security+ is the certification globally trusted to validate foundational, vendor-neutral IT security knowledge and skills. This course covers the essential principles for network security and risk management preparing students to successfully pass the test and receive certification.

**ITC 102 (5) C**  
**Information Systems Concepts**

Introduces computers and information systems, including hardware, software, data organization, data communications, systems development, the constantly changing roles of Information Technology (IT) professionals, and the evolving role of computers in society.

**ITC 110 (5) C**  
**Programming Fundamentals**

Intro to basic computing concepts and object orient programming using a object oriented language such as C# or Java. Prereq: BTM 111 and eligible for MATH 098, or instructor's permission.

**ITC 111 (5) C**  
**Programming & Web Page Concepts**

Covers introductory concepts in HTML, CSS, scripting, procedural, and object oriented programming languages. Prerequisite: BTM 111 with 2.0 or higher; or, appropriate score on SCC placement test (e.g., SAM/STEM Challenge).

**ITC 115 (5) C**  
**Object Oriented Programming**

Intro to object oriented programming, structures and concepts with Java. Intro to the C++ language Create objects and understand how they relate to classes. Develop C++ code for practical applications. Prereq: ITC 110 o with 2.0 or higher.

**ITC 134 (5) C**  
**Intro to Software Development & Version**

Introduces hardware architecture and software systems that support web applications as well as development environments and systems used to build, test and deploy applications. Explores processes utilized by developers to manage, version, test and deploy their work across \*nixes, BSD's, and windows systems. Prerequisite: ITC 102 with 2.0 or higher.

**ITC 136 (5) C**  
**UNIX Operating System**

Introduces the LINUX operating systems and its basic commands. Explores the unique aspects of Linux and its interoperability with other Operating Systems. Utilizes hands-on assignments utilizing a Linux-based system. This course satisfies Restricted IT Elective requirement at SCC. Prerequisite: MIC 101 and ITC 102 with 2.0 or higher in each; or, Instructor's permission.

**ITC 140 (5) C**  
**Introduction to Computer Hardware**

Provides a basic understanding of hardware components in personal and portable computers/peripherals. Hands-on experience installing/configuring components, and how software interacts with the hardware. Recognize problems and logically analyze symptoms to develop step-by-step troubleshooting procedures that may be applied to new and unexpected situations. Prereq: ITC 102 with a 2.0 or higher; or, Instructor's permission.

**ITC 141 (5) C**  
**Introduction to Operating Systems**

This course covers the structure and function of computer operating systems, including but not limited to installation, configuration, and maintenance of Windows and Linux environments. Topics include system concepts, system-level commands and commands relating to program, file and application management.

**ITC 151 (5) C**  
**Introduction to Security for Computing**

Introduces securing resources on computing infrastructure or computing as a service. A survey of concepts, techniques, tools and processes to minimize attack surfaces, harden exposed access, create business continuity and repair or recover from attacks. Multiple operating systems, platforms and networks structures will be examined. CompTIA's S+ will be a guiding framework for class work. Prereq: NET 120 with 2.0 or higher, Instructor-verified equivalent work experience, or Instructor's permission.

**ITC 153 (5) C**  
**Introduction to Data Analytics**

Introduces how to gather and organize data, analyze data-sets with use of Python, data analysis libraries, and statistical inference. Examines how to interpret data and effectively communicate data insights. The concepts and skills taught in this course prepare students for work in a variety of industries. Students build a portfolio project. Prereq: ITC 110, CSC 110 and MATH 146 with 2.0 or higher; or Instructor's permission.

**ITC 155 (5) C**  
**Data Structures and Algorithms with JAVA**

Covers advanced Java language features and programming concepts: collections, generics, exceptions, file I/O, graphics, recursion, sorting, searching, algorithm analysis, and dynamic structures such as lists, stacks, and queues. Prerequisite: ITC 115 with a 2.0 or higher.

**ITC 162 (5) C**  
**Android Application Development 1**

Covers advanced Object Programming concepts and their application in a mobile environment. Includes OOP inheritance, interfaces, and good design principles. Covers installation and configuration of Android Studio and SDK. Develop a use interface design, write Java code (or Kotlin) code to work with an activity, work with layouts, widgets and handle events. Work with themes and styles. Create a simple mobile application. Prereq: ITC 115 with a 2.0 or higher.

**ITC 165 (5) C**  
**Intermediate Android Development**

Expands knowledge of Android Fundamentals with new concepts and functionality. Topics include working with threads, services, notifications, and broadcast receivers. Explore and implement persistent data storage, and work with app widgets and content providers. Examines how to deploy apps. Prerequisite: ITC 162 with a 2.0 or higher.

**ITC 172 (5) C**  
**Web Programming with Python**

This hands-on, project driven course uses Python and a framework such as Django to illustrate the creation of data driven web sites. PREREQ: ITC 110 W/ 2.0 OR HIGHER OR INSTRUCTOR PERMISSION.

**ITC 205 (2) C**  
**Software Development Career Strategies**

Provides resources, strategies, & techniques for software development job search and placement. Learn how to research employers and understand the interview and hiring processes. Create industry-oriented resumes, cover letters, and portfolios. Practice programming interview questions, discuss problem-solving strategies, and learn about online resources. Soft, or behavioral, interview questions are also discussed. Prereq: ITC 110 with a 2.0 or higher; or, ITC 115 with a 2.0 or higher.

**ITC 210 (5) C**  
**Advanced Web Development**

Provides hands-on experience working on a web team with real-world client projects. Offered with WEB 210. ITC 210 students provide the main database and programming skills while WEB 210 students provide the main design and development skills. Prereq: ITC 280 with 2.0 or higher.

**ITC 220 (5) C**  
**Database Development**

Designed to provide students with an overview of database design and development. PREREQ: BTM111 with a 2.0 or higher, or Instructor's permission.

**ITC 222 (5) C**  
**SQL**

Introduces the use of the relational database language SQL to access, summarize, and alter database information, as well as to create and alter database objects. Prereq: ITC 220 with a 2.0 or higher; or Instructor's permission.

**ITC 224 (5) C**  
**Designing Database Solutions**

Focuses on importing complex data into relational databases, creating database-driven reports, and developing business intelligence solutions. Prereq: Completion of ITC 220 and ITC 222, each with a 2.0 or higher; or, Instructor's permission.

**ITC 226 (5) C**  
**Database Administration**

Provides practice with administrative activities, security and backup on a Relational Database Management System (RDBMS), using Administrative SQL and other RDBMS tools offered by the Relational Database Management System. Prereq: Completion of ITC 222 with a 2.0 or higher, or the Instructor's permission.

**ITC 230 (5) C**  
**Advanced JavaScript**

Covers JavaScript technologies that power a modern full-stack development workflow, including server-side scripting, single-page web applications with Model-View-Controller (MVC) structure, package management, and JavaScript Object Notation (JSON) data storage. Includes building a fully-functional prototype application that can be referenced for job applications or future JavaScript-based projects. Prereq: WEB 150 with a grade of 2.0 or higher, or Instructor's permission.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**ITC 240 (5) C**  
**Web Application Programming 1**

Covers the fundamentals of programming using a server-side scripting language such as Hypertext Preprocessor (PHP). Students learn basic programming skills in order to manage variables, control structures, and arrays and to elegantly incorporate their scripts into their websites to create dynamic web pages and gather data from HTML forms. PREREQ: WEB 110 with 2.0 or higher, or Instructor's permission.

**ITC 250 (5) C**  
**Web Application Programming 2**

Covers more advanced server-side scripting. Learn how to collect data from forms and to store and retrieve data from a database. Emphasizes proper coding conventions, security, and code organization. Prereq: ITC 240 with 2.0 or higher or permission.

**ITC 255 (5) C**  
**Systems Analysis**

Students analyze complex systems for development using various tools and approaches that reflect current industry practices. Prerequisite: ITC110 with a 2.0 or higher, or Instructor's permission.

**ITC 260 (5) C**  
**Web Application Programming 3**

Builds on ITC 250. Covers more advanced server-side scripting. Into to object oriented programming principles, more advanced database interaction and popular frameworks. Prereq: ITC 250 with 2.0 or higher or permission.

**ITC 262 (5) C**  
**Android Development Capstone**

Focuses on the utilization of Android Development skills from ITC 162 and ITC 164 to ideate, design, and build a more complex and robust app as part of a team project. The group project follows the Agile SCRUM methodology, introduced to students in this course. Students use code collaboration tools. Prereq: ITC 165 with a 2.0 or higher.

**ITC 285 (5) C**  
**Capstone Project Class**

Students define a project that summarizes what they have learned in their studies, document the project and the process, and present the results. The course will also include white-boarding some aspects of their projects as prelude to job interviews. Prereq: Student must be in the last quarter of the program; or, Instructor's permission.

**ITC 298 (1-5) C**  
**Special Topics**

In-depth studies in new and emerging technologies relevant to the IT programs. Prereq: Permission.

**Integrated Studies**

**INTS 100 (10) N**  
**Integrated Studies**

Ten-credit Integrated Studies course organized around a theme.

**INTS 101 (1-8) N**  
**Integrated Studies Link**

Eight-credit Integrated Studies course consisting of two independent courses linked by a theme.

**INTS 102 (10) N**  
**Integrated Studies Link**

Ten-credit Integrated Studies course consisting of two independent courses linked by a theme.

**International Business**  
**Bachelor of Applied Science**

**IBN 301 (5) N**  
**International Management**

This course lays the foundation of the global business environment - varying political, economic, and legal environments, globalization, international organizations, and regional integration. Students also explore the cross-cultural environment - the dimensions of culture, cross-cultural communication, motivation, leadership, and negotiation. Global human resources will also be studied.

**IBN 302 (5) N**  
**International Marketing**

This course examines the fundamentals of marketing within a global context students learn the impact of economic, cultural, political, legal and other environmental influences on international marketing. They analyze international marketing cases, considering product, pricing, placement, and promotion. Students learn from lectures, discussions, international case studies, and group projects.

**IBN 303 (3) N**  
**Ethics and International Business**

This course enhances the awareness of ethical issues connected with international corporate decision-making. It provides students with business strategies and frameworks needed to analyze and resolve ethical problems through case studies and shared dialog. An analytic section introduces concepts including corporate social responsibility and the moral decision making processes.

**IBN 310 (5) N**  
**Operations Management**

Operations Management (OM) introduces processes that convert resources into goods/services and extends these to suppliers, distributors, and customers. The course offers an overview of operations, including operations strategy, system and process design, lean manufacturing/continuous improvement, global supply chain, production and workforce planning, inventory and materials management, and quality improvement.



**IBN 311 (3) N****International Business Law**

This course will examine common legal issues and risks that affect business transactions in the global marketplace. Students will learn the international legal framework, methods of resolving disputes (including litigation, arbitration, and mediation), joint ventures, trade agreements, international sales contracts, intellectual property issues, international labor matters, and risks of foreign direct investment. Prereq: BUS&201 Business Law, or BUS 200 Law & Society.

**IBN 320 (5) N****International Finance**

This course focuses on the environment in which the international financial manager operates. Students will study the risks of doing business in a global environment and the tools available to minimize those risks. Foreign exchange risk, political risk, working capital management, long-term investments, and financing as well as accounting and controls are examined within this context familiarity with the basic use of spread sheets is needed. Prerequisites: ACCT& 202, MATH 160

**IBN 330 (4) N****Data Analytics in Business and Accounting**

Ongoing business operations require accountants to work with vast amounts of data generated daily. Data analytics helps businesses improve business intelligence, identify process improvements, and increase operational efficiency by uncovering valuable insights within their financial information. This course covers understanding and visualizing data, scientific decision making, and predictive data analysis.

**IBN 350 (5) N****International Business Practicum**

This course is designed as an immersion experience in a student's non-native language. The practicum can be completed through a variety of means, including (but not limited to) an educational excursion to the country where the student's non-native language is the primary language; working or volunteering in a non-profit or business that primarily communicates in a language other than the student's first language; or other means of attaining fluency in a foreign language.

**IBN 401 (5) N****International Project Management**

This course focuses on project management using the traditional approach of planning, scheduling, monitoring, and control within the broader global context. The course will cover the basic methodologies and tools of the project manager, the technical and management challenges he/she may face, and the strategic perspective of project management within the global environment.

**IBN 402 (5) N****Management of Information Systems**

This course offers an overview of how businesses use information technologies and systems to achieve corporate objectives including achieving operational excellence, developing new products/services, enhancing decision making, and achieving competitive advantage. Students will learn about a variety of issues facing organizations—infrastructure, security, business intelligence, networking, the Internet, telecom, wireless, enterprise applications, e-commerce, and ethics. Several case studies will be examined.

**IBN 410 (3) N****International Entrepreneurship**

Overview of the international entrepreneurial process, examination of the marketplace, and discussion of successful business strategies. Product/service selection, selling and marketing strategies, and sources of information and assistance are addressed.

**IBN 420 (5) N****Global Business Strategy**

This course examines the fundamentals of business strategy development within a global context. Students learn to consider the impact of external environmental influences together with the constraints of an enterprise's internal strengths and weaknesses to develop a global strategy that competes in a competitive business environment.

**IBN 490 (2) N****Research Skills for International Business**

An introduction to the organization, retrieval and evaluation of electronic and print information sources. Overview of library classification systems, scholarly resources, and the concepts underlying the research process. Universal research techniques will be explored through the use of international business-specific information resources and topics. Prerequisite: acceptance into the IB BAS program/cohort.

**International Student Development****ISD 200 (1-3) N | S****Orientation to the American College**

Provides international students with the knowledge and skills necessary for success in an American community college. Prereq: Advisor permission.

**International Studies****ISP 101 (5) C****the Global Society**

Intro to the globalization of cultures and societies in producing the current world system. Includes human interaction, social institutions, social stratification, socialization, deviance, social control, social and cultural change within the context of international inequality.

**ISP 201 (5) C | N****the Making of the 21st Century**

Studies international political economy through facets/events of post-World War II era. Covers postwar changes leading to the creation of international financial institutions, rise of MNCs, emergence of the United States as a major power, globalization of production debt crisis and structural adjustment policies. Emphasis on Asian Pacific, South Asian, Sub-Saharan African and Latin American countries.

**ISP 205 (5) C | N****Women in the Global Context**

Interdisciplinary intro to the study of women in Asia, Africa, Latin America, the Middle East and/or indigenous women in some Western societies. Explores commonalities and differences among women in various societies and cultures. Specific societies or regions covered vary by instructor.

**ISP 210 (5) C****the Pacific Century**

Study of the transformation of Pacific Asia and its contribution to the modern world. Emphasis on responses to problems and challenges of economic, political and social development. Attention to impact of China and Japan on contemporary Pacific Asia.



**ITL 197 (5) C****International Cooperative Education**

Provides an opportunity to earn academic credit for work experience or volunteer service in an international setting. Supplemental assignments offer opportunities for research and reflection of experiences. NOTE: Job/internship/volunteer time and language school attendance must be verified.

**ITL 198 (5) C****International Cooperative Education**

Provides students with an opportunity to earn academic credit for work experience or volunteer service in an international setting. Supplemental assignments offer opportunities for research and reflection of experiences. NOTE: Job/internship/volunteer time and language school attendance must be verified.

**Internship****IIP 101 (1) C****Internship Preparation: Exploration & Job Search**

The International Internship Work Experience provides international students with a meaningful work experience in the United States related to their career objectives. It is based on the principle that one learns not only through academic achievement but also through practical experience. IIP 100 - 102 prepares students for employment in the United States. IIP is a seminar participants attend with IIP 150, the actual work experience.

**IIP 102 (1) C****Internship Preparation: Skill Application/Com Exp**

The International Internship Work Experience provides international students with a meaningful work experience in the United States related to their career objectives. It is based on the principle that one learns not only through academic achievement but also through practical experience. IIP 100 - 102 prepares students for employment in the United States. IIP is a seminar participants attend with IIP 150, the actual work experience.

**IIP 103 (1) C****Internship Seminar: Skill Development/ Wrk Exp**

The International Internship Work Experience provides international students with a meaningful work experience in the United States related to their career objectives. It is based on the principle that one learns not only through academic achievement but also through practical experience. IIP 100 - 102 prepares students for employment in the United States. IIP is a seminar participants attend with IIP 150, the actual work experience.

**Italian****ITAL 121 (5) C****Italian I**

For beginning students. Intro to spoken and written Italian with emphasis on speaking, listening and reading comprehension. Covers phonetic system and basic grammar concepts. Includes Italian culture and contemporary customs as an aid in learning the language.

**Japanese****JAPN& 121 (5) C | N | S****Japanese I**

For students who have not previously studied Japanese. Intro to Japanese conversation, grammar, culture, and the Japanese Hiragana & Katakana writing systems.

**JAPN& 122 (5) C | N | S****Japanese II**

Continuation of JAPN&121. Includes development of speaking, listening, reading, and writing skills. Introduces the kanji (Chinese character) writing system. Students learn to read up to 86 Kanji characters.

**JAPN& 123 (5) C | N | S****Japanese III**

Continues the development of language skills in all areas. Presents another 60 characters. Prereq: JAPN& 122 or permission.

**JAPN 298 (1-10) C****Study Abroad: Japan**

Independent study of selected topic(s) in Japanese arranged with faculty. Prereq: Permission.

**JAPN 299 (1-5) C | N | S****Independent Study for Japanese**

Independent study of selected topic(s) in Japanese arranged with faculty. Prereq: Permission.

**Journalism****JRN 199 (1-5) C****Independent Study in Journalism**

Internship on a professional publication through arrangement between editor and journalism instructor, or management position on college publication. Prereq: CMST& 102 or JRN 101 and 104, plus permission.

**Landscape Horticulture****LHO 100 (1) S****Careers in Horticulture**

Explore career opportunities in horticulture, landscaping, urban food production, and sustainable land care. Learn about work requirements, training requirements, trade organizations, professional certification, continuing education opportunities, and related four-year degree programs. Create a personal career-development plan.

**LHO 108 (3) S****Weed Identification and Management**

Recognize common landscape weeds and other invasive species. Use print and electronic weed identification tools. Explore weed biology, become familiar with various weed management strategies (cultural, biological, chemical) and learn how to develop an integrated approach to weed management. Helps prepare for the weed section of the WSDA pesticide license exam.

**LHO 109 (3) S****Integrated Pest Management**

Principles of integrated pest management (IPM). Covers pesticide laws, health and environmental concerns, and how to develop an IPM plan. Helps prepare for the WSDA pesticide license exam.

**LHO 110 (5) S**  
**Integrated Pest and Weed Management**

Learn the principles of plant health care, integrated pest and weed management for landscape plants. Recognize common landscape weeds and invasive species. Basic information on integrated strategies for insect, disease and weed management. Covers Washington State pesticide laws, safety, and environmental concerns. Preparation for the WSDA pesticide license exam with the goal of obtaining a pesticide applicator/consultant license.

**LHO 111 (4) S**  
**Greenhouse Operations**

Experience plant growth and development through crop production. Manage plant health, environments and growth media from propagation to sales. An introduction to greenhouse structures and systems.

**LHO 112 (3) S**  
**Nursery Operations**

Examine the world of retail and wholesale nursery operations through field trips to local nurseries. Learn the basic methods of business operations and apply them in the campus retail garden center.

**LHO 115 (4) S**  
**Fall Plant Identification**

Using fall seasonal features of interest, knowledge of plant adaptations, structures, and growth, identify and properly use ornamental shrubs, trees, vines, and ground covers adapted to and utilized in the Pacific Northwest landscapes.

**LHO 116 (4) S**  
**Winter Plant Identification**

Using winter seasonal features of interest, knowledge of plant adaptations, structures, and growth, identify and properly use ornamental shrubs, trees, vines, and ground covers adapted to and utilized in the Pacific Northwest landscapes.

**LHO 117 (4) S**  
**Spring Plant Identification**

Using spring seasonal features of interest, knowledge of plant adaptations, structures, and growth, identify and properly use ornamental shrubs, trees, vines, and ground covers adapted to and utilized in the Pacific Northwest landscapes.

**LHO 119 (3) S**  
**Native Plants for Northwest Landscapes**

Explore the successful use of native plants in landscapes: plant identification and culture, native plants in urban landscapes, native plant revegetation and plant ecology. Prereq: Recommend LHO 150.

**LHO 120 (3) S**  
**Perennial Plant Identification**

Identify and properly use plants adapted to and utilized for annual perennial plantings in the Pacific Northwest. Field trips to established gardens. Recommended: LHO 150. Prereq: Recommend LHO 150.

**LHO 122 (5) S**  
**Residential Landscape Design I**

Gain a conceptual foundation in manual drafting and design, an overview of tools, elements, computer assisted design software, and the process for residential landscape design. Covers horticultural graphics, survey, measurement, analysis of site and environmental field conditions, and development of an accurate scaled plot plan and base map.

**LHO 123 (5) S**  
**Residential Landscape Design**

Gain a conceptual foundation in manual drafting, design and the process for residential landscape design. Information on how to complete a landscape design from the preliminary diagram to the final conceptual planting plan including an introduction to CAD and the digital design process.

**LHO 126 (5) S**  
**Residential Landscape Design II**

Information on how to complete the residential design process from the preliminary diagram to the final conceptual planting plan including CAD and the digital design process. Emphasis on functional, aesthetic, spatial, and ecological use of plants and trees to achieve a predetermined style, theme, or user response. Prereq: LHO 122 with 2.0 or higher or permission.

**LHO 135 (3) S**  
**Introduction to Drainage & Irrigation Systems**

Study basic principles of hydraulics, drainage and irrigation systems, irrigation fixtures and apparatus.

**LHO 136 (5) S**  
**Irrigation and Drainage**

Gain basic principles of hydraulics, irrigation systems, fixtures and apparatus to install, maintain and trouble shoot existing systems. Application of concepts through field work.

**LHO 137 (3) S**  
**Landscape Management**

Covers sustainable maintenance practices, lawn management, tool and small equipment use, safety, landscape management plans, and the impact of design on maintenance requirements.

**LHO 139 (4) S**  
**Landscape Maintenance**

Covers sustainable maintenance practices, lawn management, tool and small equipment use, safety, landscape management plans, and the impact of design on maintenance requirements.

**LHO 140 (4) S**  
**Introduction to Arboriculture**

Explore the current science and practice of managing trees in urban landscapes. This course will help students prepare for the International Society of Arboriculture's Certified Arborist Examination.

**LHO 142 (4) S**  
**Sustainable Practices for the Urban Landscape**

Examine sustainability with an emphasis on natural processes and ecological services in constructed and managed landscape systems. The use of closed loop systems to conserve site resources, including the integration of perennial edibles.

**LHO 150 (4) S**  
**Horticulture Science**

Discover the basic principles of plant anatomy and physiology, growth and development, adaptations, and plant-soil-water relations. Exploration of ecology, people, plants and the environment as they relate to horticulture.

**LHO 152 (3) S**  
**Soils**

Uncover the mysteries of soil through in-depth study of soil properties, management and conservation. Explore the plant-soil-water relationship, urban soils, assessment of soils on site, soil fertility and plant nutrition.

**LHO 155 (4) S**  
**Pruning**

Learn the art and science of pruning through lecture, demonstration, and extensive field practice. Develop skill at pruning broadleaf trees and shrubs, conifers, fruit trees, vines, and roses.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**LHO 160 (3) S**  
**Garden Renovation**

Learn by renovating an existing garden. Includes site assessment, developing a timeline, removal and handling of materials, sourcing new plant material, installation and final evaluation of the process.

**LHO 189 (4) S**  
**Introduction to Landscape Construction**

Introduction to the standards and procedures of the landscape construction industry. Covers the proper and accepted methods of a multitude of landscape installations. Includes construction specifications, project sequencing and safety practices.

**LHO 197 (1-7) S**  
**Internship in Landscape Horticulture**

Students apply horticultural knowledge and skills learned throughout the LHO program directly to the local industry. Course credit can be earned through current employment or the development of opportunities found in conjunction with the WorkSource Office. Student must complete hours and submit a Training Agreement, Learning Outcomes, and a Self-Evaluation in order to pass. Prerequisite: Approval from a Faculty Mentor (Instructor) and Embedded Career Specialist.

**LHO 198 (3) S**  
**Greenhouse and Nursery Practicum**

Hands-on application of knowledge, and development of skills in nursery and greenhouse plant production, propagation, maintenance, marketing and retail sales. Includes Saturday Garden Center open dates. Prerequisites: LHO 111 or instructor permission.

**LHO 210 (4) S**  
**Plant Problem Diagnostics**

Learn to diagnose and manage plant problems and write prescriptions for their management: insect, disease, cultural, and environmental maladies. This course will stress a total plant health care approach that utilizes cultural, biological, and chemical strategies. Pesticide recertification credits available pending WSDA approval. Prerequisite: LHO 110 or instructor permission.

**LHO 215 (4) S**  
**Plant Propagation**

Learn the art and science of plant propagation by seed, cuttings, and division. Examine the art of grafting. Hands on instruction and field trips to plant production facilities. Recommended for Success: LHO 111.

**LHO 217 (3) S**  
**Advanced Plant Propagation**

Explore propagation and plant production. Follow plant materials propagated in LHO 215. Production and management of specific species and quantities for sale in the campus retail garden center. Prereq: LHO 215 or permission.

**LHO 218 (5) S**  
**Plant Production & Marketing**

Production of plant materials for marketing and nursery sales. Crop planning, propagation, maintenance, management and finishing. Examine and apply nursery marketing and business methods to facilitate sales of plant material. Prerequisite: LHO 111 and LHO 215.

**LHO 236 (5) S**  
**Advanced Irrigation System Design**

In-depth study of irrigation equipment, hydraulics, fluid behavior, micro-climatization, design theory, and application technology. Provide the knowledge to engineer, design and layout irrigation systems for field installation and estimate purposes. Prerequisite: LHO 135; or permission from instructor.

**LHO 237 (5) S**  
**Advanced Irrigation Diagnostics and Repair**

In-depth study of the diagnostic skills necessary to troubleshoot, locate and repair problems associated with improper design and installation, malfunctions of equipment and parts and the evaluation of a systems efficiency. Emphasis will be on turf and landscape areas. Mechanical, electrical and hydraulic systems will be analyzed. Prerequisite: LHO 135 and LHO 236; or permission from instructor.

**LHO 238 (3) S**  
**Maintenance Estimating and Bidding**

Estimating material cost and quantity for bidding individual jobs and writing annual contracts. Addresses specifications and maintenance practices including the design of efficient residential and commercial landscapes with regards to maintenance needs and requirements. Provides an understanding of business operations. Recommended for Success: LHO 139.

**LHO 239 (4) S**  
**Advanced Landscape Management**

Advanced skills and practices pertaining to sustainable landscape maintenance programs including developing landscape management plans, project management, supervising small maintenance crews, tool and small equipment maintenance and repair, and the impact of design on maintenance requirements. Prerequisite: LHO 139, Recommended for success: LHO 108 or 109, LHO 135, LHO 155.

**LHO 240 (3) S**  
**Ecological Restoration: An Introduction**

Explore the field of ecological, restoration as it applies to horticulturists attempting to repair damaged landscapes. This class will investigate the science and practice of restoration through meetings with restoration practitioners, visits to restoration sites, reading and discussion, and service learning.

**LHO 241 (3) S**  
**Ecological Restoration Project Planning**

Study the recovery of degraded, damaged, or destroyed ecosystems. Learn to plan, implement, maintain, and evaluate the success of ecological restoration projects. Includes planning and implementing a restoration project near campus. Prerequisite: LHO 240 or permission.

**LHO 242 (3) S**  
**Introduction to Permaculture**

Explore permaculture and sustainable land use design based on ecological principles. Covers ecosystems, soils, water catchment and conservation, the food forest, and zones. Learn to apply these concepts and methods.

**LHO 250 (5) S****Small Business for Horticulture**

Introduction to the organization and operation of a horticulture-related small business. Includes success and failure factors through accurate estimating, and bidding individual projects, developing annual contracts, calculating business costs, minimizing and controlling risk. Guidance in how to write a business plan. Familiarization with industry opportunities and standards.

**LHO 255 (3) S****Edible Trees Shrubs and Vines**

Explore edible perennial plants and the benefits of their incorporation into the landscape, community and home gardens. Examine their impact on resources and urban sustainability. Covers selection, culture, maintenance and siting of plants through field trips, site visits and in-service learning.

**LHO 263 (5) S****Residential Landscape Design III**

Increase sophistication and usage of plant selection, placement, planting patterns, and structures. Develop products using digital applications for individual portfolios. Discuss and practice on-site consulting and other professional services. Prereq: LHO 126 with 2.0 or higher or permission.

**LHO 265 (3) S****Landscape Contracts and Specifications**

Practical applications for developing and writing bids with accurate specifications for the landscape industry. Identification of business operation expenses, calculating construction and business cost, project management, and minimizing and controlling risk. Familiarization with industry opportunities and standards. Recommended for Success: LHO 238.

**LHO 267 (5) S****Dynascope for Landscape Design**

Use Dynascope professional CAD software as a design tool. Design landscapes, generate planting plans and reports, design irrigation, make estimates and bids, track supplier and purchasing information, and customize data libraries and client reports.

**LHO 272 (4) S****Landscape Construction Project - Fall**

Application of standard trade procedures and techniques for residential landscaping. Covers care and safe use of tools used in garden structures and in trade. Prereq: LHO 189 with 2.0 or higher or permission.

**LHO 273 (4) S****Landscape Construction Project - Spring**

Application of standard trade procedures/techniques for residential landscaping. Covers care and safe use of tools used in garden structures and in trade. Prereq: LHO 189 or permission.

**LHO 298 (2) S****Greenhouse and Nursery Practicum II**

Continuation of LHO 198. Hands-on practical application course for second year students pursuing the Horticulture Studies pathway. Continue focus on nursery and greenhouse operations involved in the propagation, production, maintenance, and retail sales of plants. This course allows the student to apply and build upon the skills and knowledge from courses previously taken in the program. Prerequisites: LHO 215, and 218, or instructor permission.

**LHO 299 (1-4) S****Special Topics**

Special individual or group study topic in the landscape horticulture field. Prereq: Permission.

**Learning Center Seattle****LCS 090 (1-15) C****Learning Center Seattle 090**

Focuses on integrating basic skills instruction in the context of college and career readiness. Develops reading, writing, math, and communication skills to prepare for a high school equivalency credential as well as for entry into college programs and the world of work. Prereq: Permission.

**Library Research****INFO 101 (1-5) C | N | S****Introduction to Information Resources**

Develops critical thinking in the research process. Examine strategies for locating and using information resources. Emphasizes proficiency using electronic resources and other research tools and retrieval techniques. Explores information policy issues such as copyright, censorship and freedom of information. Prereq: Eligible for ENGL& 101.

**INFO 102 (1) C | S****Info in Action Research Basics**

Covers the process to get started with a research project and gain a solid understanding of research options. Prereq: Eligible for ENGL& 101.

**INFO 103 (1) C****Info in Action Books and Media**

Intro to the purpose, structure, and uses of books, ebooks and media as sources of in-depth or historical information on a subject. Covers use of local and regional library catalogs to find books, and strategies to evaluate them. Prereq: Eligible for ENGL& 101.

**INFO 104 (1) C | S****Info in Action Research Databases**

Explores periodical databases for research purposes, including basic database structure and the variety of databases available. Focuses on research strategies and database features to retrieve and evaluate articles on a topic. Prereq: Eligible for ENGL& 101.

**INFO 105 (1) S****Info in Action Scholarly Information**

Intro to scholarly communications that form the basis of new information, including where these communications are published, how to search periodicals databases for scholarly articles, and how to evaluate and cite sources for academic research. Prereq: Eligible for ENGL& 101.

**INFO 106 (1) C | S****Info in Action Web Research**

Examines the Internet as a conduit for research information from a wide range of sources. Discover strategies for uncovering difficult to find deep web resources and evaluating content from multiple sources. Prereq: Eligible for ENGL& 101.

**INFO 110 (1-3) C | N****Researching Information Age Issues**

Develops strategies to locate, evaluate and use information safely and ethically. Includes extra language support for non-native English speakers. Prereq: Eligible for ENGL& 101

**INFO 180 (5) C****Research for the 21st Century**

Develops a framework for research in the online environment and helps build skills and techniques for success as online learners through a quarter-long research project on global issues. Prereq: Eligibility for English 101.

**INFO 300 (1-5) N****Information Literacy for Undergraduate Research**

Explores strategies, topics, and concepts to develop research practices for Bachelor's level study. Focuses on in-depth investigation of the organization, retrieval, and evaluation of professional and discipline-specific digital and print information sources.



## Life Skills to Work

### LST 065 (14) S Life Skills to Work for Pre-College Success

This class is designed to provide students without a high school diploma instruction in life skills for pre-college success. Students will focus on learning math, reading, science and social studies by using everyday examples. In addition, there will be an emphasis on transitioning back into the community while preparing for high school completion alternatives and pre-college testing.

### LST 085 (4) S Stop the Turn Stile Lifestyle

This prep course provides the skills necessary for new KCCC/CCAP court referrals to jump-start the cognitive learning process for GED and LSW classes.

### LST 090 (1-6) S Life Skills to Work

A short-term program designed to provide skills needed for community re-entry following incarceration. This program emphasizes practical life and workplace skills development and application for successful community, family and workplace reintegration.

### LST 091 (2) S Life Skills to Work Part 1

Course emphasizes the construction of resilience skills and healthy behavioral auto-pilots in order for justice-involved students to positively transition from the criminal justice system to post-secondary education, the workplace and society. The curriculum was designed for students who have experienced childhood trauma, as defined in the cdc-kaiser permanente adverse childhood experiences study of 1998, to address student's criminogenic needs through a trauma-informed lens.

### LST 092 (2) S Life Skills to Work Part 2

Course emphasizes the construction of resilience skills and healthy behavioral auto-pilots in order for justice-involved students to positively transition from the criminal justice system to post-secondary education, the workplace and society. This curriculum was designed for students who have experienced childhood trauma, as defined in the CDC-Kaiser Permanente Adverse Childhood Experiences study of 1998, to address student's criminogenic needs through a trauma-informed lens.

### LST 093 (3) S Life Skills to Work Part 3

Course emphasizes the construction of resilience skills and healthy behavioral auto-pilots in order for justice-involved students to positively transition from the criminal justice system to post-secondary education, the workplace and society. This curriculum has been designed for students who have experienced childhood trauma, as defined in the CDC-Kaiser Permanente Adverse Childhood Experiences study of 1998, to address student's criminogenic needs through a trauma-informed lens.

### LST 098 (7) S Moral Reconciliation Therapy

Moral Reconciliation Therapy (MRT) is a systematic, cognitive-based approach that addresses criminal thinking, co-occurring disorders and substance abuse. Step-work in the MRT workbook seeks to move participants from hedonistic reasoning to higher forms of moral reasoning. Controlled evaluations of MRT indicate that MRT participants have lower recidivism rates than relative control groups.

### LST 099 (7) S Life Skills to Work

Course emphasizes the construction of resilience skills and healthy behavioral auto-pilots in order for justice-involved students to positively transition from the criminal justice system to post-secondary education, the workplace and society. This curriculum has been designed for students who have experienced childhood trauma, as defined in the cdc-kaiser permanente adverse childhood experiences study of 1998, to address student's criminogenic needs through a trauma-informed lens.

## Linguistics

### LAN 101 (5) C Introduction to Linguistics

Intro to the study of natural language. Presents the similarities in the basics of language as an instrument of thought and communication. Covers the sources for cultural differentiation between all linguistic materials.

## Literature

### LIT 2 34 (5) C Telling Stories: Identity in History & Folklore

Analyzes the process of identity creation and declaration in mythology, history and folklore through myths, stories and historical events. Focuses on anecdotes, narratives and humor to delineate individual, national and group identities. Includes quarter-long group and individual projects. Prereq: ENG 101.

### LIT 2 36 (5) C Latin American Colonial Literature

Surveys literary expressions of Colonial times through 18th century in Spanish America and Peninsular Spain. Covers representative and outstanding prose works of 16th & 17th centuries. Also offered as SPAN 236.

## Manufacturing/Machinist Technology

### MFGT 102 (5) S Introduction to Machining

This course will provide instruction relating to safety, basic schematics, and overviews of manual and CNC machining.

### MFGT 104 (5) S Introduction to Lasers and Optics

This course will provide instruction relating to basic operation of the laser cutter and optical comparator.

### MFGT 105 (20) S Basic Manufacturing

This course is an introduction to machining using lecture, online and hands-on classroom experience. The class will cover conventional machining, basic blueprint reading, applied mathematics, health and safety, and an introduction to CNC machining. The class also introduces technology sectors, team concepts, team development, and problem solving. It is the first in a three quarter certificate.

### MFGT 106 (20) S Intermediate Manufacturing

This course prepares individuals as CNC machinists. Instruction covers programming, set-up and operation of CNC machines and turning centers, blueprint reading, math, machine tool theory, CMM inspection, surface plate techniques, and lean manufacturing.



**MFGT 115 (6) S**  
**Manufacturing Technology Programming**

This course presents introductory concepts of machining technology as it affects part design, part programming, and part production. In addition, students will learn about numerical controls and its impacts on the manufacturing industry, and absolute and incremental dimensioning as it applies to numerical control machines.

**MFGT 120 (20) S**  
**Advanced Manufacturing**

This course is designed to prepare individuals as CNC Machinists. Instruction covers advanced programming, set-up and operation of CNC machining and turning centers, geometric dimensioning and tolerance, trigonometry, machine tool theory, statistical process control.

**Marine Technology****MGO 101 (2) C**  
**Principles of Marine Mechanics**

Provides training in proper use of hand tools, power tools (both hand and stationary) and measuring instruments commonly used in mechanical trades. Covers safe work practices, including safety equipment, work procedures, etiquette and regulatory considerations. Includes fastenings, bearings, seals, gasketing methods and other relevant materials and equipment.

**MGO 103 (3) C**  
**Survival Craft**

A study of survival craft commonly found aboard ships today. Training in lifeboat operation and handling congruous to that required for the U.S. Coast Guard rating of Lifeboatman. Includes lifeboat nomenclature and equipment, launching procedures, handling by oars, inflatables and other types of lifesaving equipment.

**MGO 105 (3) C**  
**Leadership and Management**

Examines relevant concepts and principles in management, leadership and organizational communication as they apply aboard ship. Emphasis on instilling an attitude and work ethic required to realize the objectives of Social Responsibility advocated by the STCW Code. Satisfies the General Education Requirement in human relations.

**MGO 111 (3) C**  
**Seamanship**

Study in seamanship to prepare for employment aboard ship. Includes training in seamanship congruous to that required for the U.S. Coast Guard rating of Able Seaman (AB). Includes nomenclature, ship structure, vessel equipment, deck fittings, knots and splices, rigging and watchstanding duties.

**MGO 112 (2) C**  
**Marlinspike**

Practical instruction in use of line, cordage, wire rope and splicing methods. Includes reeving tackles and rigging stages, boat-swains' chairs, pilot ladders and emergency steering gear.

**MGO 113 (3) C**  
**Marine Safety**

Covers basic damage control, marine fire-fighting and other safety topics to prepare for employment in the marine industry. Includes stability changes to a damaged vessel, emergency repairs to hull and vessel systems, proper use of marine fire-fighting equipment, vessel safety equipment, shipboard emergency procedures and survival at sea.

**MGO 119 (3) C**  
**Marine Mathematics**

Reviews algebraic and trigonometric methods. Includes the basics of signed numbers, linear equations, fractions, percentages, plane geometry, measurement and variables which represent additional aspects of mathematics required to solve shipboard problems. Satisfies the General Education Requirement in computation. Prereq: Math placement exam or permission.

**MGO 120 (2) C**  
**Vessel Maintenance**

Practical experience in vessel cleaning maintenance procedures and routine operation of a ship. Tasks include washing, sanding, scaling, chipping, grinding, priming, painting, stenciling and other assigned work both on the interior and exterior of training vessels. Focus on proper technique, optimal resource utilization, cost effectiveness and corrosion prevention.

**MGO 123 (3) C**  
**Basic Piloting and Navigation**

Focuses on chart navigation and basic methods of piloting with emphasis on use of charts and nautical publications, the IALA B buoyage system and solving standard navigation problems. Covers how to determine geographic and luminous ranges of lights; correct for compass error, set and drift; plot dead reckoning tracks, running fixes and lines of position; solve time, speed and distance equations; predict tides and tidal currents; calculate simple ETA; and formulate anchorage procedures.

**MGO 124 (2) C**  
**Basic Vessel Handling**

Covers fundamentals of ship handling for small vessels based on single-screw theory. Instruction in ship handling techniques includes backing and filling, Y-backing, emergency stopping, flanking, and docking and undocking. Uses a small training vessel.

**MGO 127 (4) C**  
**Fundamentals of Marine Electricity**

Fundamentals of AC and DC electricity and elementary electronics. Focuses on basic theory, measurements and instruments, routine maintenance of electrical components and general operation of shipboard electrical systems. Prereq: MGO 119, MATH 098 or permission.

**MGO 133 (6) C**  
**Seamanship Practicum**

Introductory underway practicum. Receive indoctrination to both watchstanding duties and shipboard responsibilities of an able seaman. Perform all deck-related tasks one might expect to encounter when actually at sea. Involves 12-hour voyages weekly aboard SMA's training vessels.

**MGO 137 (2) C**  
**Electronic Navigation AIDS**

Intro to standard electronic equipment and systems used to aid navigation and communication. Covers radar, gyro compass, depth sounder, Loran C, RDF, GPS, GMDSS and radiotelephone. Includes training in radar piloting and collision avoidance theory using SMA's computer radar simulator. NOTE: This course is not designed to satisfy the requirements of either 46 CFR 10.480 or 15.815. Students pursuing the license option will need to take a USCG-approved radar observer course from an organization so certified by the Coast Guard.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**  
HIN ..... Watch Technology

**COURSE TO PREFIX**  
Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**MGO 140 (3) C**  
**Nautical Rules of the Road**

Comprehensive study of navigation rules and regulations including purpose, technical provisions and application. Provides a comparative study of the international (COLREGS) and inland (U.S. domestic) rules with emphasis on practical interpretation and application.

**MGO 147 (6) C**  
**Marine Engineering Practicum**

Introductory underway practicum. Receive an indoctrination to both watchstanding duties and shipboard responsibilities of a marine engineer. Covers how to read vessel blueprints, trace machinery systems and troubleshoot simulated malfunctions. Involves 12-hour voyages weekly aboard SMA's training vessels.

**MGO 166 (6) C**  
**Navigation Practicum**

Advanced underway practicum. Under supervision, assume role of mate aboard ship and be responsible for navigating the training vessel and operating all related navigational equipment as well as directing the deck crew while underway. Demonstrate competency, proficiency and confidence in navigating a vessel without guidance. Includes 12-hour voyages weekly aboard SMA's training vessels. Prereq: MGO 133.

**MGO 177 (6) C**  
**Advanced Engineering Practicum**

Advanced underway practicum. Under supervision, assume the role of Designated Duty Engineer aboard ship and be responsible for all facets of the operation of the engine room and related equipment while the training vessel is underway. Demonstrate competency, proficiency and confidence in running an engine room without guidance. Involves weekly 12-hour voyages aboard SMA's training vessels. Prereq: MGO 147.

**MGO 200 (1-5) C**  
**At Sea Internship**

Provides real-world at-sea experience on vessels of at least 500 gross tons that operate beyond the boundary line. During 30-60 day internship demonstrate mastery of the competencies outlined in Table A-II/4 of STCW for ratings forming part of navigational watch or Table A-III/4 of STCW for ratings forming part of an engineering watch.

**MRT 101 (14) C**  
**Introduction to Composite Boatbuilding**

Introduces fiberglass boatbuilding as well as wood joinery. Students work in teams to lay up, by hand, a complete fiberglass hull and then trim it with wood. Industry standards in safety and production will be modeled. Prereq: WCO 110 with a minimum GPA of 2.0.

**MRT 102 (4) C**  
**Introduction to Marine Electrical Systems**

Introduces basic AC and DC electrical systems as found on recreational and small commercial vessels. Safe installation and troubleshooting of engine starting and charging systems, DC house systems for lights, pumps, navigational gear and shore power AC systems. Prereq: WCO 110 with minimum GPA 2.0.

**MRT 103 (10) C**  
**Wooden Boat Joinery and Repair**

Construction and repair of both contemporary and traditional wooden boats. Topics include: tools, wood types, adhesives, pattern making and interior joinery on wood and composite vessels. Personal and shop safety are emphasized. Prereq: MRT 101 and MRT 102 with a minimum GPA 2.0 for each course.

**MRT 104 (8) C**  
**Introduction to Marine Mechanical Systems**

Introduces basic gas and diesel engine operating principles, service, maintenance and troubleshooting. Course also covers marine sanitation systems, various marine pumps and plumbing. Prereq: MRT 101 and MRT 102 with minimum GPA 2.0 for each course.

**MRT 105 (14) C**  
**Advanced Composites**

Complex fiberglass boatbuilding and repair problems, including repair of damaged fiberglass structures, plug and mold building, and advanced composites, including resin infusion. Direct hands-on experience in safe and productive use of machinery and supplies is emphasized. Prereq: MRT 103 and MRT 104 with a minimum 2.0 GPA for each course.

**MRT 106 (4) C**  
**Marine Electrical II**

Advanced vessel electrical systems, sizing of battery banks, AC battery charging systems, inverter systems, engine operation gauge systems, gen-sets and galvanic corrosion. Preparation for ABYC Marine Electrical Certification exam. Prereq: MRT 103 and MRT 104 with minimum 2.0 GPA for each course.

**MRT 108 (1-18) C**  
**Advanced Wooden Boat Joinery and Repair**

Provides the opportunity to build one's own boat or undertake a more comprehensive boat restoration project. Emphasis is on performance in a professional manner in safety and project execution. Course is optional. Prereq: MRT 105 and MRT 106 with minimum GPA of 2.0 for each course.

**MTS 201 (2) C**  
**Naval Architecture**

Survey of ship design and construction of all types of vessels. Emphasis on basic naval architecture and management considerations regarding ship structure. Includes hull structure and components, vessel design process, design stresses, tonnage measurements and load line assignments.

**MTS 202 (2) C**  
**Stability**

Covers principles, terms and procedures used in the determination of transverse, longitudinal and damage stability of ships. Includes physical laws affecting a floating body, effects of cargo operations, loose water, fuel consumption, grounding and flooding on vessel stability. Includes analyses of case studies involving loss of stability and how to perform trim and stability calculations.

**MTS 210 (2) C**  
**Marine Meteorology**

A non-mathematical intro to meteorology with specific emphasis on marine applications. Focuses on ocean weather phenomena as they impact vessel operations and the role of the ship's officer in observing, recording and analyzing developing weather patterns.

**MTS 212 (4) C**  
**Auxiliary Machinery and Ship Design**

Intro to auxiliary machinery and naval architecture. Includes heat exchangers, pumps, air ejectors, steering gear, distilling plants, pressure vessels, piping systems, cargo handling equipment, vessel design, vessel structure and stability.

**MTS 217 (4) C****Diesel Engine Maintenance and Operation**

Theory, fundamental operating procedures, troubleshooting and repair of marine diesel engines. Applied training in diesel engine labs.

**MTS 221 (4) C****Applied Marine Electricity**

Applied course in AC and DC motors, generator applications and electrical theory to typical marine equipment. Covers 3-phase circuits and transformers. Operate marine electrical equipment in the laboratory, on a panel board simulator and aboard SMA's training vessels (dockside). Prereq: MGO 127 or permission.

**MTS 223 (3) C****Advanced Piloting and Navigation**

Continuation of MGO 123. Emphasizes advanced aspects of navigation and piloting essential to ocean voyaging. Studies methods for determining ETA of CPA by distance off; learn navigational techniques for ocean sailing and perform advanced ETA computations involving time conversion. Includes use of a sextant in determining position and range, measuring speed by RPM, fuel consumption and use of the speed log.

**MTS 228 (5) C****Marine Hydraulics**

Emphasizes routine maintenance, troubleshooting and repair of marine hydraulic equipment. Disassemble, analyze and reassemble various hydraulic components through simulation models.

**MTS 233 (5) C****Marine Refrigeration**

Fundamentals of refrigeration cycles, system components, common refrigerants, theory of operation and preventive maintenance techniques as they apply in the marine industry.

**MTS 257 (4) C****Advanced Diesel Engines**

Continuation of MTS 217. Advanced training in the disassembly and rebuilding of marine diesel engines. Special emphasis on air intake systems, fuel injectors, governors, lubrication systems, cylinder wear, ring wear, piston clearances, bearing wear and crankshaft alignment. Prereq: MTS 217.

**MTS 263 (3) C****Propulsion Systems**

Focuses on the principles, operation, maintenance and repair of select propulsion systems. Includes design and application of engines and related systems such as fuel, lubricating, cooling, exhaust and heat recovery. Includes reduction gears, shafting, bearings and propellers.

**MTS 284 (2) C****Shipboard Pollution Prevention**

Using a non-technical format, review issues in pollution prevention and control as they impact on the duties and tasks performed by deck and/or engineering personnel onboard ship.

**MTS 285 (3) C****Marine Boilers**

Combines theory and applied training in operating steam boilers. Covers the principles, operation, maintenance and repair of marine boilers.

**MTS 294 (2) C****License Seminar**

Seminar on licensure knowledge requirements for deck/engineering candidates preparing to take the U.S. Coast Guard deck/engineering exams. Learn to consult and reference the Code of Federal Regulations, Title 46 and other publications.

**Materials Science****MSC 101 (5) N****Introduction to Materials Science**

A one quarter introductory course describing the molecular structure of different materials and how that affects the materials' macroscopic characteristics, such as tensile strength and heat transmission. The emphasis of the course is on semiconductors and their application to electronic devices. Prereq: MATH 098 and CHEM& 121. Lab fee. Transfer class.

**Math****MATH 080 (5) C | N****Preparatory Mathematics**

Computer-based, self-paced math course covering all topics from Basic College Mathematics through Intermediate Algebra. Provides an opportunity to accelerate through the developmental math sequence. Online access code required. Currently requires eligibility for MATH 081, 084, 085, 087, or 096. Beginning Spring 2016, requires eligibility for Math 081, 087, or 096.

**MATH 081 (5) C | N | S****Basic Math Skills**

Covers operations with whole numbers, fractions, decimals and signed numbers, order of operations, ratios, proportions, percents, measurement, and geometry.

**MATH 083 (5) S****Arithmetic**

High school-level course emphasizing the structure of the number system. Review of fundamental arithmetic, particularly the addition and subtraction of fractions and decimals. Intro to elementary algebraic concepts and primary concepts of probability, statistics and geometry. Reviews problem-solving strategies and applications. Prereq: Basic computational math skills.

**MATH 084 (5) C | N | S****Algebra I**

Basic operations with algebraic expressions; solving and graphing linear equations and inequalities; word problems; systems of equations. Prereq: MATH 081 or higher or placement exam (C,N); MATH 083 or higher (S).

**MATH 085 (5) C | N | S****Algebra II**

Real numbers, linear equations, linear inequalities, systems of linear equations in two variables, polynomials and factoring, rational expressions and equations, radical expressions and equations, quadratic equations and problem-solving. Prereq: MATH 081 or placement.

**MATH 086 (5) S****Geometry I**

Covers points, lines and angles, triangles, parallel lines, polygons, proofs on congruence and similarity of triangles. Calculator required. Prereq: MATH 085 with a 2.0 or higher.

**MATH 087 (5) C**  
**Foundations of Algebra**

Basic concepts of algebra that form a foundation for Intermediate Algebra. Topics include evaluating expressions, properties of variables, solving basic linear equations and inequalities, graphing lines in slope-intercept form, interpreting slope and intercepts, solving systems of linear equations by graphing, basic rules of exponents, basic rules of roots, solving simple quadratic equations, and basic polynomial arithmetic. Prereq: MATH081 with a minimum grade of 2.0 OR Placement Exam Score.

**MATH 088 (5) C**  
**Intermediate Algebra in Context**

A quantitative reasoning course in which ideas, concepts, and skills from algebra are applied to real-world contexts. Designed, with MATH 087, to prepare non-STEM students for courses such as MATH 107, 116, and 146. Extensive collaborative learning is utilized. Technology is applied appropriately. Reading and writing are both central elements of the course. Prereq: MATH 84, 87, or 96 with a minimum grade of 2.0 or Placement Exam Score or Instructor Permission.

**MATH 089 (1-5) N | S**  
**Mathematics-Independent Study**

Linked with math, physics and chemistry classes. Individual focus of study in arithmetic, algebra, study skills and math anxiety. You must meet with the instructor.

**MATH 090 (1-5) N | S**  
**Mathematical Modules**

Review class on different topics in math ranging from arithmetic to precalculus to help students meet necessary prerequisites. Taken together, Math 091, 092 and 136 in sequence result in credit for a college-level statistics course.

**MATH 091 (5) C | S**  
**Descriptive Statistics with Algebra I**

For non-STEM majors. First of 3 Statway courses for teaching statistics with integrated algebra. Covers concepts and methods of statistics with emphasis on data analysis, collecting data, graphical and numerical descriptions, correlation and simple linear regression. Application problems are multidisciplinary and multicultural. Completion of Statway sequence results in credit for college-level statistics course. Prereq: Eligible for MATH 084 and ENGL& 101.

**MATH 092 (5) C | S**  
**Descriptive Statistics with Algebra 2**

For non-STEM majors. Second of 3 Statway courses for teaching statistics with integrated algebra. Continuation of content from MATH 091. Completion of Statway sequence results in credit for a college-level statistics course. Prereq: MATH 091 with 2.0 or higher or permission; eligible for ENGL& 101.

**MATH 094 (5) S**  
**Introductory & Intermediate Algebra I**

Covers basic math review, linear equations and inequalities in one and two variables, systems of linear equations, and exponents and polynomials. Prereq: MATH 083 or COM-PASS core of 48.

**MATH 095 (5) S**  
**Introductory & Intermediate Algebra II**

Covers factoring and the use of factoring to solve equations; quadratic equations and methods to solve them; simplifying and solving rational expressions; basic math review, linear equations and inequalities in one and two variables, systems of linear equations, exponents and polynomials. Prereq: MATH 094 with a 2.0 or higher.

**MATH 096 (2) C**  
**Preparation for Intermediate Algebra**

A bridge course between the Foundations of Algebra course (MATH 087) and our Intermediate Algebra course (MATH 098). Designed for future STEM majors and those wishing to fulfill an Intermediate Algebra (MATH 098) prerequisite for transfer to a 4-year institution. Covers polynomial math, square root math, solving quadratic equations, and graphing parabolas. Prereq: MATH87 or 88 with minimum grade of 2.0, or placement exam, or instructor permission.

**MATH 097 (5) N**  
**Elementary Algebra**

Includes linear and quadratic equations and graphs, inequalities, exponents, polynomials, and an introduction to rational expressions and radicals, all covered at an accelerated pace.

**MATH 098 (5) C | N | S**  
**Intermediate Algebra**

Covers real number system, polynomial and rational expressions, exponents and radicals, first and second degree equations, linear systems of equations and graphs. Intro to functions and logarithms.

**MATH 099 (2) N**  
**Essentials of Intermediate Algebra**

Corequisite course for Math& 107, Math in Society, and Math& 146, Introduction to Statistics. Covers algebra topics needed for students to be successful in Math& 107 or Math& 146. Topics include percents, ratios, rates, linear equations, function notation, negative and fractional exponents, and an introduction to exponential and logarithmic functions.

**MATH 102 (5) C | N | S**  
**College Algebra**

For students in Math and Science. Bridges the gap between Intermediate Algebra and Pre-Calculus functions. Strongly recommended in preparation for MATH& 141(S). Required for entry into MATH 120 (N). Prereq: MATH 098.

**MATH& 107 (5) C | N | S**  
**Math in Society**

Intended for non-science majors; fulfills QSR requirement for AA Degree. Topics include financial computations (e.g. loans and interest), modeling linear and exponential growth (e.g. population growth and disease spread), and basic probability and statistics (e.g. understanding data and risk), with an emphasis on applications. Other topics selected by instructor.

**MATH 110 (3) C | S**  
**Applied Math for Technicians**

Emphasizes application of mathematics in professional technical courses. Prereq: Satisfactory score on College's math placement test.

**MATH 111 (1-5) S**  
**Applied Mathematics I**

Intro to applied algebra, geometry and trigonometry. Includes algebraic operations, integral exponents, scientific notation, dimensional analysis, metric system, radicals, calculator fundamentals, first-degree equations, plane and solid geometry, solution of right triangles, systems of equations, graphs, determinants and applications. Prereq: Satisfactory performance on Math placement test.

**MATH 112 (5) S**  
**Applied Mathematics II**

Includes factoring, algebraic fractions, fractional and quadratic equations, rational exponents, operations with radicals, oblique triangles, law of sines and cosines and trigonometric graphs. Prereq: MATH 111 or permission.



**MATH 116 (5) C | N | S**  
**Applications of Math: Mngmnt, Life and Soc Sci**

Explores functions and graphs as found in business and the social sciences. Students utilize linear, polynomial, exponential and logarithmic functions, solve systems of equations and inequalities, and learn applications of the growth of money.

**MATH 119 (3) C**  
**Mathematics Behind Information Technology**

Learn basic aspects of discrete mathematics common to information technology: scientific notation; binary and hexadecimal number systems; logical operations and the design of logical networks; set theory; relations and functions; combinatorics; graphs and directed graphs; regular expressions; and finite-state machines.

**MATH& 131 (5) S**  
**Math for Elementary Education I**

Covers the mathematics elementary teachers are responsible for teaching at K-8 levels, including computing with whole numbers, fractions, decimals and percents; multiplicative comparisons and reasoning; ratio, rates, and proportions; negative numbers; algebra and graphing; relationships between time, distance and rate; patterns and functions. Fulfills QRS requirement for A.A. degree. Prereq: MATH 098 with 2.0 or higher.

**MATH& 132 (5) S**  
**Math for Elementary Education 2**

Covers the mathematics elementary teachers are responsible for teaching at K-8 levels, including polyhedra, polygons, symmetry, tessellations, size changes, curves and curved surfaces, transformations, length, angles, area and surface area, volume, measure formulas, quantifying uncertainty, simulating probabilistic situations; sampling; and organizing and interpreting data with one and two variables. Fulfills QSR requirement for A.A. degree. Prereq: MATH 098 or 131 or permission.

**MATH 136 (5) C | S**  
**Inferential Statistics**

For non-STEM majors. Third of 3 Statway courses (MATH 091, 092, 136) for teaching statistics with integrated algebra. Continuation of content from MATH 092. Completion of Statway sequence results in credit for a college-level statistics course. Fulfills QSR requirement for A.A. degree through 2015 only. Prereq: MATH 092 with 2.0 or higher or permission; eligible for ENGL& 101.

**MATH 140 (1-10) C**  
**Precalculus: Computer Based**

Examines polynomial, rational, exponential, logarithmic, & trigonometric functions; & related functional, algebraic, & geometric topics & applications. Computer-based, self-paced course requiring online access code. Replaces Math&141 &/or Math&142. Prereq: MATH&141 (MATH 098 with 2.5 or higher, OR 1.5 years of high school algebra AND placement exam within the last 3 years); MATH&142 (MATH&141 with 2.2 or higher, OR 2 yrs. of high school algebra AND placement exam within the last 3 yrs.).

**MATH& 141 (5) C | N | S**  
**Precalculus I**

The sequence Math& 141 and Math& 142 covers polynomial, rational, exponential and logarithmic functions; related functional and algebraic topics; topics in analytic geometry; systems of equations; trig and inverse trig functions; right triangle and oblique triangle trig; polar coordinates; vectors; and related trig applications. Fulfills the QSR requirement for A.A. degree. Prereq: Math 095 or Math 098 with a 2.5 or higher; Math 102 with a 2.0 or higher (S); or Placement test.

**MATH& 142 (5) C | N | S**  
**Precalculus II**

The sequence Math& 141 and Math& 142 covers polynomial, rational, exponential and logarithmic functions; related functional and algebraic topics; topics in analytic geometry; systems of equations; trig and inverse trig functions; right triangle and oblique triangle trig; polar coordinates; vectors; and related trig applications. Fulfills the QSR requirement for A.A. degree. Prereq: Math 095 or Math 098 with a 2.5 or higher; Math 102 with a 2.0 or higher (S); or Placement test.

**MATH& 146 (5) C | N | S**  
**Introduction to Statistics**

(Formerly MATH 109) Covers descriptive methods, probability and probability distributions, samples, decisions, hypothesis testing and statistical inferences. Fulfills QSR requirement for A.A. degree. Prereq: MATH 095, 098 or placement.

**MATH& 148 (5) C | N | S**  
**Business Calculus**

Explores introductory topics in differential and integral calculus, with particular emphasis on understanding the principal concepts and their applications to business.

**MATH& 151 (5) C | N | S**  
**Calculus I**

The sequence MATH&151, &152 and &163 covers limits, differential calculus and its applications, integral calculus and its applications, intro to differential equations, series including Taylor series, vector geometry in three dimensions, multivariable calculus, partial differentiation, double integrals in Cartesian and polar coordinates and applications. Fulfills QSR requirement for A.A. degree. Prereq: MATH&142 or placement test or MATH 120 (N).

**MATH& 152 (5) C | N | S**  
**Calculus II**

The sequence MATH&151, &152 and &163 covers limits, differential calculus and its applications, integral calculus and its applications, intro to differential equations, series including Taylor series, vector geometry in three dimensions, multivariable calculus, partial differentiation, double integrals in Cartesian and polar coordinates and applications. Fulfills QSR requirement for A.A. degree. Prereq: MATH&151.

**MATH& 163 (5) C | N | S**  
**Calculus 3**

The sequence MATH&151, &152 and &163 covers limits, differential calculus and its applications, integral calculus and its applications, intro to differential equations, series including Taylor series, vector geometry in three dimensions, multivariable calculus, partial differentiation, double integrals in Cartesian and polar coordinates and applications. Fulfills QSR requirement for A.A. degree. Prereq: MATH& 152.

**MATH 198 (1-5) S**  
**Mathematics Workshop**

A problem-solving workshop using math topics considered appropriate by the instructor. May include study skills, note-taking systems, test-taking strategies and group problem-solving approaches.

**MATH 211 (5) N**  
**Elements of Statistical Methods**

The course will examine numerical and categorical data, analyze sampling distributions, perform inference on numerical and categorical data, and explore relationship between quantitative variables. A statistical programming language will be used for statistical computation and graphics. Prereq: MATH 116 or MATH& 141 with a 2.0 or higher, or placement test.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**  
HIN ..... Watch Technology

**COURSE TO PREFIX**  
Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**MATH 220 (5) C | N | S**  
**Linear Algebra**

Intro to linear algebra and its implications. Includes systems of linear equations, matrices, determinants, vector spaces, inner product spaces, eigenvalue problems, and similarity transformations. Prerequisite: MATH& 163 with a 2.0 or higher or permission.

**MATH 224 (5) C | N | S**  
**Vector Calculus**

Continuation of MATH& 163. Includes vector-valued functions, vector fields, line and surface integrals and the theorems of Green, Gauss and Stokes, vector operators and the extension of the calculus to the vectors in 2-D and 3-D space. Prereq: MATH& 163 with a 2.0 or higher or permission.

**MATH 238 (5) C | N | S**  
**Differential Equations**

Covers first order differential equations, second order differential equations, their applications, and Laplace transforms. Covers the elementary theory of differential equations and the interrelationship between pure mathematics and applied mathematics.

**MATH 239 (5) N**  
**Linear Systems of Differential Equations and Bou**

Continuation of MAT 220 and 238. Includes analysis of systems of ordinary differential equations using eigenvalues and eigenvectors, and using the phase plane. Also includes solving partial differential equations and boundary value problems using the method of separation of variables and Fourier series. Fulfills QSR requirement for A.A. degree. Prerequisite: MATH 220 & 238.

**MATH 298 (1-5) S**  
**Special Topics in Math**

Problem-solving for special math topics. Prereq: Permission.

**MATH 299 (1-5) C | N**  
**Independent Study**

Independent study of problems or topics of special interest. Prereq: Permission.

**Mechanical Engineering Technology**

**MET 102 (4) S**  
**Creative Technical Problem Solving**

Intro to systematic procedures for engineering problem-solving. Review of basic math principles, geometry, algebra, trigonometry and basic physical principles related to analysis of technical engineering problems.

**Medical Vocabulary Health/Medical**

**AHI 100 (3) N**  
**Introduction to Medical Vocabulary**

General survey of medical terminology introducing health service workers to the basic rules and fundamentals in medical vocabulary-building.

**Meteorology**

**MEY 100 (5) C | N**  
**Meteorology**

Intro to the composition, structure, motions and origin of the atmosphere; forecasting; climates and how they have changed through time; and effects of human activities on weather and climate.

**Microcomputer Mgmt./ Computer Info. Systems**

**CIS 197 (1-5) C**  
**Work Experience-Computer Information Systems**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply computer information systems knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**MIC 098 (3) C**  
**Computing Essentials**

Presents common concepts and principles for effective use of current technologies. Covers basic technology vocabulary, general uses and functions of computers, mobile devices, software applications and the Internet. Designed for students with little or no experience using computers and/or the Internet for academic and professional purposes. Prereq: Placement into ENGL 092/ ESL 093 or equivalent and basic keyboarding skills (United States keyboard).

**MIC 101 (4) C**  
**Introduction to Microcomputer Applications**

Intro to microcomputer applications for Windows. Includes an overview of Windows, the Microsoft Office System featuring Word, Excel, Access, PowerPoint, Internet Browsers, email, along with emerging software application topics and concepts.

**MIC 102 (1) C**  
**Using Computers I**

A series of one-credit short classes which provide a brief hands-on intro to one type of commonly used industry software using both PC and Macintosh. Attendance mandatory and additional 2-4 hours per week required during Computer Center hours.

**MIC 103 (3) C**  
**Computer Applications for Builders**

Intro to basic personal computer hardware and software concepts as they apply to business transactions and the building trades. Prereq: Permission.

**MIC 120 (4) C**  
**Database Applications & Design with MS Access**

Develop database application and design skills through use of MS Access. Emphasizes planning, creating and revising a database system. Prereq: MIC 101 or equivalent experience.

**MIC 151 (5) C**  
**HTML and Web Page Development**

Intro to Hypertext Markup Language (HTML) and web page development. Includes implementing HTML tags and files; learning common web page formats and functions; and developing and installing comprehensive websites. Prereq: MIC 101 or MIC 150, or equivalent experience.

**MIC 175 (4) C**  
**Computer User Support**

Designed to introduce students to the fundamentals of help desk operations. Emphasizes the basic components of a successful help desk, provide students with working knowledge of software to process and track calls, and present hands-on experience with problem analysis.

**MIC 203 (3) C**  
**Introduction to Computer Aided Drafting & Design**

Intro to drafting and design using the cross-platform program Vectorworks. Offered at the Wood Construction Center. Prereq: MIC 103 or permission.

**MIC 215 (4) C**  
**Introduction to Dreamweaver**

Online course. Access online discussion board, lecture board, quiz and file sharing tools. Intro to Macromedia Dreamweaver, the most widely used software for web page development used by professionals and hobbyists. Create simple web pages as well as dynamic and comprehensive websites. Prereq: MIC 101 or equivalent.

**MIC 298 (1-5) C**  
**Microcomputers Special Topics**

Designed to allow for special course offerings and new course development on topics relevant to new and emerging computer and technology applications and industry needs. Prerequisite: Permission.

**Multi-Occupation in Engineering and Technology**

**MOET 101 (1-5) S**  
**Multi Occupation Engineering & Tech Orientation**

Introductory course for students pursuing the Multi Occupation in Engineering & Technology (MOET) AAS-T degree. Course orients students to the college and program including introduction to learning technology, college systems, preparation of portfolio, and preparation for learning in an online and classroom environment.

**Music**

**MUSC 100 (5) C | S**  
**Music in the Western World**

Intro to classical music. Provides an understanding of musical expression through works of the great composers. Emphasizes music listening through recordings, films and special performances.

**MUSC& 105 (5) C | N | S**  
**Music Appreciation**

Explores the elements, forms, and styles of music in genres such as Classical, Rock, Pop, Rap, Hip Hop and Jazz. Students will develop listening perception to increase their enjoyment and understanding of various musical styles, and discover commonalities among various styles of music. Prereq: Eligibility for ENGL 101

**MUSC 109 (5) S**  
**World Beat: Global Studies Through Music**

Examines societal beliefs, identity, history, world view, values and aspirations expressed by selected non-Western cultures (or groups within these cultures) through music. Features both traditional and contemporary popular music.

**MUSC 110 (5) C | N**  
**Introduction to World Music**

Covers the music of selected societies of the world within their cultural context. Using musical concepts on a cross-cultural basis, examine various cultural areas and societies.

**MUSC 113 (5) C | N**  
**Music in the United States**

Overview of musical developments in the United States from Colonial times to the present, using live performances, videotapes and recordings. Examines contributions of ethnic/minority groups and the relevant social issues connected with these musical experiences.

**MUSC 116 (5) C | S**  
**Rock Music - History and Perspectives I**

Examines rock music as a musical, social, cultural, economic and political force in the United States. Emphasizes early rock music development.

**MUSC 117 (5) S**  
**Rock Music II**

Examines rock music as a musical, social, cultural, economic and political force in the United States. Emphasis on the later decades of rock music development.

**MUSC 118 (5) C**  
**Electronic Music: Origins to Edm**

The course will survey the history of Electronic Music from its early Twentieth Century roots to present day Electronic Dance Music (EDM). The course will focus on technological innovations and the applications of those technologies resulting in compelling electronic music compositions and respective electronic music genres world-wide.

**\MUSC 119 (2) C | N**  
**Beginning Group Instruction: Voice**

Students explore and strengthen their individual singing voice. Technique and repertoire are major focuses. Expressivity and overall musicianship are fostered. Students learn about the wide variety of communication tools available to them. Importance of lyric analysis, awareness of melodic shapes, and overall interpretation is stressed. Pieces are chosen based on student's needs as well as tastes. Open to all levels.

**MUSC 120 (2) C**  
**Intermediate Group Instruction: Voice**

Continuation of MUSC 119. Students continue to explore and strengthen their individual singing voice, develop greater technique, choose voice-specific repertoire, and memorize musical literature. Importance of lyric analysis, awareness of melodic shapes, and overall interpretation continue to be stressed. Students will select pieces based on current skill level and personal preference. Prerequisite: Satisfactory completion of MUSC119.

**MUSC 124 (2) C**  
**Create Music From Beats to Melody**

A fun and interactive course designed for the study of music fundamentals to the beginning music student. Students learn the basic fundamentals of notation, melody, rhythm, beat making, and harmony, and to develop listening skills necessary for the interpretation of the musical written page. Students are encouraged to compose their own music using the latest music technology. This is a course for students with no prior musical training or experience.

**MUSC 125 (5) C | N**  
**Creative Music Fundamentals**

Introduces basic music theory topics including music notation, meter, rhythm, scales, and key signatures, along with introductory piano and musical composition skills.

**MUSC 126 (2) C | S****Beginning Group Piano - 1st Quarter**

Class piano for general student to develop reading skills and technical proficiency.

**MUSC 127 (2) C | S****Beginning Group Piano - 2nd Quarter**

Piano class for students with previous keyboard experience. Prerequisite: Successful completion of MUSC 126, or Instructor's permission.

**MUSC 128 (2) C | S****Beginning Group Piano - 3rd Quarter**

A continuation of MUSC 127. Prerequisite: Satisfactory completion of MUSC 127.

**MUSC 130 (1-2) C | N****Individual Instruction: Voice**

Instructor and student co-create curriculum based on student's needs and goals with a primary focus on technique, repertoire, and expressive musicianship. Pieces are chosen based on student's needs and individual preferences. Weekly individualized guidance and feedback are provided. MUSC 130 is open to all levels and may be repeated. Credit hours vary. An additional fee is charged for all individual instruction. Prereq: Instructor's permission.

**MUSC 134 (1-2) C | N****Individual Instruction: Woodwinds**

Credit hours vary. May be repeated. An additional fee is charged for all individual instruction in this series. Prereq: Permission.

**MUSC 135 (1-2) C | N****Individual Instruction: Percussion**

Credit hours vary. May be repeated. An additional fee is charged for all individual instruction in this series. Prereq: Permission.

**MUSC 136 (1-2) C | N****Individual Instruction: Composition**

Instructor & student co-create curriculum based on student's needs and goals with a focus on reading, notational skills and a working knowledge of melody, harmony, rhythm & a diverse palette of compositional techniques used throughout music history. Assignments are chosen based on student's needs and tastes. Weekly individualized guidance and feedback are provided. Open to all levels, may be repeated. Credit hours vary. Additional fee charged for all individual instruction. Prereq: Permission.

**MUSC 138 (1-2) C | N****Individual Instruction: Guitar**

Credit hours vary. May be repeated. An additional fee is charged for all individual instruction in this series. Prereq: Permission.

**MUSC 139 (1-2) N****Individual Instruction: Harp**

Prereq: Permission. Transfer Class.

**MUSC 140 (1-5) N | S****College Choir**

Focus on musicianship, vocal techniques and performance skills for the large choral ensemble through study of literature from all stylistic periods. Present one concert per quarter in various musical styles and cultures. Daily attendance required. May be repeated for up to 15 credits. Prereq: Ability to match pitch.

**MUSC& 141 (5) C****Music Theory I**

Covers rudiments of music notation, scales, intervals and triads. Development of aural skills rhythmic, melodic and harmonic, through sight-reading and dictation. Includes simple music composition analysis and correlated keyboard exercises. For music majors and minors.

**MUSC 145 (2) C****Pop Vocal Ensemble**

Open to singers of all abilities and levels. Opportunities to perform pop, rock, jazz, rap, R&B, ballads, spoken word, Broadway, Americana, experimental, and free improvisational songs. Instruction in vocal techniques, choral techniques, stage presence, and creating harmonies. This class has an optional fee for access to piano practice rooms.

**MUSC 146 (2) C****Popular Music Ensemble I**

Beginning level performance ensemble open to all instrumentalists and vocalists, with an emphasis on popular music styles. Provides beginning musicians an opportunity to gain experience in performing music with their peers in a relaxed and fun environment, essential to alleviating performance anxiety. Students develop the ability to read beginning level musical lead sheets while performing in a variety of music genres. Open to all students. No audition required.

**MUSC 147 (2) C****Popular Music Ensemble II**

An intermediate level performance ensemble open to all instrumentalists and vocalists, with an emphasis on popular music styles. Music 147 provides Intermediate level musicians an opportunity to gain experience in performing music with their peers in a relaxed and fun environment, essential to alleviating performance anxiety. Students engage in Intermediate level music reading of lead sheets and chord charts. Prereq: Instructor permission.

**MUSC 148 (2) C****Popular Music Ensemble III**

An Advanced level performance ensemble open to all instrumentalists and vocalists, with an emphasis on popular music styles. Music 148 provides Advanced level musicians an opportunity to gain experience in performing music with their peers in a relaxed and fun environment, essential to alleviating performance anxiety. Students engage in advanced level of music performance in addition to composing opportunities. Prereq: Instructor permission.

**MUSC 151 (2) C****Performance Experience**

Students will have the opportunity to develop music performance skills and techniques, working toward a more engaging and vibrant stage presence. Students will have the opportunity to work in solo, duet, trio, and small ensemble settings and learn to effectively collaborate. Students will develop current marketing skills for performers. Open to all levels of instrumentalists, singers, composers, songwriters, dancers, actors, and comedians who want to (further) incorporate music into their acts.

**MUSC 154 (1-2) N****Symphonic Band**

Features the finest in Wind band literature, both contemporary and traditional. Membership by audition.

**MUSC 160 (5) S****Blues to Hip Hop**

Explores the blues and other early African American musical styles, with a focus on how these styles influenced the development of rock, soul, funk, pop, and hip hop music and culture. Musical study in this course is placed within the historical context of social, economic and political forces within American society.

**MUSC 161 (5) C****History of American Popular Music**

History of American popular music from colonial times to contemporary styles. Analysis of musical characteristics, as well as social/cultural contexts of development.

**MUSC 171 (1-2) C | N****Individual Instruction: Piano**

Individual piano instruction. Credit hours vary. May be repeated. Additional fees are required. Prereq: Instructor's permission.

**MUSC 172 (1-2) N****Individual Instruction: Strings**

Credit hours vary. May be repeated. An additional fee is charged for all individual instruction in this series. Prereq: Permission.

**MUSC 173 (1-2) C | N****Individual Instruction: Brass**

Credit hours vary. May be repeated. An additional fee is charged for all individual instruction in this series. Prereq: Permission.

**MUSC 185 (5) C****Computer Music and Recording**

Intro to the technical skills of electronic music production and recording. Covers the basic elements of music including listening, improvising, recording, arranging, mixing and digital editing. Create original music using stimuli. Learn mixing and audio production, including sound shaping, effects use and midi sequencing. Open to all students.

**MUSC 186 (5) C****Digital Music Production and Sonwriting**

Sequel to Music 185. Expands knowledge of digital music production through learning intermediate level techniques for composing, producing, and performing songs. Covers computer-based recording, synthesis, and notation for the composer/arranger. Focuses on fundamentals of MIDI, sequencing, sampling, basic signal processing, and practical production skills using current digital technology. Includes writing of original material during lab sessions. Prereq: Musc 185 minimum passing grade 2.0.

**MUSC 204 (5) C | N****History of Jazz**

Traces the roots of jazz in America, through films, lectures, recordings and live performances. Includes Rag, New Orleans, New York, Chicago, Kansas City, the Big Band era, Blues, Be-bop, Hard Bop, the New Thing, Free Form, Electric and Fusion Styles.

**MUSC 205 (5) C****Jazz Masters of the 20th Century**

A music literature course for the general student who wishes to study jazz music in more depth. Lectures, selected readings and major recordings by each artist.

**MUSC 221 (2) C | S****Group Piano - 4th Quarter**

Continuation of MUSC128. Technique, repertoire, and theory, with emphasis on classical compositions.

**MUSC 222 (2) C | S****Group Piano - 5th Quarter**

Continuation of MUSC221. Prerequisite: Successful completion of MUSC221, or permission.

**MUSC 223 (2) C | S****Group Piano - 6th Quarter**

Continuation of MUSC222. Prerequisite: Successful completion of MUSC222, or permission.

**MUSC 298 (5) C****Practicum in Music**

Practicum in various skills in music, such as tutorial assistant in piano theory, coaching vocal students or apprenticeship in use of electronic equipment (Broadway Performance Hall).

**MUSC 299 (1-5) C | N | S****Practicum in Music**

Research musical performance in an area of interest determined by student and instructor. Prereq: Permission.

## NanoTechnology

**NANO 101 (5) N****Introduction to Nanotechnology**

Intro to nanotechnology principles, applications, industry, ethics and careers. Includes basic concepts, properties and applications of relations between nano/microelectronics-mechanical materials, electronics, magnetism, mechanics, fluidics, optics, photonics and smart biological materials. Covers processing, fabrication, modeling and testing used in the field. Prereq: MATH 098. Recommend: one quarter of college-level chemistry.

**NANO 220 (5) N****Micro/Nanofabrication**

Course covers the fabrication technologies used in the nano/micro fabrication laboratory and production environments. Includes cleanroom basics and proper technique: lithography: methods of physical and chemical materials deposition and etching. Prereq: NANO 101 (with a 2.0 or higher), MATH& 098, CHEM& 121, and MSC 101; or instructor permission.

**NANO 230 (5) N****Nano/Micro Characterization Packaging & Testing**

Intro to nano/micro device and material characterization testing and packaging. Covers surface and bulk material characterization methods, including composition and property analysis of nano/micro devices materials, and structures. Prereq: NANO 220, CHEM& 131 with a 2.0 or higher and MATH 098 with 2.0 or higher or permission. Recommend PHYS& 121.

**NANO 250 (5) N****Capstone/Practicum II**

Provides direct experience in a nano/micro-fabrication facility. Complete a design and fabrication project related to a nano/micro-device, document and report on the project. Prereq: Permission.

## Network Infrastructure

**NTI 300 (5) C****Linux and Enterprise Scripting Technologies**

Covers basic understanding of the command line to automation of administrative tasks and configuration across a large environment. Learn to cron, armor, and log administrative scripts and translate them into high level scripting languages. Also includes regex, stream editing, remote admin, change management, databases and web. Prereq: ITC 110 and ITC 136 with grade of 2.0 or higher or instructor permission.

**NTI 310 (5) C****Linux Application**

Builds on existing Linux automation and configuration skills by introducing Product Data/Product Lifecycle Management tools, custom code compilation and package creation. Includes administering, patching, and updating various development, testing, and production versions of server services and configuring internally facing services for Windows compatibility. Prereq: NTI-300 with a 2.0 or higher, or equivalent Linux automation experience (permission).



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**NTI 320 (5) C**  
**Monitoring and Trending of Enterprise Networks**

Define optimization and monitoring techniques for enterprise networks and applications. Analyze deployment, implementation and configuration for availability, capacity, performance, security, reporting, storage, alerts, recovery, backup, and archival. Demonstrate optimization and monitoring by implementation techniques. Prereq: NTI 300 and NTI 310, each with a 2.0 or higher; or Instructor's permission.

**NTI 340 (5) C**  
**Software Defined Networking 1**

Introduces knowledge and skills needed to plan, implement, and monitor a scalable routed network. Focuses on routing protocols for both IPv4 and IPv6: Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) for an enterprise; and, Border Gateway Protocol (BGP) for enterprise Internet connectivity. Includes learning how to redistribute routes, implement path control, and secure Cisco routers. Prereq: Instructor's permission.

**NTI 350 (5) C**  
**Software Defined Networking 2**

Covers the knowledge and skills needed to create an efficient and expandable enterprise network. Focuses on Layer 2 and multi-layer switch functions including VLANs, trunks, inter-VLAN routing, port aggregation, spanning tree, first hop redundancy, as well as network security and high availability features. Prereq: NET 146 with 2.5 or higher, or Instructor's permission.

**NTI 360 (5) C**  
**Software Defined Networking 3**

Focuses on techniques to monitor and troubleshoot routed and switched networks through extensive hands-on lab exercises. Explore troubleshooting methods, approaches, procedures, and tools. Introduction of a series of different organizations for troubleshooting scenarios. Solve troubleshooting tickets, debrief, and review info that will help further understanding of the specific issues raised. PREREQ: NTI 340 with 2.5 or higher; or, Instructor's permission.

**NTI 400 (5) C**  
**Identity & Information/Content Security**

Explores architectures & technology to enhance the security & trustworthiness of information delivery processes. Examines: identity management in a global marketplace; key laws managing content/data; & methods of risk management & risk control. Explores brand management & continuous delivery/content management for cloudcentric business models, & methods for information governance when working with enterprise & cloud content. PREREQ: ITC 110, or NET120, with 2.0 or higher; or Instructor's OK.

**NTI 410 (5) C**  
**Network Security for the Enterprise**

Introduces the tools and techniques of penetration testing for the persistent threat environment of the cloud enabled world. Details the elements of an application, app, or database exploit. Examines the configuration of penetration tools for use in the cloud and the enterprise. Demonstrates processes for managing coding errors. Explores case studies to examine penetration tools as applied to the DevOps process. PREREQ: ITC 110 or ITC 151 w/ 2.0 or higher or instructor permission.

**NTI 430 (5) C**  
**Big Data and Collaboration Management**

Investigates the dynamics of data, & examines the marketplace for data. Explores diverse data storage environments, tools, and systems to provide secure or insecure access to that data. Covers enterprise, cloud, and hybrid environments. Delves into security processes to manage collaboration for a variety of business models that use data natively and/or for analytics. PREREQ: ITC 110 OR ITC 151 with a 2.0 or higher, OR Instructor's permission.

**NTI 440 (5) C**  
**Devops and Enterprise Admin for the Cloud (Sre)**

Focuses on DevOps and SRE (Site Reliability Engineering) administration practices for Internet Services. Examine techniques to design, build, & run cloud services. Use core skills: UNIX/Linux system administration, networking, & hardware-based operating systems maintenance. Not a coding class. Investigate highly available, fast, & secure scalable services. Evaluate cloud systems against performance metrics. PREREQ: ITC136 or NET124, either with 2.0 or higher; or Instructor's permission.

**NTI 460 (5) C**  
**Devops Practicum, BAS IT Networking**

Develop and deploy DevOps tools for either an external client/approved project. Determine suitability, cost benefit analysis, ongoing maintenance needs in deploying DevOps. For example: develop/implement a deployment plan to orchestrate infrastructure builds programmatically in the public cloud, use configuration management, & work with cloud native templates. Prereqs: Must be in the last qtr of program; completed all other BAS-IT Networking courses with 2.0 or higher; & Instructor's permission.

**NTI 470 (5) C**  
**Internship/Capstone Project, BAS IT Networking**

For the IT Networking (Bachelor of Applied Science) program. Students complete an internship or arrange to complete a capstone project, applying the skills learned in the classroom to the workplace. Students write a culminating paper, reflecting on their experience and integrating it with their classroom learning. Prereq: Must be in the last qtr of program; completed all other BAS-IT Networking courses with 2.0 or higher; & Instructor's permission.

## Network Technology

**NET 120 (5) C**  
**Network Essentials - Compitia Network +**

Intro to networking technologies for local area networks (LANs), wide area networks (WANs) and the Internet. Prereq: MIC 101 or ability to use MS Office.



**NET 122 (5) C**  
**Network Operating Systems 1 - Client**

Covers the installation and configuration a managed enterprise client operating system on stand-alone clients/computers that are part of a workgroup, domain, or cloud infrastructure. Includes configuration and implementation skills for creating a client for a LAN/WAN server structure using a directory based network. IaC (Infrastructure as Code) from the client perspective is introduced. Prereq: NET 120 with a 2.0 or higher, or similar work-experience. Co-requisite: NET 124.

**NET 124 (5) C**  
**Network Operating Systems 2 - Win2k Server**

Learn to install Windows Server and various file systems and to administer and manage Active Directory services and objects. Use Microsoft Management Console to monitor system performance and to administer Internet Information Services and user accounts, group accounts and group policies. Study print services, network protocols, virtual private networking, Routing and Remote Access Service, DHCP, WINS and DNS. Learn to back up data, implement disaster protection and recover from a disaster. Prereq: NET 122 with 2.0 or higher or concurrent enrollment in NET 122.

**NET 126 (5) C**  
**Network Operating Systems 3 - Sysop Applications**

Focuses on administering enterprise class servers. Investigates IaC (Infrastructure as Code). Learn to deploy advanced directory services. Explore enterprise server tools using PowerShell & Python. Develop a foundation in the use & manipulation of enterprise systems operation applications. Specific attention to Authentication, Authorization, and Access to enterprise/Cloud objects. Prereq: NET 124 with 2.0 or higher, similar work experience, or Instructor's permission. Co-requisite: NET 134.

**NET 134 (5) C**  
**Network Iac (Infrastructure as Code) & Design**

Analyze and construct a networked application environment. Examine network path availability, fault tolerance, and cost in homogenous and diverse environments on many scales. Evaluate tool selection for best-of-breed and monolithic system environments. Perform maintenance, deployment, and auditing using PowerShell and Python. Prerequisite: NET124 with a 2.0 or higher, or Instructor's permission (who evaluates previous work experience, etc.). Co-requisite: NET126.

**NET 138 (5) C**  
**UNIX for Network Administration**

Covers the organization of UNIX-based hardware components and software tools used by the host administrator to control access, tune the system, and account for system resources used. Covers advanced concepts with multi-user, multi-tasking, time-sharing networked communications, UNIX tools, network schedulers, security, remote access, performance monitoring and networking aspects of UNIX. Examines operational considerations including host initialization, suspension and termination and the system's physical environment. Prereq: ITC 136.

**NET 142 (5) C**  
**Network Management - CISCO I**

First of three sequential courses teaching current and emerging network technology. Covers safety, network terminology and protocols, LANs, OSI model, cabling, cabling tools, IT addressing and network standards. Emphasizes decision-making and problem-solving techniques and proper use, care and maintenance of networking software, tools and equipment. PREREQ: Completion of ITC 140 with a minimum grade of 2.0 or permission.

**NET 144 (5) C**  
**Network Management - CISCO II**

Continuation of NET 142. Covers safety, networking, network protocols, LANs, WANs, Ethernet, LAN switching, router IOS, TCP/IP addressing, router configuration, dynamic routing, static routing and the network administrator's role and function. Emphasis on techniques to solve networking problems. Prereq: Completion of NET 142 with a minimum grade of 2.0 or permission.

**NET 146 (5) C**  
**Network Management - CISCO III**

Third of three courses designed to expand knowledge & previously learned networking skills. Introduces & extends the configuration ability of Border Gateway Protocol (BGP), Layer 3 Switching, and Hot Standby Router Protocol (HSRP). Covers Enhanced Interior Gateway Routing Protocol (EIGRP), Wide Area Networks (WANs), & network troubleshooting. Includes Point-to-Point Protocols (PPP) & frame relay design, configuration, & maintenance. Prereq: NET 144 with a 2.0 or higher.

**NET 200 (10) C**  
**Enterprise Applications**

Capstone course for network infrastructure students. Simulate a small business environment in hardware and software from a case study and apply the skills from the foundation networking courses. Further explore enterprise applications and server needs of businesses as directed by industry standards and trends. Prereq: NET 126 with 2.0 or better or permission.

**New Media****NME 110 (6) C**  
**New Media I**

Course provides students with authentic tasks and projects preparing them for real-world work demands encountered in their respective fields. Students work collaboratively in a project-based curriculum, exploring the role of communications in the context of New Media and society. Additional objectives of New Media are to develop skills that form the basis for future career work in the creative arts disciplines-all of which relate to general media-and to begin to establish professional contacts.

**NME 120 (6) C**  
**New Media II**

This interdisciplinary SCCC Creative Academy course, second of a three-course series, brings together Graphic Design and Photography students to apply skills to complete integrative design assignments. Students are given authentic tasks and projects preparing them for real-world work demands encountered in their respective fields. Students work collaboratively in this project-based curriculum, exploring the role and interplay of design and communications in the context of New Media and society.

**NME 130 (6) C**  
**New Media III**

This is the final of a three course series in which advanced techniques will be applied and explored. The course provides students from Design and Photography with authentic tasks and projects preparing them for real-world work demands encountered in their respective fields. Students work collaboratively in a project-based curriculum, exploring the role of communications in the context of New Media and society.

## Nursing – Associate in Nursing DTA/MRP

### NURS 101 (4) C | N | S Fundamentals of Nursing

Introduction to the profession of nursing and core nursing concepts organized around the framework of Gordon's Functional Health Patterns. Covers principles of critical thinking, use of the nursing process, the role of the nurse in health care, cultural views of health, and principles of growth and development.

### NURS 102 (3) C | N | S Medical-Surgical Nursing I

Focuses on comprehensive understanding of the physiology of homeostasis and the effects of patient self-efficacy, culture, environment, and illness. Covers alterations of fluid and electrolyte balance, acid-base balance, chronic neurological conditions, sensory deficits, diabetes, and wound care from the perspective of Gordon's Functional Health Patterns.

### NURS 103 (3) C | N | S Medical-Surgical Nursing II

Focuses on the application of the nursing process to patients from the perspective of Gordon's functional health patterns. Emphasizes the care of adult patients with nutrition-metabolic, activity-exercise, and elimination functional health patterns. Pharmacology related to the course content and patient responses to cultural practices and beliefs are integrated.

### NURS 111 (2) C | N | S Skills Lab I

Builds upon the application of foundational nursing concepts and skills in the laboratory environment. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care planning for patients with risk for or actual dysfunctional health patterns.

### NURS 112 (3) C | N | S Nursing Practice I

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for adult and gerontologic patients. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care for patients at risk for or with alterations in functional health patterns.

### NURS 113 (1) C | N | S Skills Lab II

Builds upon and provides in-depth and advanced application of foundational nursing concepts and skills in a laboratory or simulated environment. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care planning for patients with risk for or actual dysfunctional health patterns.

### NURS 121 (3) C | N | S Nursing Practice

Focuses on the application of foundational nursing concepts and skills in supervised direct or simulated care for adult and gerontologic patients in long term care settings. Gordon's Functional Health Patterns and the nursing process are used as the organizing framework for assessment and patient-centered care planning.

### NURS 123 (4) C | N | S Nursing Practice II

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for adult patients with medical-surgical conditions. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care for patients at risk for or actual dysfunctional health patterns.

### NURS 132 (3) C | N | S Behavioral Health Nursing

Focuses on application of the nursing process to patients from the perspective of Gordon's functional health patterns. Emphasizes care of patients with cognitive-perceptual, self-perception/self-concept, role-relationship, coping/stress-tolerance and sexuality-reproductive dysfunctional health patterns. Nurse/patient relationships, therapeutic communication, safety, related pharmacology, identification of barriers to care and the impact of cultural practices/beliefs are integrated.

### NURS 142 (3) C | N | S Behavioral Health Practice

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for patients with behavioral health conditions. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care for patients at risk for or actual dysfunctional health patterns.

### NURS 204 (5) C Medical-Surgical Nursing III

Focuses on the application of the nursing process to patients from the perspective of Gordon's functional health patterns. Emphasizes the care of adult patients with nutrition-metabolic, activity-exercise, and health perception-health management dysfunctional health patterns. Pharmacology related to the course content and patient responses to cultural practices and beliefs are integrated.

### NURS 205 (4) C Medical-Surgical Nursing IV

Focuses on the application of the nursing process to patients from the perspective of Gordon's functional health patterns. Emphasizes the care of adult patients with nutrition-metabolic, activity-exercise, cognitive-perceptual, health-perception/health-management, and self-perception/self-concept dysfunctional health patterns. Pharmacology related to the course content and patient responses to cultural practices and beliefs are integrated.

### NURS 206 (3) C Health Promotion and Managing Care in Nursing

Overview of the major theories and models that guide health promotion interventions including environmental, sociocultural, and economic factors that influence health care practices. Emphasis is placed on evidence-based strategies to promote individual, family, and community health for diverse populations. Gordon's Functional Health Patterns serve as the organizing framework for assessing the health of individuals, families, and communities.

### NURS 214 (3) C Nursing Practice III

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for adult patients with medical-surgical conditions. Emphasis is on nursing skills, communication, and clinical judgment in order to plan and implement evidence-based care for patients at risk for or actual dysfunctional health patterns.

**NURS 215 (3) C**  
**Maternal Nursing**

Focuses on application of the nursing process to maternal-newborn patients from the perspective of Gordon's Functional Health patterns. Emphasizes care of maternal-newborn patients at risk for or with actual nutritional-metabolic, activity-exercise, role-relationship, and cognitive-perceptual dysfunctional health patterns and adult patients with sexuality-reproductive dysfunctional health patterns. Related pharmacology and cultural practices and beliefs are integrated.

**NURS 216 (5) C**  
**Nursing Practice IV**

Expands upon the application of concepts discussed in prior and current nursing courses in a supervised or simulated care setting. Emphasis on nursing skills, communication, and clinical judgment in order to plan and implement evidence-based care for patients experiencing alterations in multiple dysfunctional health patterns.

**NURS 224 (3) C**  
**Pediatric Nursing**

Focuses upon application of the nursing process to pediatric patients from the perspective of Gordon's Functional Health Patterns. Emphasizes care of pediatric patients with risk for or actual alteration in nutritional-metabolic, activity-exercise, elimination, health-perception/health management, cognitive-perceptual, and self-perception/self-concept dysfunctional health patterns. Related pharmacology and specific cultural practices and beliefs are integrated.

**NURS 225 (1) C**  
**Maternal Practice**

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for maternity and newborn patients. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care for patients at risk for or with alterations in functional health patterns.

**NURS 226 (3) C**  
**Transitions to Professional Nursing Role**

Focuses on leadership, management of care, and professionalism as the student transitions into the healthcare system as a professional nurse. Legal obligations, licensure requirements, organizational culture, self-care, healthcare informatics, and evidenced-based practice are emphasized.

**NURS 234 (1) C**  
**Pediatric Practice**

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for pediatric patients. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care for pediatric patients at risk for or with alterations in functional health patterns.

**Nursing****NUR 101 (5) C**  
**Nursing I: Fundamentals of Nursing**

Intro to core nursing concepts, organized around the individual as a biopsychosocial being, constantly interacting with and adapting to a changing environment. Covers principles of critical thinking, the nursing process, the role of the nurse, cultural views of health and principles of growth and development with emphasis on the aging process. Addresses images and impressions of nursing, current trends in health care delivery and legal and ethical issues in nursing. Coreq: NUR 111, 122 and MATH& 107.

**NUR 102 (3) C**  
**Nursing II: Medical-Surgical Nursing**

First of 4 medical-surgical theory courses. Develop a comprehensive understanding of homeostasis and the adaptation of clients to the complex processes of the physiologic mode. Emphasis on alterations in fluid and electrolyte balance, acid-base balance, endocrine functions, compromise in wound healing and peripheral vascular circulation. Prereq: Completion of 1st quarter with 2.5 or higher. Coreq: NUR 112, 123 & NTR 150.

**NUR 103 (4) C**  
**Nursing III: Medical Surgical Nursing**

Second of 4 medical-surgical theory courses. Develop a comprehensive understanding of homeostasis and adaptation with emphasis on alterations in neurologic, musculoskeletal, chronic respiratory and chronic cardiovascular systems. Covers key concepts of adaptation to the complex processes of movement and cognition, oxygenation and circulation. Prereq: Completion of 2nd quarter with 2.5 or higher. Coreq: NUR 113, 185 and PSYC& 200 or PSY 206.

**NUR 105 (2) N**  
**CPR and First Aid for Healthcare Providers**

Provides support for ESL and Adult Basic Education students. Covers American Red Cross (ARC) or equivalent CPR/AED for the Professional Rescuer and Healthcare Provider, with 2-year valid certification; and First Aid Certificates required to work in skilled nursing facilities, adult family homes and hospitals. Co-req: NUR 107.

**NUR 107 (8) N**  
**Nursing Assistant - Theory & Concepts**

Introduction to basic nursing care theory and concepts including HIV/AIDS education. Corequisite: NUR 109. Students without current CPR and First Aid certification will also need to enroll in NUR 105. For program information and requirements go to <https://northseattle.edu/programs/nursing-assistant-certified> Questions contact: (206) 934-4601 or email [na-certifiedinfo@seattlecolleges.edu](mailto:na-certifiedinfo@seattlecolleges.edu).

**NUR 108 (3) N**  
**Clinical Hospital Experience for NAC**

This course is for Nursing Assistants-Certified who wish to increase their hospital-based skills for employment in an acute care facility or emergency department. Successful completion of this course requires mastery of a list of skills that were developed by Acute Care Facilities. After certification or after successful completion students will be eligible to apply for employment with Acute Care Facilities if other conditions of employment are met.

**NUR 109 (4) N**  
**Nursing Assistant - Lab and Clinical Experience**

Introduction to supervised lab and clinical experience in a long-term care facility. Corequisite: NUR 107. Students without current CPR and First Aid certification will also need to enroll in NUR 105. For program information go to <https://northseattle.edu/programs/nursing-assistant-certified> Questions contact: (206) 934-4601 or email [na-certifiedinfo@seattlecolleges.edu](mailto:na-certifiedinfo@seattlecolleges.edu)

**NUR 111 (3) C**  
**Nursing Practice I**

Apply nursing concepts from NUR 101. Assess four adaptive modes in the clinical setting: physiologic-physical, self-concept-group identity, role function and interdependence. Covers basic assessment and care planning. Apply principled application of nursing skills in practice lab and clinical setting. Coreq: NUR 101, 122 & MATH& 107.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**NUR 112 (3) C**  
**Nursing Practice II**

Builds on NUR 111. Apply concepts relevant to adaptation in the basic physiological and psychosocial modes, client response and administration of medications. Assess the four adaptive modes. Gain experience in complete assessment, care planning and principled application of nursing skills in practice lab and clinical setting. Prereq: Completion of 1st quarter with 2.5 or higher. Coreq: NUR 102, 123 and NTR 150.

**NUR 113 (4) C**  
**Nursing Practice III**

Builds on NUR 112. Emphasizes integrating nursing theory, clinical data, skills in providing nursing care and developing priorities. Assess the four adaptive modes, gain experience in individualized assessment and care planning and apply nursing skills in practice lab and clinical setting. Prereq: Successful completion of 2nd quarter. Coreq: NUR 103, 185 & PSYC& 200.

**NUR 115 (2) N**  
**Introduction to Patient Care**

Intro to supervised clinical experience in a long-term care environment. Includes communication and documentation skills. Coreqs: NUR 116, 117 & 130.

**NUR 116 (6) N**  
**Nursing Fundamentals**

Provides the theoretical background for basic nursing skills, including intro to nursing process, microbiology, nutrition, medical terminology and math equivalents. Coreqs: NUR 115, 117, & 130.

**NUR 117 (2) N**  
**Nursing Fundamentals Lab**

This is an introductory course in nursing skills and procedures. The course includes demonstration of basic skills and laboratory practice. Beginning communication skills are also included. Coreqs: NUR 115, 116, & 130.

**NUR 118 (2) N**  
**Clinical Nursing Skills I**

Covers laboratory content linked to NUR 127 and 131. Intermediate level nursing practice. Prereq: 1st quarter NUR courses. Coreq: NUR 127 & 131.

**NUR 119 (1) N**  
**Clinical Nursing Skills II**

Continuation of NUR 118; theory and labs linked with NUR 128 and 141. Prereq: First two quarters NUR courses. Coreq: NUR 128 & NUR 141.

**NUR 122 (2) C**  
**Psychosocial Nursing I**

First of 2 psychosocial nursing courses. Focuses on communication pertinent to the care of clients in various health care settings throughout the lifespan. Practice therapeutic and professional communication techniques. Assess adaptation in self-concept, role function and independence of clients who are coping with acute and chronic illness. Learn group process. Coreqs: NUR 101, 111 and MATH& 107.

**NUR 123 (4) C**  
**Pharmacology for Nursing**

Intro to basic concepts of drug therapy, roles and responsibilities of nurses, and applying critical thinking and the nursing process for safe medication administration. Includes terminology, resources and regulations related to drug therapy and principles of pharmacokinetics, pharmacodynamics and pharmacotherapeutics. Major classifications of drugs include autonomic nervous system agents; parenteral fluids; electrolytes; vitamins and minerals; endocrine, neurologic, respiratory and selected cardiovascular agents; anesthetic, immune system and gastrointestinal agents. Coreqs: NUR 102, 112 & NTR 150.

**NUR 126 (3) N**  
**Role of the LPN**

Assist the student to further understand the role of the LPN and legal issues related to practical nursing. Prereq: First three quarters NUR courses. Coreq: NUR 139 & 154.

**NUR 127 (7) N**  
**Medical/Surgical Nursing - Child/Adult I**

Covers common conditions of illness throughout the life span. Prereq: All first-quarter NUR courses. Coreq: NUR 118 & 131.

**NUR 128 (6) N**  
**Medical/Surgical Nursing - Child/Adult II**

Continuation of NUR 127. Prereq: First two quarters NUR courses. Coreq: NUR 119 & 141 and permission.

**NUR 130 (2) N**  
**Critical Thinking in Nursing Practice**

Intro to critical thinking skills in nursing and the nursing process with practice applying theory and skills. coreqs: NUR 115, 116, & 117.

**NUR 131 (4) N**  
**Clinical Nursing Practice I**

Supervised hospital and nursing home practice in medical/surgical care of the child/adult and chronic and convalescent patients. Includes communication and documentation skills. Prereq: All first-quarter NUR courses. Coreq: NUR 118 & NUR 127

**NUR 133 (2) N**  
**Family Nursing Theory**

Study of the care of families, perinatal clients and their partners, infants and children. Nursing care for children will center on health promotion and wellness maintenance as well as parenting. Coreq: NUR 134.

**NUR 134 (2) N**  
**Family Nursing Clinical**

Application of practical nursing care of families, including perinatal clients and their partners, infants and children in a childbirth center and pediatric setting. Nursing care for children will center on health promotion and wellness as well as parenting. Coreq: NUR 133.

**NUR 139 (4) N**  
**Transition to LPN Practice**

Provides experience in full-shift nursing care on a work-like schedule. Expands medical/surgical nursing experience. Coreqs: NUR 126 & 154.

**NUR 141 (2) N**  
**Clinical Nursing Practice II**

Supervised hospital and nursing home practice with related ward conferences, to expand basic nursing care skills for the convalescent and chronically ill patient, medical/surgical patient, child or adult. Includes communication and documentation skills. Prereq: First two quarters NUR classes. Coreq: NUR 119 & 128.

**NUR 154 (1) N**  
**Intravenous Therapy Skills**

Intermediate course in intravenous therapy which provides theoretical background for intravenous infusion and clinical application skills using the nursing process. Prereq: First three quarters NUR courses. Coreq: NUR 126 & 139.



**NUR 155 (1-6) N****Special Topics: Adult Family Home**

This 52-hour class gives instruction on the inspection processes required for licensing, business procedures and State and Federal laws governing the operation of an Adult Family Home. All training materials are provided. Prerequisite: take the CASAS test to evaluate English and Math or submit unofficial college transcript showing successful completion of college level English and Math. For additional information go to <https://conted.northseattle.edu/afh>. Questions: email [afh.north@seattlecolleges.edu](mailto:afh.north@seattlecolleges.edu) or call (206) 934-3619.

**NUR 170 (12) S****Na-C Basic Health Care**

Covers basic health care concepts needed to provide nursing care to adults, including maintaining and monitoring patient's health status while covering the nurse's role in aspects of aging and disability. The course provides clinical experience in a long term care setting. Prereq: CASAS reading score of 235, 5/10 on basic math test, CASAS listening score of 220 (for ESL) and attend NAC orientation. CPR Cert and immunizations required.

**NUR 174 (10) S****LPN IV - Maternal Child Health Pediatric Nursing**

Learn skills, and attitudes for providing nursing care in maternal, newborn, pediatric, and infant care settings. Covers psychiatric nursing concepts and principles. Clinical experiences focus on labor, delivery, and pediatric care in inpatient and clinical facilities. Prereq: NUR 173.

**NUR 179 (2) S****LPN V Mentorship**

Introduces medical terminology which will apply to the entering LPN student. Reviews ANP, study skills, and CNA skills. Prereq: Permission.

**NUR 185 (2) C****Gerontology for Nurses**

Study adaptations of normal aging, differentiating these adaptations from disease and learn the implications for nursing care. Covers psychosocial, legal and ethical issues common in gerontological nursing practice. Prereq: Completion of 2nd quarter with a 2.5 or higher. Coreq: NUR 103, 113 and PSYC& 200.

**NUR 201 (2) C****Nursing IVA: Psychosocial Nursing II**

Second of 2 psychosocial nursing courses. Builds on NUR 122 (or NUR 106). Focuses on caring for clients with mental illness using a system with cognator and regulator subsystems to maintain adaptation in the four adaptive modes. Covers psychosocial assessment and therapeutic interventions in psychiatric disorders at three levels: integrated, compensatory and compromised. Prereq: Completion of 3rd quarter or LPN/RN Transition courses with 2.5 or higher. Coreq: NUR 211, 206, 216.

**NUR 206 (3) C****Nursing IVB: Medical-Surgical Nursing**

Third of 4 medical-surgical courses. Builds on NUR 101, 102 & 103. Develop a comprehensive understanding of homeostasis and the adaptation of clients to the complex processes of the physiologic mode. Emphasizes alterations in select integumentary and immune or protective responses and surgical therapies. Prereq: Completion of 3rd quarter or LPN/RN Transition courses with 2.5 or higher. Coreq: NUR 201, 211, 216.

**NUR 207 (4) C****Nursing V: Medical-Surgical Nursing**

Fourth of 4 medical surgical courses. Builds on NUR 101, 102, 103 & 206. Develop a comprehensive understanding of homeostasis and the adaptation of clients to the complex processes of the physiologic mode. Emphasizes acute respiratory, acute cardiovascular, gastrointestinal and renal alterations. Prereq: Completion of 4th quarter with 2.5 or higher. Coreq: NUR 217, 220.

**NUR 208 (6) C****Nursing VI: Developing Family Nursing**

Develop a comprehensive understanding of homeostasis and the adaptation of maternal, newborn and pediatric clients to the complex processes of the physiologic mode. Emphasizes learning and promoting normal family development and understanding adaptive and maladaptive physiologic and psychosocial responses to childbearing, childrearing and illness in childhood. Prereq: Completion of 5th quarter with 2.5 or higher. Coreq: NUR 218, 230.

**NUR 211 (3) C****Nursing Practice IVA**

In a psychiatric setting focus on adaptation in the basic physiological and psychosocial modes and client response. Integrates nursing theory, clinical data and skills in nursing care and developing priorities. Assess the four adaptive modes in clinical setting, gain experience in individualized assessment and care planning and apply therapeutic skills in practice lab and clinical setting. Prereq: Completion of 3rd quarter LPN/RN Transition courses with 2.5 or higher. Coreq: NUR 201, 206, 216.

**NUR 216 (3) C****Nursing Practice IVB**

Focuses on concepts relevant to adaptation in the basic physiological and psychosocial modes and client response. Emphasizes comprehensive care and the relationships of the various components of client data and health care interventions. Assess the four adaptive modes, gain experience in individualized assessment and care planning and apply nursing skills in practice lab and clinical setting. Prereq: Completion of 3rd quarter Nursing or LPN/RN Transition with 2.5 or higher. Coreq: NUR 201, 206, 211.

**NUR 217 (5) C****Nursing Practice V**

Study adaptation in the basic physiological and psychosocial modes and client response. Emphasizes analysis of client data and health care interventions, initiating nursing assessments and interventions, health promotions and education and developing leadership skills. Assess the four adaptive modes, gain experience in individualized assessment and care planning and apply nursing skills in a variety of clinical settings. Prereq: Completion of all 4th quarter with 2.5 or higher. Coreq: NUR 207 & 220.

**NUR 218 (3) C****Nursing Practice VI**

Emphasis on adaptation in the developing family. Apply concepts from NUR 208 relevant to adaptation in the basic physiological and psychosocial modes and client response. Assess the four adaptive modes in the clinical setting. Obtain experience in individualized assessment, care planning, and principled application of nursing skills in a variety of clinical settings. Coreqs: NUR 208, 230.



**NUR 220 (2) C****Health Promotions and Managing Care**

Intro to theoretical foundations of health promotion, education and wellness maintenance across the lifespan and to the leadership role in Nursing. Emphasizes planning health promotions and managing care in a variety of settings. Addresses leadership in nursing: traits, styles, problem-solving, change, team communication, conflict management, delegation, time management and the implications of health care trends. Linked to final medical-surgical rotation. Prereq: Completion of 4th quarter with a 2.5 or higher. Coreq: NUR 207 & 217.

**NUR 223 (2) N****Advanced Nursing Skills**

With NUR 225 and 231 provides laboratory practice of advanced nursing skills, to prepare for employment as an RN. Prereq: WA state LPN license.

**NUR 224 (2) N****Health Promotion and Education in Nursing**

Provides theoretical knowledge related to planning and implementing educational processes in a health care setting. Prereq: WA state LPN license. Coreq: NUR 226, 227 & 228.

**NUR 225 (6) N****Family Nursing**

With NUR 231, develops theoretical knowledge of the continuum of wellness and complex health conditions related to family nursing, to prepare for employment as an RN. Prereq: WA state LPN license. Coreq: NUR 223 & 231.

**NUR 226 (2) N****Care Management and Leadership**

Intro to theoretical foundations of leadership in nursing. Emphasizes leadership, change and motivational theories, conflict management, problem-solving and group dynamics. Includes principles of time management and delegation. Prereq: WA state LPN license. Coreq: NUR 224, 237 & 238.

**NUR 227 (7) N****Complex Medical Surgical Psychiatric Nursing**

Expands theoretical knowledge and nursing care related to various complex medical/surgical and psychiatric health conditions throughout the life span. Prereq: WA state LPN license. Coreq: NUR 228.

**NUR 228 (5) N****Complex Nurg Medical Surgical Psychiatric Clinic**

Covers supervised ambulatory, community-based, acute or long-term care practice (medical-surgical) which enhances nursing skills in order to plan and implement care for patients with acute medical/surgical illnesses and psychiatric disorders. Promotes health through the life span. Prereq: WA state LPN license. Coreq: NUR 227.

**NUR 230 (2) C****Transition to Professional Nursing Role**

Covers the transition from the role of student to Registered Nurse. Focuses on the role of the RN in health care, the community and organizations. Emphasizes professional and legal obligations, obtaining and maintaining licensure, professional organizations, continuing education and job searching. Includes preparation for the NCLEX/RN exam. Prereq: Completion of 5th quarter with a 2.5 or higher. Coreq: NUR 208 & 218.

**NUR 231 (4) N****Family Nursing Clinical**

With NUR 223 and 225, prepare for work as an RN. Clinical hours focus on family nursing, normal growth and development, and adaptation of children and families to illness. In a supervised pediatric setting, practice assessment, planning, implementing care, and gain clinical experience with childbearing. Prereq: WA state LPN license.

**NUR 237 (3) N****Advanced Medical Surgical Nursing Care**

Covers theory needed to plan and implement culturally competent care for diverse populations related to various complex conditions of illness throughout the lifespan. Study how this care may impact treatment modalities. Prereq: LPN license in Washington state. Coreq: NUR 224, NUR 226 and 238.

**NUR 238 (5) N****Transition to Registered Nursing Practice**

Provides supervised ambulatory, community-based, acute, critical, long-term care practice medical/-surgical. Develop further skills in assessment, analysis, planning, implementation and evaluation. Prereq: WA state LPN license. Coreq: NUR 224, 226 & 237.

**Nutrition****NTR 150 (5) C | N****Human Nutrition**

Intro to nutrition, with an emphasis on the relationship of nutrition to growth, development, health, physical and mental functioning. Examines sources, functions, interrelationships and human requirements of proteins, carbohydrates, fat, minerals, vitamins and water. Includes changes in energy and nutrient requirements throughout the life cycle. Prereq: Eligible for MATH 084 and ENGL& 101 (C).

**NTR 155 (5) C****Advanced Human Nutrition**

Covers contemporary topics in nutrition. Emphasis on origins of the American diet, nutrition's role in disease and behavior and the safety of the food supply. Prereq: NTR 150.

**NUTR& 101 (5) C | N | S****Nutrition**

Introduction to human nutrition with an emphasis on the relationship of nutrition to growth, development, health, and physical and mental functioning across the lifespan. Sources, functions, interrelationships, and human requirements of proteins, carbohydrates, fat, minerals, vitamins and water will be examined. Topics also include analysis of personal dietary habits, public health issues such as obesity and access to food and food security, and the role of nutrition in chronic disease.

**Oceanography****OCEA& 100 (5) C | N****Introduction to Oceanography**

Explores the basic fields of ocean science: geological, biological, chemical and physical oceanography. Investigates challenges related to the ocean such as natural disasters, climate change, whaling, and fisheries decline. Non-lab science. Eligibility for ENGL& 101 and Math 098 or Math 136, or Completion of Math 088 with a grade of 2.0 or higher.

**OCEA& 101 (5) C | N**  
**Introduction to Oceanography with Lab**

Explores the basic fields of ocean science: geological, biological, chemical and physical oceanography. Investigates challenges related to the ocean such as natural disaster potential, climate change, whaling, and fisheries decline. Lab science. Eligibility ENGL& 101 and Math 098 or Math 136 or Completion of Math 088 with a grade of 2.0 or higher.

**OCEA 299 (1-5) C**  
**Independent Study in Oceanography**

Study of selected topics in oceanography. This course is an agreement between the student(s) and a faculty adviser who will guide the student(s) through the course work. Prerequisite: Instructor's permission.

**Parent Ed****FAM 014 (1-3) S**  
**Personal Growth for Seniors**

Includes classes in self-image, writing your life story, decision-making, widowhood, interpersonal communication and similar topics.

**FAM 047, 048, 049 (1-3) S**  
**Parent Education Child Study Lab: 0-12 Months**

Classes meet on campus for parents with their infant. In small and large group discussion, parenting education seminars, individual consultation, parents gain practical knowledge and skills they utilize at home as well as with the children in class while developing a network of support.

**FAM 053, 054, 055 (1-3) S**  
**Parent Education Child Study Lab: 12-24 Months**

Classes meet on campus in a parent cooperative preschool for one year olds. In small and large group discussion, parenting education seminars, individual consultation, parents gain practical knowledge and skills they utilize at home as well as with the children in class while developing a network of support. Parents work in the classroom as assistant teachers under the guidance of the preschool teacher and parenting education instructor.

**FAM 063, 064, 065 (1-3) S**  
**Parent Education Child Study Lab: 24-36 Months**

Classes meet in local neighborhood locations in a parent cooperative preschool for two year olds. In small and large group discussion, parenting education seminars, individual consultation, parents gain practical knowledge and skills they utilize at home as well as with the children in class. Parents work in the classroom one class session per week as an assistant teacher, manage preschool business, develop a network of support and parenting instructors function as resource persons, facilitators, and early childhood educators.

**FAM 073, 074, 075 (1-3) S**  
**Parent Education Child Study Lab: 36-48 Months**

Classes meet in local neighborhood locations in a parent cooperative preschool for three year olds. In small and large group discussion, parenting education seminars, individual consultation, parents gain practical knowledge and skills they utilize at home as well as with the children in class. Parents work in the classroom one class session per week as an assistant teacher, manage preschool business, develop a network of support and parenting instructors function as resource persons, facilitators, and early childhood educators.

**FAM 083, 084, 085 (1-3) S**  
**Parent Education Child Study Lab: 48-60 Months**

Classes meet in local neighborhood locations in a pre-K parent cooperative preschool for four year olds. In small and large group discussion, parenting education seminars, individual consultation, parents gain practical knowledge and skills they utilize at home as well as with the children in class. Parents work in the classroom one class session per week as an assistant teacher, manage preschool business, develop a network of support and parenting instructors function as resource persons, facilitators, and early childhood educators.

**FAM 094, 095 (1-3) S**  
**Parent Education Child Study Lab: 24-60 Months**

Classes are for parents with multi-age children in one class.

**FAM 145, 146, 147, 148 (1-3) N**  
**Parent Education: 0-12 Months**

Students with children, birth through 12 months of age, enroll in Parent Education/Child Study Laboratory classes. Students attend the laboratory class one day a week with their child and one evening each month.

**FAM 149 (1-3) N**  
**Parent Child Study Lab II**

Students are parents of children, birth through 6 years of age, who enroll in Parent Education/Child Study Laboratory. Students participate in the laboratory and attend parent education opportunities as scheduled. The class is intended primarily for a second parent of a child in a Parent Education/Child Study Laboratory class, with the first parent enrolled in a FAM 145-146-147-148, 155-156-157-158, 165-166-167-168, 175-176-177-178, 185-186-187-188 course.

**FAM 155, 156, 157, 158 (1-3) N**  
**Parent Education: 12-24 Months**

Students with children 12-24 months of age enroll in Parent Education/Child Study Laboratory classes. Students attend the laboratory class one day a week with their child and one evening each month.

**FAM 165, 166, 167, 168 (1-3) N**  
**Parent Education: 24-36 Months**

Students with children 24-36 months of age enroll in Parent Education/Child Study Laboratory classes. Students attend the laboratory class one day a week with their child and one evening each month.

**FAM 176, 177, 178 (1-3) N**  
**Parent Education: 36-60 Months**

Students with children 36-60 months of age enroll in Parent Education/Child Study Laboratory classes. Students attend the laboratory class one day a week with their child and one evening each month.

**FAM 180 (3) N**  
**Effective Black Parenting**

Covers cognitive-behavioral principles and techniques to foster effective family communication, healthy African American identity, extended family values, child growth and development, and healthy self-esteem. Includes prevention and treatment roles in community efforts to address learning disorders, behavioral problems, and emotional disturbance.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**FAM 181 (1-6) N**  
**Star Parenting**

Online class. The STAR process (Stop, Think, Act, Review) encourages those who work with children to investigate children's temperament and development and to focus on long-range goals. Use the child's current behavior to teach skills/values the adult wants. Guide by avoiding problems, responding to cooperation, acknowledging feelings, setting limits and teaching new skills. May be repeated for credit.

**FAM 184 (1-5) N**  
**Understanding Children**

This course is designed for students with children birth through 18 years of age in their care. The course enables students to extract and adopt principles applicable to parenting, teaching, and child development. There will be a different focus of study each quarter. Tuition is \$80.00 plus a \$35 Distance Learning fee for a total of \$115.00. For questions contact: beth.goss@seattlecolleges.edu, Mara.Mulcahy@seattlecolleges.edu or Betty Williams at (206) 934-4571. This course replaces FAM 180 Special Topics for Parents of Young Children.

**FAM 186, 187, 188 (1-3) N**  
**Parent Education: 48-72 Months**

Students with children 48-72 months of age enroll in Parent Education/Child Study Laboratory classes. Students attend the laboratory class one day a week with their child and one evening each month

**FAM 189 (2) N**  
**Principles & Tools for Effective Parenting**

This course is designed for students with children 1 to 12 years of age in their care (parents, teachers, childcare workers). It introduces students to principles and tools they need to guide the children in their care. Students will apply the principles and tools to their own individual child or issue(s). A student may retake the class with a different child (or issue) in mind.

**FAM 196 (1-3) C | N**  
**Parent ED: Special Programs**

This class is for students enrolled in Parent Education/ Child Study Laboratory: Special Programs classes. The course format includes lectures, discussions, and laboratory experiences designed to explore current research as it applies to child development. Students also fulfill specific obligations of individual classes. The course enables students to extract and adopt principles applicable to parenting, teaching, and child development.

**FAM 197 (1-3) N**  
**Parent Education: Special Programs**

Students in this class may include children's teachers, as well as parents and caregivers, who enroll in the Parent Education/Child Study Laboratory. Students participate in the laboratory as able, and attend parent education opportunities as scheduled. Students are welcomed and encouraged to attend other related workshops or classes offered in Parent Education or Child Development.

**FAM 198 (1-3) N**  
**Parent Education: Special Programs**

Students in this class may include children's teachers, as well as parents and caregivers, who enroll in the Parent Education/Child Study Laboratory. Students participate in the laboratory as able, and attend parent education opportunities as scheduled. Students are welcomed and encouraged to attend other related workshops or classes offered in Parent Education or Child Development.

**FAM 199 (1-3) N**  
**Parent Education: Special Program**

This class is for students enrolled in Parent Education/ Child Study Laboratory: Special Programs classes. The course format includes lectures, discussions, and laboratory experiences designed to explore current research as applies to child development. Students also fulfill specific obligations of individual classes. The course enables students to extract and adopt principles applicable to parenting, teaching, and child development.

**Pastry & Baking Arts**

**PST 101 (5) S**  
**Pastry and Baking Orientation**

Learn trade terminology, scaling and measuring procedures, mixing methods, identification and proper use of hand tools and mechanized baking equipment, plus safety procedures and sanitation. Covers portion control, baking math and ingredient functions in baking. Prereq: Enrollment in program or permission.

**PST 102 (5) S**  
**Introduction to Baking Management**

Learn bakery and pastry production management, including procedures and organizational tools for day to day operations of a bakery or pastry shop. Study standardized formulas, cost control, AP and EP menu mix, purchasing, receiving, storeroom organization, formula cost analysis, safety and sanitation, trade terminology, professional and ethical behavior and attitude. Prereq: PST 101 or permission.

**PST 103 (4) S**  
**Decoration Theory 1**

Covers theory and practical applications of decorative confectionary mediums. Learn techniques, ingredients and tools used in centerpiece, show piece and confectionary display production, including performance test and showpiece requirements. Includes rye dough, Royal icing flow, marzipan, macaronade, rose paste, and chocolate tempering. Prereq: PST 102 or permission.

**PST 104 (4) S**  
**Decoration Theory 2**

Covers theory and practical applications of decorative confectionary mediums. Learn techniques, ingredients and tools used in centerpiece, show piece and confectionary display production, including performance test and showpiece requirements. Covers pastillage, gum paste, rolled fondant, modeling chocolate, rock sugar, and poured sugar. Prereq: PST 102 or permission.

**PST 105 (4) S**  
**Decoration Theory 3**

Covers theory and practical applications of decorative confectionary mediums. Learn techniques, ingredients and tools used in centerpiece, show piece and confectionary display production, including performance test and showpiece requirements. Covers pulled sugar, flower piping, rice paper flowers, salt dough, and nougatine. Prereq: PST 102 or permission.

**PST 111 (15) S**  
**Baking 1**

Covers production of cookies, cakes, and quick breads. Learn terms, ingredients and their functions, and techniques of basic baking. Prepare assorted doughs and batters using classic and modern mixing methods. Includes assessment of doughs and batters, product finishes, safety and sanitation procedures. Prereq: PST 101 or permission.

**PST 112 (15) S**  
**Pastry 1**

Covers French pastry and beginning decorating and finishing. Make primary doughs and bases using classical techniques: Pate Feuilleté, pâte à choux, pâte sucrée and assorted pie doughs. Includes elementary assembling and finishing for cakes and tarts, pastry ingredients and their functions, baking methods, assessment of doughs and batters, sponges, safety and sanitation. Prereq: PST 111, FSD 100 and HOS 203 with 2.0 or better or permission.

**PST 113 (15) S**  
**Baking 2**

Covers beginning and intermediate bread baking, terms and techniques of bread production including proper mixing, fermentation, shaping, proofing, baking and finishing. Prepare laminated and rich yeasted doughs (Viennoiserie). Deepen learning about bread ingredients and their functions, baking methods, lamination procedures, assessment, safety and sanitation. Prereq: PST 112 or permission.

**PST 197 (1-5) S**  
**Internship in Pastry and Baking Arts**

Individual internship in Pastry and/or Baking Arts industries. Prereq: permission.

**PST 211 (15) S**  
**Pastry 2**

French pastry and plated desserts. Make more complex pastry doughs and bases using classical techniques. Includes dessert ingredients and their functions, advanced product finishes and decorations, plated dessert design and production. Study dessert sauces and garnishes, flavor profiles and combinations, banquet desserts, safety and sanitation. Prereq: PST 113 or permission.

**PST 212 (15) S**  
**Pastry 3**

Covers terms and techniques of chocolate work, seasonal baking and show pieces, including tempering, candy cooking, enrobing, piping and product finishes. Also covers use of local, sustainable, natural and organic dairy and seasonal produce in baked and dessert products. Learn storage and care, stock rotation, safety and sanitation. Produce a decorative display piece. Prereq: PST 211 or permission.

**PST 213 (15) S**  
**Pastry 4**

Covers terms and techniques of advanced pastry decoration by making complicated desserts and highly decorated cakes, including advanced mousses, Bavarians and meringues. Learn practical management skills through student lead experiences: delegation, leadership, time management, conflict resolution, customer relations, inventory control, product receiving and rotation, safety and sanitation. Prereqs: PST 102 and 212 or permission.

**PST 299 (1-15) S**  
**Special Topics in Pastry and Baking**

Special topics on an individual or group basis related to Pastry and Baking Arts industries.

**Pharmacy Technician (AHI)****PHA 112 (2) N**  
**Pharmacy Law**

This course is designed to introduce students to federal and state laws governing the practice of pharmacy. Special emphasis is given to areas of state law regulating activities of pharmacy technicians. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 115 (3) N**  
**Orientation to Pharmacy Practice**

This course will review the contributions made by nations of the world to the practice of pharmacy past and present. Course will review the role of professional pharmacy organizations, past and present, to improving the practice of pharmacy and the role of pharmacy personnel. Students will also learn about new drug development, drug distribution, and the role of the pharmacy technician in drug procurement. Course material will cover the types of sites which currently employ pharmacy technicians including an analysis of the role of pharmacy technicians in these various job settings. Current trends which may effect the future direction for pharmacy technicians will also be discussed. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 116 (1) N**  
**HIV/AIDS and Hipaarmacy Practice**

Intro to the basic concepts of HIV/AIDS including the treatment and prevention guidelines for patient care and a review of the HIPAA federal law as it pertains to the pharmacy technician.

**PHA 120 (3) N**  
**Pharmacy Calculations**

Covers mathematics review with an introduction to calculations encountered in pharmacy practice. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 130 (2) N**  
**Over the Counter Drugs**

In this course students will learn common disorders in which consumers seek advice about self-treatment. This course reviews the use of non-prescription drugs for these selected disorders. Students also learn questions to ask consumers which will help the pharmacist determine whether self-treatment is indicated or additional medical care should be sought. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 140 (3) N**  
**Sterile Products and Aseptic Technique I**

Introduction to sterile products and aseptic techniques in hospital settings. The devices and manipulation techniques necessary to maintain sterility and mechanics of a hospital pharmacy are discussed and practiced in laboratory exercises. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 141 (3) N**  
**Sterile Products and Aseptic Technique II**

Continuation of PHA 140. Focus on the preparation of cardiac and other titratable drips, IV antibiotics, chemotherapy, IVPs and TPNs. Intro to hospital application software. Includes lab. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 145 (1) N**  
**Pharmacy Ethics**

Focuses on commonly encountered ethical dilemmas from pharmacy practice. Introduces ethical decision-making models and problem-solving solutions.



**PHA 146 (2) N**  
**Communications in Pharmacy Practice**

This course will examine communication processes to see how they are influenced by the values, behaviors and beliefs that are defined by culture. It will also explore communication within the pharmacy setting incorporating law.

**PHA 150 (3) N**  
**Pharmacology I**

This course will review the principals of drug action including introduction to pharmacokinetics and pharmacodynamics. Students will also study the anatomy and physiology of the nervous system and discuss drugs used in the treatment of disorders of the nervous system. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 151 (2) N**  
**Pharmacology II**

This course is a continuation of PHA 150. Students will briefly study the anatomy and physiology of the cardiovascular system, gastrointestinal system, endocrine system, respiratory system. Emphasis will be placed on treatment of diseases of cardiovascular, gastrointestinal, and respiratory systems. Students will also discuss treatment of bacterial and viral infections. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 160 (3) N**  
**Pharmacy Technology I**

This course will review the history of computers in pharmacy, current practice applications, and future trends. Legal and ethical issues surrounding information collection and retrieval will also be addressed. The laboratory component of this course is designed to provide students with the skills and knowledge needed to process prescriptions using pharmacy software. Students will gain proficiency in the use of ambulatory care prescription processing software. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 161 (3) N**  
**Pharmacy Technology II**

This course is designed to introduce students to the TOP 200 drugs. Skills gained in PHA 160 will be integrated into this course. Students will use pharmacy software to process real prescriptions in the pharmacy lab. Computerized insurance billing and report generation will be explored. Students will be introduced to hospital and nursing home application software. Registration is limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 170 (5) N**  
**Pharmacy Records Management**

This course is designed to provide skills required to practice effectively in an ambulatory care practice setting. Students learn to interpret prescription contents, top 100 drugs, inventory control procedures, tasks associated with procurement of pharmaceuticals, to complete and file records for third party reimbursement and requirements for completing and filing prescription records. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 180 (2) N**  
**Healthcare Systems, Insurance and Billing**

Introduction to healthcare systems, pharmacy billing, and the contractual relationships between pharmacies, manufacturers, and wholesalers. Course covers basics of US healthcare, insurance overview, and current billing practices. Course will include workshops for practical skill development, such as billing insurance, problem-solving adjudication issues, prior authorization submissions and allocating resources for affordable patient medication costs.

**PHA 185 (3) N**  
**Pharmacy Law and Ethics**

Pharmacy Law and Ethics covers the federal and state laws governing pharmacy practice and the commonly encountered ethical dilemmas in the field of pharmacy. Introduces ethical decision making models and practical problem solving solutions that are utilized in the pharmacy.

**PHA 190 (1-13) N**  
**Pharmacy Technician Externship**

The pharmacy technician practicum is designed to enable students to obtain hands on experience in a pharmacy setting. Students are introduced to all aspects of the pharmacy technicians job at the site in which they have been placed. Students will be placed in at least two different settings (an inpatient setting and an ambulatory care setting). Inpatient settings include: nursing home, inpatient hospital, and home infusion. Ambulatory care settings include: chain pharmacy, independent pharmacy, and outpatient hospital/clinic pharmacy. Registration is limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 191 (1) N**  
**Job Skills and National Exam Preparation**

This course will cover job hunting skills, resume, and cover letter writing techniques and the interview process. In addition, it will provide the necessary information for the students to complete the national exam.

**Pharmacy Technician  
Apprenticeship Program****PTAP 115 (1) N****Orientation to Pharmacy Practice Ptap**

Introduction to pharmacy technician as a career. Includes topics such as the history of pharmacy, pharmacy information resources and drug distribution control.

**PTAP 117 (2) N****Medical Terminology Part I Ptap**

This course covers the terminology surrounding anatomy, physiology, pathology, tests, and treatments, organized by body systems. The student will learn basic medical word structure and language. An overview of the body including cavities and regions, anatomical planes and directional terms, divisions of the spine, and individual body systems.

**PTAP 120 (2) N****Pharmacy Calculations Part I Ptap**

Introduction to pharmacy practice-related mathematical calculations. Covers calculations related to prescription interpretation, reading drug labels, compounded orders and percentage based calculations.

**PTAP 130 (1) N****Otc Drugs Ptap**

This course covers the use of self treatment non-prescription drugs for the most common symptoms presented at the pharmacy. Also introduces the basic questions to ask consumers which will help the pharmacist determine whether self-treatment is indicated or additional medical care is indicated.

**PTAP 160 (1) N****Pharmacy Technology I Ptap**

This course covers the use of computers in pharmacy, current practice applications, and future trends. Legal and ethical issues surrounding information collection and retrieval along with good practices will also be addressed.

**PTAP 170 (2) N****Pharmacy Records Management Ptap**

General overview of skills required to work in a retail pharmacy (ambulatory care). Introduces the skills to interpret prescriptions, such as Latin abbreviations, the top 100 drugs, apothecary symbols, inventory control and record keeping.



**PTAP 185 (2) N**  
**Pharmacy Law and Ethics Ptap**

Pharmacy Law and Ethics covers the federal and state laws governing pharmacy practice and the commonly encountered ethical dilemmas in the field of pharmacy. Introduces ethical standards and practical problem-solving solutions that are utilized in the pharmacy.

**Philosophy****PHIL& 101 (5) C | N | S**  
**Introduction to Philosophy**

Introduction to philosophical thought and issues, intellectual systems, and the writings of various philosophers. Covers the nature of philosophy, the meaning of knowledge, values, reality, and related subjects.

**PHIL 102 (5) C | N**  
**Contemporary Moral Problems**

Covers philosophical consideration of some of the major moral problems of modern society and civilization, such as discrimination, abortion, euthanasia, animal rights, world hunger and homelessness. Examines the issue of what means are justified in trying to bring about social change.

**PHIL 110 (5) N | S**  
**Introduction to Social Ethics**

Includes philosophical analysis of current or perennial issues in public affairs, such as the nature and scope of freedom in society, the justification of democratic government and the nature of social justice.

**PHIL 111 (5) N**  
**Introduction to Bioethics**

Covers ethical questions surrounding clinical medical practice, public health, and biomedical research. Of interest to those considering health care professions, and those interested in the issues of health and human rights. Focus will be newly emerging diseases (cancers, asthma, environmental illnesses, etc.) Transfer class.

**PHIL 118 (5) S**  
**Practical Reasoning and Decision Making**

Emphasizes a non-symbolic approach to logic and critical thinking. Emphasis on analyzing and evaluating real life examples of reasoning.

**PHIL& 120 (5) C | N | S**  
**Symbolic Logic**

Symbolic logic provides a tool for analyzing and evaluating statements and deductive arguments. This introductory course focuses on both sentence and quantificational logic. The meaning of language and its place in the reasoning process is discussed and analyzed. Prereq: MATH 098 with 2.0 or higher.

**PHIL 131 (1) C | N | S**  
**Ethics and Policy in Healthcare I**

Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people. Introduces ethical and legal principles governing healthcare with a focus on nursing practice including historic milestones in nursing.

**PHIL 132 (2) C | N | S**  
**Ethics and Policy in Healthcare II**

The Ethics and Policy in Healthcare series explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people. This second course in the three-course series presents organizational structures, legal considerations, policies, procedures, and ethical principles/theories related to healthcare.

**PHIL 160 (5) C**  
**Philosophy of Science**

Covers the historical development of selected concepts from science and the philosophy of science.

**PHIL 210 (5) C**  
**Comparative Religion**

This course introduces the academic study of religion by using a comparative approach to a variety of religious traditions. We'll ask, What is religion? We also will explore the ethical, metaphysical, and other philosophical stances found within and between various religions by examining their beliefs, rituals, texts, and practices. Prereq: ENGL& 101 eligibility.

**PHIL 215 (5) C**  
**Introduction to Ethics**

Deals with questions: What am I to do? - and Why?; What am I to be?; and How can I be what I choose to be? Examines ethical principles of Aristotle, Mill, Aquinas, Kant, existentialism and situation ethics. Includes current problems in medical ethics. Explores ideas of duty, justice, responsibility, virtue and human excellence.

**PHIL 220 (5) N**  
**Environment and Human Rights**

This course addresses ethics and human rights standards in general as well as the relevance of these norms and instruments for environmental concerns. It examines ways in which ethical principles and international human rights norms apply to specific environmental and sustainability issues. Addresses applicable norms and principles as well as practical measures human rights organizations have taken to effect change. Transfer class.

**PHIL 230 (2) C**  
**Ethics and Policy in Healthcare III**

The Ethics and Policy in Healthcare series explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people. This third course in the three-course series presents research, leadership, workplace issues, and ethical dilemmas in healthcare with an emphasis on nursing.

**PHIL 255 (5) C**  
**Marxist Philosophy Examined**

Examines Marxist philosophy: What is the nature of capitalism? What is exploitation? What are some Marxist criticisms of capitalism? Does Marxism clarify or distort the phenomenon of racism? What reasons, if any, Photography

**PHO 110 (4) C**  
**Survey of Photography**

Explores the varied career paths found in professional photography. Emphasis is placed on the creative styles and trends in image making, from the first Daguerreotypes to the HD SLR storytellers of today. Entry-level issues such as working conditions, time management, organizational strategies and professional ethics will also be examined. Prereq: Permission.

**PHO 111 (4) C**  
**Digital Capture Techniques**

Addresses the terminology and ethics of capturing digital images. Covers the functions and operation of HD SLR cameras. Introduces techniques for determining optimum exposures and basic compositional aesthetics. Includes development of an organized file management system utilizing Adobe Lightroom and parametric editing in Capture One. Prereq: Permission.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**PHO 120 (4) C**  
**Conceptual Development**

Introduces visual conceptualization skills required in commercial photography. Includes attention to techniques and processes that support creative and aesthetic development. Explores approaches to critique and the art market. Fosters creativity and aesthetic development. Prereq: Successful completion of first quarter commercial photography program courses with a minimum grade of 2.0 in each course.

**PHO 121 (4) C**  
**Digital Imaging I**

Covers the creative and technical requirements of digital image optimization using Adobe Photoshop Creative Cloud. Includes interface navigation, tools, layers and filters, creation and manipulation of image selections, adjustments of color and contrast, use of retouching, masking, cropping, and basic image compositing, and the export of images for print and web. Prereq: Successful completion of first quarter commercial photography program courses with a minimum grade of 2.0 in each course.

**PHO 122 (4) C**  
**Lighting Techniques II**

Covers studio techniques for lighting people. Addresses safe operation of studio equipment for portrait lighting setups. Introduces three-dimensional contrast in a traditional portrait studio setting. Includes subject rapport, subject posing and development of a theme-based narrative using advanced lighting techniques while demonstrating set construction skills. Prereq: Successful completion of first quarter commercial photography program courses with a minimum grade of 2.0 in each course.

**PHO 123 (4) C**  
**Video Production I**

Introduces basic video capture techniques including HDSLR camera operation. Includes an overview of Adobe Premiere's interface, tools, features, and a basic production workflow. Covers working in production teams, environmental aesthetics, establishing a point of view, capturing the decisive moments in short clips, and assembling final video in the editing process. Prereq: Successful completion of first quarter commercial photography program courses with a minimum grade of 2.0 in each course.

**PHO 130 (4) C**  
**Studio Techniques I**

Introduces e-retail/catalog photography. Covers the production of imagery that conforms to a client's requirements for designed layouts in print or online. Includes defining and solving image production issues for a catalog, lookbook, or website. Prereq: Permission.

**PHO 131 (4) C**  
**Digital Imaging II**

Introduces advanced image editing techniques and production workflows in Adobe Photoshop. Focuses on precise color correction, refined selections, and multiple image compositing. Includes advanced retouching and image output and evaluation. Requires creation of a cohesive final project of professional quality utilizing these advanced image editing tools and techniques. Prereq: Permission.

**PHO 132 (4) C**  
**Location Techniques**

Explores the logistical planning and technical skills required to shoot on location. Focuses on the strategies required for constructing and shooting small to large sets on location. Includes application of skill sets required of the location photographer, assistant, and location scout. Integrates technical and creative problem solving. Prereq: Permission.

**PHO 133 (4) C**  
**Video Production II**

Covers advanced on-location video techniques and advanced editing video techniques. Includes location techniques of setup and breakdown, procurement of permits, and location lighting. Also covers advanced post-production techniques. Requires participation as producers, directors, talent, and crew. Includes web ads, lookbooks, or music video productions. Prerequisite: Permission.

**PHO 197 (1-5) C**  
**Work Experience-Photography**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply photography knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**PHO 214 (4) C**  
**Catalogue Production**

Create professional quality images for a multiple-page catalog layout, by producing a mini-catalog using traditional and digital photographic techniques. Explore personal photographic style. Collaborate on advertising assignments.

**PHO 215 (4) C**  
**Advertising Production**

Working with a local, community-based non-profit organization, develop and produce an advertising campaign. Learn all aspects of advertising production, including business components such as negotiating fees and expenses. Present completed campaigns to a panel of industry professionals.

**PHO 224 (4) C**  
**Communication Production**

Intro to shooting motion/video with a DSLR camera. Research, plan, direct and produce a completed video project. Learn techniques for writing treatments, scripts and storyboards. Covers video shooting techniques and use of video production equipment.

**PHO 225 (3) C**  
**Conceptual Development**

Intro to visual conceptualization skills, elements and principles of 2-D design. Study techniques and processes that support creativity and aesthetic development. Explore the critique process. Focus on developing individual creativity and photographic style.

**PHO 234 (3) C**  
**Professional Business Practices I**

Intro to small business development and management for the professional photographer. Learn to write a business plan for commercial or retail markets. Covers retirement planning, insurance, taxes, copywriting, budgeting, accounting, estimating, pricing and negotiating. Follow an assignment from first phone call to invoice. Acquire business licenses and join professional organization(s).

**PHO 235 (3) C****Professional Business Practices II**

Focuses on marketing practices. Write and implement a marketing plan, create self-promotion materials for mail, web, social media and in-person presentations. Present final marketing plan to industry professionals for critique.

**PHO 244 (3) C****Visual Narrative**

Learn to use industry standard video editing software for post-production, non-linear editing of digital video. Covers basic digital video and audio editing workflows. Learn to support a narrative by incorporating continuity and logical sequencing of both video and audio clips.

**PHO 245 (3) C****New Media**

Broaden understanding of image editing techniques including advanced retouching, layering, masking and color adjustments for basic web design. Learn to use templates to build sites. Create and publish online a basic website using image editing and design software.

**PHO 254 (4) C****Portfolio I**

Intro to the processes of creating a professional-level portfolio as a marketing and job search tool. Includes various presentation methods, including electronic portfolios. Create marketing materials: business card, stationery and self-promotion pieces.

**PHO 255 (4) C****Portfolio II**

Continuation of PHO 254. Produce portfolio-quality images and computer-generated portfolio pages. Investigate traditional and electronic alternatives for portfolios. Create a résumé and an information page for a website. Meet with industry professionals to discuss tools needed after graduation.

**PHO 256 (4) C****Portfolio III**

Assemble a final portfolio of images that represents the student's creative voice and professional direction, for presentation to multiple clients, representatives and agencies. Continue learning about production stages of multiple, complex location shoots.

**PHO 266 (3) C****New Media Workshop**

Edit, sequence and prepare images for the website project from previous quarter. Finalize the website and all promotional materials. Complete a printed portfolio. Create a shot list and shot plan for the week-long Pt. Townsend Portfolio Shoot-out.

**PHO 276 (3) C****Portfolio Workshop**

Prepare materials for the annual Portfolio Show. Design individual show stations and work with committees to plan the two-day event. Work with faculty to edit and select images. Meet with industry professionals in one-on-one interviews and portfolio reviews.

**PHO 286 (3) C****Special Projects**

Focus on career entry and development by studying various projects such as employment strategies, technological innovations and global marketplace opportunities. Seek critical feedback on portfolios from professionals and develop professional relationships.

**Physical Education****PEC 050 (5) S****Career Link Physical Education**

Introductory fitness class designed to increase students' awareness of the importance of fitness. We plan to empower students to have the knowledge to design their own fitness programs and understanding of health based topics. Includes a variety of physical activities and exercise that may be adapted to your personal fitness performance. For all fitness levels.

**PEC 090 (5) S****Physical Education**

Physical Education students will be involved in a variety of activities, designed to improve physical fitness, coordination and sport specific skills. Students may also develop content knowledge pertaining to nutrition, dieting, mental health, the development of fitness plans, and the ability to link the importance of physical activity with life-long endeavors. This course is designed for students to earn high school credit.

**PEC 104 (2) C | N****Beginning Martial Arts**

Learn the practical self-defense techniques and philosophies of Goju Ryu Karate-do including fundamentals of stances, blocks, strikes, kicks, movement and offensive and defensive strategies.

**PEC 105 (2) C | N****Intermediate Martial Arts**

For individuals at intermediate skill level. Adjust to the type of self-discipline and interaction required in the Goju Ryu Karate. Prereq: PEC 104, or formal rank up to and including green belt.

**PEC 106 (2) C | N****Advanced Martial Arts**

For advanced skill levels. Foster self-improvement and appreciation of Karate as an art, sport, physical conditioning and self-defense tool. Prereq: Intermediate skills, successful completion of PEC 105 or formal rank of brown belt or higher.

**PEC 110 (2) S****Cardio-Fitness**

Improve cardio respiratory fitness through rhythmic, dynamic, large-muscle exercise performed to music. Includes information relevant to current fitness-related issues, trends and topics.

**PEC 113 (2) C****Beginning Badminton**

Intro to basic skills of badminton: clears, serves and drives. Covers rules of play and basic singles and doubles strategies. Opportunity for game play and tournament play.

**PEC 130 (2) C****Beginning Basketball**

Covers basic individual skills of dribbling, passing and shooting, team skills and strategies. Includes in-class drills, modified game play, structured scrimmage and tournament play.

**PEC 131 (2) C | N****Beginning Weight Training**

Beginning Weight Training develops muscular fitness through resistance training, using free weights and weight machines. Workouts consist of individualized programs developed to align with student goals and established weight training principles. In-time instructional feedback and assistance is provided to correct form and technique, and to answer student questions. Related information may include muscle anatomy & physiology, training tactics and supplementation, fitness trends & myths.

**PEC 132 (2) N****Intermediate Weight Training**

Designed for students with previous weight training experience and knowledge, Intermediate Weight Training develops muscular fitness through resistance training, using free weights and weight machines. Workouts consist of individualized and instructor-driven programs that align with student goals, proper technique, and weight training principles. Intermediate skills & workout designs are presented, advanced exercise assistance is provided, and nutrition & fitness information are included.

**PEC 135 (2) N****Circuit Training**

Circuit Training incorporates a variety of activities in each session to target cardio stamina, and muscular strength & endurance development. In class, exercises working all the major muscle groups will be assigned at separate stations. At a given station, the student will perform a specific activity for a specific time period, and then rotate to subsequent stations, where different activities and challenges will be completed. Fundamental fitness and nutrition information will be included.

**PEC 136 (2) C | N | S****Yoga**

This course covers Yoga postures, breathing and meditation practices for physical and mental health. The history, philosophy, benefits and holistic nature of Yoga will be explored as well as the development of a personal practice. All fitness levels are welcome, and all poses can be modified to accommodate physical limitations.

**PEC 137 (2) C****Yoga II**

Builds on PEC 136 with stronger asana/postures and further discussion of Yoga principles and philosophy. Prereq: PEC 136 or permission.

**PEC 139 (2) N****Yoga Pilates**

Yoga poses and Pilates matwork exercises are integrated into an exercise training program to improve posture, strength, flexibility, coordination, and balance. Breathing and relaxation practice are added to connect body-centered activity with mind-centered activity. Other topics of interest include movement mechanics, fundamental yoga and Pilates principles, nutrition, and other fitness-and health-related themes.

**PEC 143 (2) S****Walking for Fitness**

Develops cardio-respiratory fitness through progressive workouts including warm-ups, walking sessions and cool-downs. Covers safety, walking technique and issues and trends related to walking and physical fitness.

**PEC 145 (2) S****Jogging**

Develop cardio-respiratory fitness through progressive workouts including warm-ups, walking sessions and cool-downs. Covers safety, jogging technique and issues and trends in jogging and physical fitness.

**PEC 150 (1-3) C | N | S****Beginning Physical Fitness**

Beginning Physical Fitness includes instruction in developing, executing, and maintaining individualized fitness programs that highlight cardiorespiratory endurance, muscular strength & endurance, and flexibility. Students learn to use cardio & weight machines, free weights, and other equipment, as well as participate in a variety of activities, to help meet personal goals. Information about anatomy & physiology, nutrition, injury prevention, and fitness trends are also included.

**PEC 151 (1-3) N | S****Intermediate Physical Fitness**

For students with previous fitness training experience, Intermediate Physical Fitness develops cardiorespiratory endurance through walking, jogging or aerobic machines, and muscular fitness via free weights, weight machines, and stretching activities. Individualized and instructor-driven workouts align with student goals, best practices, and established training principles. Intermediate level skills and workout designs are presented, and supplemental fitness information is provided.

**PEC 155 (3) N****First Aid and Personal Safety**

American Heart Association Heartsaver First Aid CPR AED certification (adult, child, infant). Basic Life Support (BLS) for Healthcare Providers certification is available as an option. Provides instruction in advanced rescue skills including two-person CPR, pocket mask, and bag-valve-mask.

**PEC 165 (2) C | N****Body Conditioning**

Body Conditioning uses hand-held weights, resistance bands, kettlebells, and/or similar equipment to improve muscular strength, muscular endurance, and flexibility in all of the body's major muscle groups. A variety of exercises and activities are practiced, and particular attention is given to proper technique, safety, and fitness progression. Wellness-related information, such as nutrition, proper hydration, and fitness trends are also included.

**PEC 170 (2) N****Introduction to Jazz Dance**

Covers fundamentals of dance technique while improving strength, flexibility and anaerobic capacity. Builds postural awareness and develops motor skills through jazz style, which borrows from ballet and contemporary street dance. Includes safety, injury prevention, spinal health and nutrition.

**PEC 171 (2) N****Introduction to Dance**

Introduction to Dance teaches the fundamentals of dance technique while increasing levels of strength, flexibility and anaerobic capacity. A brief history of each style and how it has evolved, as well as vocabulary synonymous with dance will also be introduced. Topics include ballet, modern, and hip-hop styles of dance along with basic composition of dance. The class will be taught in four sections; a brief lecture, dance technique and warm-up, traveling motor skills, and a movement combination.

**PEC 172 (2) C****Intro to Salsa and Latin Dance**

Students learn dance posture, rhythm, and the techniques of leading and following for four styles of dance from Latin America, including Salsa. The class includes an introduction to Latin music theory and emphasizes the rich history and culture that surrounds these dances. No partner necessary.

**PEC 173 (2) C****Intro to Swing Dancing Andlindy Hop**

Students learn dance posture, rhythm, and the techniques of leading and following for four styles of dance from the United States, including East Coast Swing, Lindy Hop, Charleston, and Shim Sham jazz steps. This class includes an introduction to Jazz music and emphasizes the rich history and culture that surrounds these dances. No partner necessary.



**PEC 175 (2) N**  
**Ballet Basics**

Covers fundamentals of ballet style. Stresses proper technique and body mechanics to avoid dance-related injury. Emphasis on flexibility and strength, focusing on basic movements (plie, tendu, developpe and battement), joint stability and range of motion. Includes kinesthetic memory, basic nutrition, rest and the application of ballet to other dance and movement styles.

**PEC 177 (1-2) N**  
**Introduction to Ballroom Dance**

An introduction to the most popular social dances, such as Rumba, Waltz, Swing, Cha Cha, FoX Trot, Tango, and Salsa. Lead and Follow principles, partnering technique, footwork, basic patterns, spins and turns, and traditional dance etiquette will be presented and practiced. Transfer Course.

**PEC 179 (2) N**  
**Dance Fusion**

Learn various dance genre (hip hop, contemporary, modern, classical, ballroom, and Latin) basics in a fast-paced, cardio dance environment with choreography performed to contemporary, hip-hop, Latin and pop music. Students should plan to sweat, burn calories, learn more about cardiovascular training and aerobic exercise, as well as meet others with similar fitness goals.

**PEC 181 (3) C**  
**Wellness Management**

Covers the fundamentals of a complete wellness program. Principles of fitness, healthy eating, stress management, goal setting, positive lifestyle choices, and application of these components. Includes physical activity, self-monitoring, on-line and in-person lecture, and group interaction. Class requires participation online and in-person, on-campus.

**PEC 182 (2) N**  
**Fusion Fitness**

This class incorporates a three-component conditioning plan to challenge and improve aerobic stamina, muscular strength and endurance, power, and flexibility. The three components include: Turbo (kickboxing, running, interval training, stair climbing, and similar aerobic activities.), Pump (body weight training, sculpting, core training, circuits, and similar muscular training activities), and Power (boot camp, Tabata, burpees, mountain climbers, and similar power activities). Transfer class.

**PEC 183 (2) C**  
**Mindfulness for Success in School, Work & Beyond**

An introduction to Mindfulness training. Covers scientific research as it relates to measurable changes in the brain and the rest of the body. Emphasizes the impact of Mindfulness training on studying, job success, and positive personal life management. Group Mindfulness experiences in class and assigned online.

**PEC 185 (1-2) N**  
**Cardio Plus**

Designed to increase the heart rate through a variety of cardio activities that students can modify to below or high impact. These activities may include but not be limited to circuit training, interval training, walking/jogging workouts, stair climbing, kickboxing choreography, and step training. The Plus is some added strength training to improve muscular fitness.

**PEC 199 (2) N**  
**Independent Fitness**

Basic instruction in developing and maintaining an individualized fitness program. Includes equipment usage and safety, and how fitness-related activity affects the body. Students are required to meet the first two weeks, for one week at mid-term, and one week at end of term, as scheduled. Students will complete lab participation at the NSC Wellness Center during its drop-in hours. Appropriate attire and shoes are required at all sessions. Participation at all scheduled meetings is required.

**PEC 298 (1-5) C | N**  
**Special Topics**

Seminar on selected topics and/or activities in physical education. Prereq: Variable, depends on topic.

**PEC 299 (1-5) N | S**  
**Independent Study**

Independent study of approved topics in physical education. Prereq: Permission.

**Physics****PHYS& 100 (5) C**  
**Physics for Non-Science Majors**

Basic laws of physics, such as motion, sound, gravitation, energy, heat and temperature, electricity and magnetism, light, relativity, quantum theory, and nuclear physics. For non-majors. Non-lab course.

**PHYS& 114 (5) C | N | S**  
**General Physics I with Lab**

First of three algebra-based courses covering the field of physics. Includes kinematics, vectors, forces, dynamics, work, energy, momentum, torque and gravitation. Lab included.

**PHYS& 115 (5) C | N | S**  
**General Physics II with Lab**

Continuation of PHYS& 114. Includes fluids, heat, gas laws, electricity, magnetism and electrical circuits. Lab included.

**PHYS& 116 (5) C | N | S**  
**General Physics III with Lab**

Continuation of series. Covers mechanical oscillations, sound, optics, atomic and nuclear physics. Lab included.

**PHYS& 221 (5) C | N | S**  
**Engineering Physics I**

Development of the basic principles of classical mechanics—kinematics, Newton's laws and the conservation laws using calculus. Lab included.

**PHYS& 222 (5) C | N | S**  
**Engineering Physics II**

Covers Maxwell's classical laws of electricity and magnetism which developed from the study of the Laws of Coulomb, Ampere, Gauss and Faraday. Lab included.

**PHYS& 223 (5) C | N | S**  
**Engineering Physics III**

Introduction to waves and oscillations and the study of sound, geometric and physical optics. Covers the dualistic particle-wave nature of microscopic phenomena as an intro to modern physics. Lab included.

**PHYS 298 (1-5) C**  
**Special Topics**

Independent work in physics laboratory and/or library. Prereq: Permission.

**PHYS 299 (1-5) C | S**  
**Independent Study**

Independent study of physics problems or topics. Prereq: Permission.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**Political Science**

**POLS 090 (5) S**

**Contemporary World Problems**

This Contemporary World Problems course is designed to provide a study of the critical issues and areas in the world, specifically the United States, throughout the 1900's to today. The study of the current world starts in the past, so a large emphasis is placed on historical background and perspective is developed in each area studied. Students will be asked to learn world geography and have a basic understanding of the main world religions and forms of government.

**POLS& 101 (5) C | N**

**Introduction to Political Science**

Explores the origin and development of the study of political science. Examines the origins of government systems, political theory, comparative systems, political socialization, public administration, political parties and elections, technology, political economy, globalization, and international relations. Foundation course for political science studies.

**POLS 105 (5) C**

**the War On Drug: Addiction & Mass Incarceration**

An in-depth examination of the history and future of the drug war, and its role in inequality and mass incarceration. The course begins by studying substance use in the 1800s, alcohol prohibition, drug prohibition, and the ongoing criminalization of addiction, including the War on Drugs launched by the Nixon Administration. The course analyzes political policies through a lens of racial, political, and economic factors.

**POLS 111 (5) C**

**The American Presidency**

Explores the evolution of the American presidency. Includes the presidents' personalities, character, leadership and public relations. Examines presidential campaigns and the roles of the president as Chief Diplomat, Chief Executive, Chief of State, Commander-In-Chief and Chief Bureaucrat.

**POLS 112 (5) C**

**Contemporary World**

Intro to the nation-state system, elements of power and major problems facing nation-states today including demographics, hunger and disease, nuclear proliferation, energy, nationalism and North-South/East-West relations. May be taken for international studies credit as ISP 112.

**POLS 170 (5) C**

**Minority Politics in America**

Focuses on socio-political developments leading to current status of minorities in America. Surveys U.S. legislative history and citizenship. Covers critical review of proposed solutions to minority tensions.

**POLS& 201 (5) S**

**Introduction to Political Theory**

Examines the philosophical foundations of politics and power. Utilizes texts in political philosophy/theory to introduce concepts including justice, citizenship, legitimate authority, power, liberty, rights, and equality.

**POLS& 202 (5) C | N | S**

**American Government**

Survey of the origin and functions of the U.S. government. Examines the Articles of Confederation, the Constitution and the creation of the federal system as well as the three branches of American Government. Analyzes the functions of institutions through the lens of political history and through analysis of current events. Topics include political culture, elections and campaigns, interest groups, the media, and public policies.

**POLS& 203 (5) C | N | S**

**International Relations**

Introduction to international relations and governmental organizations. Examines major issues in the international arena including nationalism, national sovereignty, globalization, international law, economics, security, environmentalism and foreign policy. Emphasis on issues that foster or frustrate world peace and prosperity. Transfer class.

**POLS 205 (5) C**

**Political Economy**

Study of basic economic terms and concepts, by surveying various nations and regions politically and economically. Study how nations and regions economically compete with one another. Includes study of human and non-human resources, the international monetary system, government business activity, development and international law.

**POLS 213 (5) N**

**Women and Politics**

Intro to concepts of power and policy issues as they relate to women. Covers theoretical, historical and empirical studies of women's participation in social and political movements nationally and internationally. Studies women's diverse roles in relation to family, economics, labor, government and law.

**POLS 220 (5) C**

**Comparative Political Systems (W)**

Covers democratic and authoritarian governments. Includes political and economic systems of wealthier nations and less-developed nations. Examines supranational governments like the United Nations, European and African Unions and transnational trade groups like OPEC, NATO and IMF.

**POLS 255 (5) C**

**Government and Politics of the Middle East**

Problems of traditional society versus construction of a modern state. Emphasis on Arab-Israeli relations and impact on international affairs.

**POLS 298 (1-5) C | N**

**Independent Study in Political Science**

Independent research and writing on selected political science topics under faculty supervision. Prereq: Permission.

## Professional Technical Teacher Education

**PTE 301 (3) S**

### Workforce Instructional Methods and Materials

Provides an overview of established training principles and practices for aspiring instructors or trainers. A variety of instructional methods will be focused on, including: lecture, discussion, demonstration, and small group work. Different learning options will be addressed, including: Prior learning assessment (PLA), competency-based, project-based, and apprenticeship. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 302 (3) S**

### Course Development Design

This course presents models and processes for curriculum design appropriate to the adult setting. Content includes: scope and sequence, competency-based models, syllabus development, writing course objectives, technical advisory boards, industry standards, and accreditation standards will be discussed. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 310 (3) S**

### Managing the Learning Environment

This course is designed to help students develop a management plan for instructional materials and supplies. Emphasis is on shop, laboratory, and classroom safety practices. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 311 (3) S**

### Technology in Learning

This course covers how to identify, evaluate, and implement new and emerging technologies relevant to instruction. A variety of applications will be covered to include in student-created curriculum. The focus will be on current curriculum development practices. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 312 (3) S**

### American Community College

This course explores the history, present status, student diversity, student services, ethical issues, and future directions of the American community college. Students will research and develop at least one grant proposal relevant to their discipline. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 313 (3) S**

### Online Teaching Methods

Provides an overview of best practices for creating online content, teaching online, and student management of online courses. Students will practice skills during class and will begin to create an online course using the Canvas LMS. This course is intended for Professional Technical instructors who would like to teach online. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 314 (3) S**

### Professional Portfolio

This course will require students to document prior work experience by developing a portfolio and will culminate in receiving Workforce Experience Practicum credit. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 315 (1-10) S**

### Workforce Experience Practicum

Credits earned will be based on the successful completion of the Professional Portfolio course (PTE 314). Students must have demonstrated 2 or more years of relevant work experience in their area of interest. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 345 (5) S**

### Adult Learning

This course introduces students to adult learning theory, learning styles, learning processes, learning development, and student motivation. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 401 (3) S**

### Student Support and Guidance

Evaluate student completion theories and develop the skills necessary to respond to student needs, including scheduling and holding office hours, providing multiple modes of communication, and understanding professional obligations regarding student contact. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 402 (3) S**

### Assessment of Learning Performance

Students will learn how to design and develop evaluation processes to be integrated into classroom learning. Course content will include prior learning assessment, formative assessment, summative assessment, and will be linked to learning outcomes. Accreditation standards and processes will be addressed. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 420 (3) S**

### Legal Issues and Ethics in Education

An introduction to how legal implications from local, state, and federal sources guide professional practice. Evaluate social, economic, and political issues that influence professional ethics and practice. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 460 (3) S**

### Diversity and Globalism in Education

Examine cultural competence and the effects of globalism in the educational setting. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 468 (3) S**

### Program Management and Recruitment

Learn all aspects of program management and leadership, including student recruitment. Covers program budgets, staffing, facilities, and scheduling. Develop a recruiting plan for a current program or intended area of instruction. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 489 (1) S****Professional Development Certification**

Develop a professional development plan per WAC 131-16-92 and attain an Initial Washington State Professional Technical Teacher Certification. Additional requirements for certification include CPR and First Aid. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 490 (1-10) S****Teaching Internship**

Observe, reflect, and practice teaching adult learners in a technical, post-secondary environment. Find a technical teaching placement in their field of interest and work with an adult educator (site supervisor) to develop and deliver relevant curriculum. Both the site supervisor and college faculty advisor will evaluate the internship. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 495 (3) S****Capstone**

Project-based course offered during the student's last quarter of study. Draws on all previous classes and internship experiences. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

**PTE 498 (1-10) S****Special Topics**

Special topics in teaching or leadership as agreed upon by the student and a faculty member.

**Psychology****PSG 110 (2) C****Behavioral Psychology**

This course addresses the psychological aspects of the health professional relative to work environment, patient care/interactions and daily living. Throughout the course aspects of hierarchy of needs, effective communication, death and dying, the grieving process, conflict resolution, verbal and non-verbal communication, spatial separation, cultural diversity, managing stress, motivation, the need to belong, and achievement motivation are discussed. Prereq: Permission.

**PSYC& 100 (5) C | N | S****General Psychology**

Introduction to the scientific study of human behavior including research methods, brain and behavior, learning, cognitive psychology, development, personality, abnormal psychology, and social thinking and behavior. Additional topics may include: emotions, perception, motivation, intelligence, genes and evolution, and health.

**PSYC 120 (1-5) C****Psychology of Adjustment**

Covers the study of personality within the framework of the social system and the application of proven psychological principles to problems of adjustment and conflict faced in daily living.

**PSYC 132 (2) C | N | S****Psychosocial Issues in Healthcare I**

Explores the influence of culture on psychosocial issues in healthcare for diverse patient populations. Focuses on the application of the nursing process to patients experiencing Self-Perception/Self-Concept and Coping/Stress-Tolerance dysfunctional health patterns related to a substance-related or addictive disorder. Safety, pharmacologic management, and health promotion/maintenance are emphasized.

**PSYC& 200 (5) C | N | S****Lifespan Psychology**

Survey of human physical, psychological, and sociocultural development from conception through death. Emphasis on major developmental theories, research and research methods of studying lifespan development. Prereq: PSYC& 100 or permission.

**PSYC 207 (5) C****Developmental Psychology**

Analysis of psychological development of the child in relation to biological, physical and sociological antecedent conditions from conception through adolescence. Prereq: PSYC& 100 or permission.

**PSYC 209 (5) C | N | S****Fundamentals of Psychological Research**

Examines the scientific method, hypothesis testing and designs of qualitative and quantitative research. Covers the search for and evaluation of research literature in psychology, descriptive statistical analysis, fundamentals of scientific writing, ethical issues and cross-cultural considerations in psychological research. Includes a research project. Pre-req: PSYC& 100 or equivalent.

**PSYC 210 (5) C | N****Personality and Individual Differences**

Introduces the study of personality and individual differences, including theory, measurement, and research. Application of psychological principles to problems of everyday living. Prerequisite: PSYC 100 with a 2.0 or higher, and eligibility for ENGL 101.

**PSYC 217 (5) N****Intro to Prob & Stats in Social Sciences**

Focuses on an introduction to descriptive statistics, probability theory, distributions including the normal distribution, sampling, experiments, hypothesis testing, t-tests, and correlations. Prereq: MATH 098.

**PSYC& 220 (5) C | N | S****Abnormal Psychology**

Provides students with an overview of research and theories in abnormal psychology. Emphasis on the psychological, social, historical, cultural, and physiological research into abnormal psychology. Addresses ethical issues of diagnosis and treatment and major diagnostic categories such as anxiety, mood, psychotic, dissociative, eating, and personality disorders, and disorders of childhood and older adulthood.

**PSYC 222 (5) C | N | S****Survey of Physiological Psychology**

Covers workings of the nervous system. Explores the brain's capacity in language, hunger and thirst, learning and memory, emotions, sexual behavior, depression, schizophrenia and repair after injury. Recommended: PSYC& 100 or a biological science course.

**PSYC 225 (5) S****Psychology of Addiction**

Psychology of addiction, a critical examination of the behavior and mental processes associated with addiction. Systemic approaches to investigation through psychosocial, biological, cognitive and sociobehavioral areas in psychology. Lecture, research, presentation and critical examination. 5 credit class. 200 level course. Prerequisite: PSYC 100 General Psychology or SOC 101 Intro to Sociology. This is a dual PSYC/SOC course.

**PSYC 230 (5) C | N | S****Human Sexuality**

Provides an overview of research and theories in the broad field of human sexuality. Emphasis on the psychological, social, historical, cultural, and physiological research into human sexuality. May be taken as SOC 230.

**PSYC 231 (2) C****Psychosocial Issues in Healthcare II**

Focuses on the application of the nursing process to patients experiencing Self-Perception/Self-Concept, Cognitive-Perceptual, and Role-Relationship dysfunctional health patterns related to behavioral health disorders affecting maternal, pediatric, and diverse sexual identity patients. Safety, pharmacologic management, cultural practices, and health promotion/maintenance are emphasized.

**PSYC 232 (1) C****Psychosocial Issues in Healthcare III**

Focuses on psychiatric crisis and common interventions in dealing with violence, anger, aggression, suicide, homicide, domestic violence, and elder abuse. At-risk populations with tremendous poverty, physical, and social needs will be identified and strategies for early detection through screening will be examined. Individualized treatment plans for moving into self-management, relapse prevention, and bridging systems will be discussed.

**PSYC 240 (3) C | S****Psychology of Human Relations**

Covers dynamics of organizations and human resources in the workplace: motivational theory, leadership, group processes, organizational theory, participatory management, conflict management and counseling. Primarily for professional-technical students. Prereq: Satisfactory performance on placement test (S).

**PSYC 245 (5) C | N | S****Social Psychology**

Explores how social settings influence the individual. Examines the effect of others on self-concept, social cognition, aggression, conformity, helping, loving and liking, competition and cooperation, and prejudice and discrimination. Research on contemporary issues around race, gender, and other social identities will be covered and discussed.

**PSYC 250 (5) C****Psychology of African Americans**

Provides an in-depth look at contemporary psychological research and issues involving African Americans. Includes Black personality, institutional racism and the educational system, counseling African Americans and methods of dealing with racism in daily life.

**PSYC 255 (5) C****Cognitive Psychology**

Overview of the field of cognitive psychology. Addresses current theory and research in the areas of attention, perception, learning, memory, decision-making, language, problem-solving and creativity in both clinical and real world contexts. Prereq: PSYC 100 with a 2.0 or higher; or, Instructor's permission.

**PSYC 257 (5) C | N****Psychology of Gender**

Explores major psychological theories of sex differences. Examines studies of sex-role development and biological and environmental influences that may determine and maintain sex differences in aggression, cognitive abilities, achievement, motivation, affiliation and sexuality. May be taken as WMN 257.

**PSYC 260 (5) C****Psychology of Racism**

Overview of theories and research concerning factors and contexts that contribute to racial/ethnic discrimination in the U.S. and the multilevel consequences for minority groups and the broader U.S. society. Covers socioeconomic, political, and historical structures and their consequences on racial/ethnic identity. Emphasizes how multiculturalism can have a positive impact and provide a safe space for discussion.

**PSYC 298 (1-5) C | N****Independent Study in Psychology**

Independent study in selected psychology topics under faculty supervision. Prereq: Permission.

**PSYC 299 (1-5) C | N****Psychology Seminar**

Small group seminar for study and discussion of selected psychology topics. Prereq: Permission.

**Real Estate****RES 100 (5) N****Real Estate Fundamentals**

Learn the fundamental elements of the real estate industry, including sales and listing practices, financing, appraising, title, real estate law, escrow and property management. Great introduction class for anyone interested in a real estate related career or investing in real estate. RES 100 and RES 140 Real Estate Sales Practices prepare students for the Washington State Real Estate Broker Licensing Exam. (Fulfills 60 DOL pre-licensing clock hours.)

**RES 101 (5) N****Technology for Real Estate**

Learn Microsoft's Word, Excel, Outlook, Publisher and the internet to create marketing materials, manage time and contacts, communicate, create spreadsheets, and professional letters. Learn internet resources specifically for Real Estate Industry. Some computer experience highly recommended. (50 DOL clock hours)

**RES 106 (1) N****Real Estate Fraud**

Become aware of the extent of real estate fraud within the real estate sales, finance and appraisal industries. Gain an overview of numerous past and present fraud cases, the local and national extent of the problem, and the impact on the market place. Find out how to avoid potential fraudulent acts. Don't be part of the problem, be part of the solution! (Fulfills 10 DOL and DFI continuing education clock hours.) Recommend RES 100 which may be taken concurrently.

**RES 107 (1) N****Foreclosures Short Sales and Mortgage Elimination**

Learn the foreclosure process. Examine the legal issues professionals and investors should consider before being part of a foreclosure or short sale/mortgage elimination. (10 DOL clock hours)

**RES 110 (3) N****Introduction to Commercial Real Estate**

Learn about the opportunities in commercial real estate, and how to list, sell and lease various types of investment properties. Use finance as a tool to increase profits. Learn to establish market value and return for investments in office buildings, industrial properties, apartments, shopping centers and retail stores. (30 DOL clock hours)

**RES 120 (2) N****Real Estate Principles of Maintenance and Repair**

Study the maintenance and repair for residential and commercial properties. Learn to recognize maintenance problems and schedule preventative maintenance and repairs. Explore HVAC, roofing, landscaping, and janitorial services. Analyze maintenance and service contracts. (Fulfills 15 DOL continuing education clock hours.)



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**RES 125 (2) N**

**Applications of Real Estate Math**

Develop skills in basic real estate mathematics using the Hewlett Packard HP10BII programmable calculator. Apply a variety of principles for real estate transactions, valuation, finance and other investment analysis. Students purchase and bring to the first day of class HP10BII calculator or may borrow an HP10BII from the Real Estate Program while supplies last. (Fulfills 20 DOL continuing education clock hours.) Recommend RES 100 taken concurrently.

**RES 130 (3) N**

**Green Real Estate**

Learn how environmental sustainability applies to real estate home sales and listings. Class focuses on an introduction to sustainable design, water and energy efficiency and conservation, smart material choices that affect indoor air quality and occupant health, sustainable site selection, and how to recognize green home buyers - the demographics of green minded consumers. Class qualifies as preparation for the Built Green Real Estate Professional Designation exam. (30 DOL clock hours.) PLEASE NOTE: This class is typically offered ONE time per year: Winter quarter (typical class offerings may change depending on student enrollment and other factors).

**RES 131 (2) N**

**Green Building Materials**

Learn how material choices affect real estate home sales and listings. Includes smart material choices affecting indoor air quality and occupant health, energy efficiency and water conservation products that enhance comfort and increase utility savings. Learn how to talk to green home buyers about material choices and how to work with clients preparing for sales and listing. Prereq: Recommend RES 130. (DOL clock hours).

**RES 140 (3) N**

**Real Estate Sales and Practice**

Pre-license course prepares the student for the Washington Real Estate Broker's License Exam and to enter the residential real estate sales industry. Highlights of what you will learn include: sales techniques and practices, evaluating, pricing and showing property, listing and purchase/sale agreements, obtaining and servicing listings, qualifying the buyer, negotiating and servicing the sale, agency, planning and budgeting. (Fulfills 30 DOL pre-licensing educational requirement.) PLEASE NOTE: This class is typically offered every quarter (typical class offerings may change depending on student enrollment and other factors). Prerequisites: RES 100 or RES 210 (or concurrent enrollment) or real estate experience or by instructor permission.

**RES 141 (3) N**

**Land Use Principles and Practice**

Introduces federal and state laws and regulations governing land use and environmental issues. Includes in-depth study of local (King County) regulations. Provides practical land use knowledge including the permit process. (30 DOL clock hours)

**RES 142 (3) N**

**Inspecting the Condition of Real Estate**

Find deficiencies in residential and commercial buildings including site drainage, weatherproofing, structure, heating, plumbing and electrical systems. Emphasizes inspection techniques and handling the identified problems. (30 DOL clock hours)

**RES 150 (2) N**

**Residential Sales and Leasing Documentation**

Covers Washington real estate broker and agent practices, emphasizing agency law, contracts, torts, and Multiple Listing forms. Prereqs: RES 100, 110, 170 or 210 or concurrent enrollment, or 6 months experience in real estate. (15 DOL clock hours).

**RES 164 (5) N**

**Real Estate Finance Residential**

Explore various financing programs for residential real estate. Learn to prequalify borrowers and generate closing cost worksheets. Gain knowledge about credit reports and credit scoring. Discover how underwriters determine who gets mortgages. Recommend RES 100 and/or RES 125 that can also be taken concurrently. (Fulfills 50 DOL continuing education clock hours.)

**RES 170 (3) N**

**Real Estate Law**

Review the principles of real estate law, including acquisition, encumbrance, transfer, rights and obligations of parties, and Washington State regulations thereof. (Fulfills 30 DOL continuing education clock hours.) Prerequisites: RES 100 or RES 110 or real estate experience, or instructor permission.

**RES 175 (3) N**

**Introduction to Title**

For those in real estate sales, finance, escrow, or title insurance fields. Covers fundamentals of title insurance, various types of liens, methods of clearing title, and other items of record and off-record that affect real property. (30 DOL clock hours)

**RES 177 (2) N**

**Real Estate Taxes**

Covers U.S. income taxes pertaining to real estate. Learn what constantly changing federal income tax laws affect residential, business, and investment properties. (Fulfills 22 DOL continuing education clock hours.)

**RES 180 (3) N**

**Basic Appraisal Principles**

Revised to meet the January 1, 2008 Real Property Appraiser Qualification Criteria. Intro to the appraisal process. Investigate influences on the types of real estate values. Overview of real estate markets and analysis. Recommend RES 100 concurrently. (30 DOL clock hours)

**RES 183 (3) N**

**Basic Appraisal Procedures**

Revised to meet the January 1, 2008 Real Property Appraiser Qualification Criteria. Presents methodologies used in valuation procedures. Understand property descriptions for appraisal reporting and apply these to residential and commercial appraisal applications. Prereq: RES 180 or appraisal experience or permission. (30 DOL clock hours)

**RES 190 (3) N**

**Real Estate Escrow I**

Intro to escrow principles and procedures covering laws, real estate and escrow documents, escrow closings, and title exceptions. (30 DOL clock hours)



**RES 197 (3) N****Real Estate Title & Escrow**

Covers methods of clearing title. Provides a foundation in title insurance, various types of liens, encumbrances and other items that affect real property. Presents escrow principles and procedures covering laws that govern and control escrow closing. Learn to work with real estate and escrow documents, escrow closings, and title exceptions. Prerequisite: RES 100 or concurrent enrollment.

**RES 202 (3) N****Multi-Family Property Management**

This course teaches important functions in rental property management, property analysis, rental policies, rental surveys, lease provisions, inspection, building codes, tenant relations, operating policies and financial result analysis. (Fulfills 30 DOL continuing education clock hours.)

**RES 203 (3) N****Property Management-Commercial**

Covers commercial property management, including personnel policies, marketing, tenant management, property maintenance, security, collection, lease provisions, and record-keeping systems. (30 DOL clock hours). PLEASE NOTE: This class is typically offered only ONE time per year: Winter quarter (typical class offerings may change depending on student enrollment and other factors).

**RES 204 (3) N****Community Association Management**

Learn how successful associations are established, operated, and managed. Explore the fundamental principles and procedures of various types of community associations, such as Home Owners Associations, Resort Association, and more. Applicable for property managers, association Boards, developers, condo sales agents, loan officers, escrow officers, and paralegals. (30 DOL clock hours)

**RES 210 (3) N****Residential Property Investments**

Learn to invest in different types of residential properties, including the principles and techniques used to determine the advantages and disadvantages of buying, selling and renting investments. Study financing options for various residential investments. Recommend RES 100 or concurrent. (30 DOL clock hours)

**RES 217 (3) N****Real Estate Development and Sustainability**

Explore the fundamental principles and procedures involved in developing residential, commercial and industrial real estate. The stages of a development project from its initiation to completion will be discussed in some detail. Although the course is oriented toward the development-related professions, it is also appropriate for people whose main interest is on investments or other aspects of development. (Fulfills 30 DOL clock hours.) PLEASE NOTE: This class is typically offered only ONE time per year.

**RES 220 (3) N****Real Estate Economics**

Use economic principles to analyze the impact that national, regional, community, and neighborhood trends have on real estate values. Study trends in the money market, community growth patterns, land use controls, taxations, etc., in the Puget Sound Region. (Fulfills 30 DOL continuing education clock hours.) Prerequisites: RES 100, or RES 110, or RES 180 or RES 210 which can be taken concurrently, or real estate experience, or real estate license or instructor permission. All classes will be held on campus, Tuesdays from 6:00 p.m. - 9:00 p.m.

**RES 235 (3) N****Sales and Marketing**

Increase your business and/or market share by incorporating sales and marketing techniques including an action plan. Learn to differentiate yourself/business from your competition and generate effective marketing media strategy. Recommend RES 100 or RES 110 or RES 180 or concurrent enrollment. (30 DOL clock hours).

**RES 260 (5) N****Real Estate Finance-Commercial**

Gain an understanding of commercial real estate investment. Course outline includes the real estate lending environment, borrowing and lending decisions, and loan underwriting and processing. Determine the value of commercial real estate property with tools that include operating statements and discounted cash flow analysis. (Fulfills 50 DOL continuing education clock hours.) Recommended: RES100, RES125 and BUS124, or real estate experience.

**RES 281 (2) N****National Usap Course**

Focus on ethical behavior and competent performance set forth in the USPAP and Washington Regulations. Prereq: RES 183 or 6 months appraisal experience or permission. (15 DOL clock hours)

**RES 290 (3) N****Commercial Sales and Leasing**

Study the opportunities and responsibilities of representing commercial property owners, buyers, tenants and landlords. Learn to list, sell and lease various commercial properties. Explore basic evaluation and marketing tools. Learn to complete market surveys, commercial listing, sales and leasing agreements. Prereq: RES 100 or 110, or Washington Real Estate License or permission. Coreq: RES 125 recommended. (30 DOL clock hours and initial license renewal under RCW 18.85.095(2)(a))

**RES 295 (2) N****Commercial Real Estate Investment Analysis**

Learn commercial real estate investment analysis, including fundamentals of commercial leases, pro forma analysis, use and selection of discount and capitalization rates, tax laws and applications of decision-making tools. Bring programmable financial calculator to class. Prereq: RES 110 and 125, and RES 290 or concurrently or real estate experience or permission. (20 DOL clock hours)

**RES 298 (1-6) N****Special Projects, Internships in Real Estate**

Provides advanced students with research opportunities or unpaid work experience in real estate applications parallel with those encountered in an actual job environment and allows students to pursue independent study on special projects. Credits vary depending on amount of work. (Fulfills 20-60 DOL continuing education clock hours.) Students must have instructor permission. All of RES 298 sections are 1-6 credits.

**Residential/Commercial Property Management****RCPM 301 (3) N****Principles of Residential Property Management**

Introduction to Property Management and management of residential property. Employees, management tools, government involvement, client acquisition and tax requirements, leasing and managing property, and understanding agents' pre-licensing and brokerage requirements.

**RCPM 302 (4) N****Stakeholder Relations & Prof Development**

Prepare property management students as professionals in a global community. Role-play emphasis on professional presentation, etiquette, culture, business communication, problem identification and solving, network and relationship building with all stakeholders.

**RCPM 303 (3) N**  
**Intro to Development and Construction Management**

An introduction to the fundamental principles and procedures of real estate development, sustainable construction, and vendor relationships to broaden student understanding of the scope of construction within property management field. Topics include development process, construction management, and tenant improvements.

**RCPM 304 (2) N**  
**Principles of Commercial Property Management**

Examine and practice management of four types of commercial properties, learning the necessary competencies such as time management, relationship building (owner, staff, tenant, customer and public), problem identification and solving, operations and maintenance management, sustainability, budgeting, leasing and lease administration, safety, security and emergency procedures. Prerequisite: Acceptance into the Residential and Commercial Property Management BAS Program.

**RCPM 310 (2) N**  
**Specialty and Affordable Housing**

Contemporary issues affecting residential property management including student, senior, military, tax credit housing, Real Estate Investment Trust (REIT), and Accessory Dwelling Units (ADU).

**RCPM 311 (2) N**  
**Marketing & Leasing of Residential Real Estate**

Effective marketing practices, leasing strategies and tactics designed to attract and retain qualified residential tenants to income producing properties. Students will learn how to gather market data, develop marketing plans, formulate leasing workflows and utilize metrics to improve their marketing and leasing process.

**RCPM 313 (3) N**  
**Marketing and Leasing of Commercial Real Estate**

Gain an understanding of effective commercial real estate marketing strategies and the leasing processes for commercial real estate. Create a marketing plan to set rental rates, secure new tenants, and effectively position the property to meet the owner's project requirements. Identify technology and social media as tools utilized to market commercial real estate. Understand lease processes, contract components and negotiation.

**RCPM 315 (2) N**  
**Introduction to Negotiations**

Introduction to negotiation techniques and styles. How to structure agreements to meet your goals. Practice dealing with common challenges in property management field. Prerequisite: Acceptance into the Residential and Commercial Property Management BAS Program.

**RCPM 320 (4) N**  
**Financial Accounting for Property Management**

Introduces students to the software used by asset management and real estate investment companies.

**RCPM 330 (3) N**  
**Leadership and Team Building**

Examine the foundational elements of leadership and team building. Review current management thought. Examine and practice the application of current and emerging management topics emphasizing leadership, inspiration, communication, relationship building, team dynamics, organizational development and management of a diverse workforce. Introduces leadership, culture, service, brand and innovation as essential to sustained business excellence.

**RCPM 350 (2) N**  
**Revenue Management for Property Management**

Study of accounting for corporations, methods of raising capital, analysis of financial statements, introduction to management accounting, product cost accounting systems, profit planning, management performance measures, and capital budgeting.

**RCPM 401 (5) N**  
**Project Management for Property Management**

This course is an overview of project management from a business perspective with a focus on activities common in property management. Topics will include project estimation, project feasibility, planning, risk management, communication and responsibility planning, scheduling, and project control.

**RCPM 402 (4) N**  
**Supervision and Management**

Organization and coordination of personnel practices and methods. Consideration given to communication, employment, staff orientation and training, working conditions, supervision, performance evaluation, collective bargaining, salary administration, and health and well-being of a diverse work force employed in domestic and international settings.

**RCPM 403 (4) N**  
**Real Estate and Fair Housing Law**

Examines the concepts & goals of real estate laws & fair housing laws at the federal, state, & local levels. Attention will be given to how fair housing laws are designed to prevent discrimination in housing. The class will look at the Civil Rights Act of 1964, key court decisions involving fair housing laws & the 1968 Fair Housing Act & applicable state & local laws. Real estate law principles of transfer of interests, contracts, sustainability, agency, & escrow will be analyzed.

**RCPM 410 (2) N**  
**Professional Ethics in Property Management**

Analysis of ethical decisions in property management and case studies affecting property management codes of ethics.

**RCPM 420 (5) N**  
**Sustainable Facilities Management**

Fundamental theory and application of sustainable facilities management including building envelope, heating, ventilation, air conditioning, plumbing, indoor air quality, and fire suppression systems for buildings. Emphasis on system integration and sustainable topics as related to design, construction and management of mechanical construction scope of work. Basic understanding of high performance building and energy efficiency, including fundamentals of residential operations and maintenance.

**RCPM 494 (4) N**  
**Practicum Portfolio**

The property management practicum project is the opportunity for the student to demonstrate the application of RCPM BAS program course content, processes, and principles. Student projects focus on a specific asset type and location. Faculty guide and supervise the student's property management field project, which will be compiled in a portfolio and culminate in a professional presentation.

## Respiratory Care Bachelor of Applied Science in Allied Health

**RCP 299 (1-3) C**  
**Independent Study in Respiratory Care**

Independent study in selected respiratory care topics under the supervision of the program director. Topics coincide with the quarter's curriculum.

**RCP 320 (4) C**  
**Acute Care Clinical I**

Covers direct application of respiratory care skills in the hospital setting. Focuses on skills for respiratory care practice in acute care. Students treat patients using basic respiratory care techniques and perform physical assessments, chart review, hand washing, and bronchial hygiene techniques. Builds on respiratory care knowledge and skills established in the classroom, lab and clinical setting. Prereq: Successful completion of courses from 1st quarter with a minimum GPA of 2.0.

**RCP 323 (2) C**  
**Pathophysiology for Respiratory Care**

Encompasses a study of the concepts and principles by which disease alters the normal function of the cardiopulmonary system. Emphasis will be on development of the respiratory care plan in the context of Respiratory Failure, Asthma, Chronic Obstructive Pulmonary Disease, Cystic Fibrosis, Postoperative Atelectasis, Interstitial Lung Disease, Neuromuscular disease, Bacterial Pneumonia, Tuberculosis, and Sleep Disordered Breathing. Prereq: Completion of 1st quarter courses with minimum GPA of 2.0.

**RCP 328 (4) C**  
**Advanced Therapeutic Approaches**

The second course in the therapeutic approaches series, this course builds upon concepts, knowledge, and skills acquired in AHE 218. Emphasis is on the knowledge and skills necessary to safely and effectively provide artificial airway care, Arterial Blood Gas (ABG) drawing and analysis, bedside monitoring techniques and non-invasive positive pressure ventilation. Prereq: Completion of 1st quarter Respiratory Care program courses with minimum GPA of 2.0.

**RCP 329 (1) C**  
**Advanced Therapeutic Approaches Equip and Tech**

Covers the application of Respiratory Care therapeutics learned in RCP 328. Learners will apply theory acquired in RCP 328 using models, simulation and laboratory partners for practice. Focuses on the safe and effective application of artificial airway care, Arterial Blood Gas drawing and analysis, bedside monitoring techniques and non-invasive positive pressure ventilation. Prereq: Completion of 1st quarter Respiratory Care program courses with a minimum GPA of 2.0.

**RCP 330 (5) C**  
**Acute Care Clinical II**

Further familiarizes students with hospital-based respiratory care. Students practice direct patient care, treat patients using basic respiratory care techniques, & perform physical assessments. Chart review, hand washing, & bronchial hygiene techniques emphasized. Students use techniques learned in lab & on-site, & build on the foundation of respiratory care knowledge & skills established in the classroom setting. Prereq: 2.0 or higher in previous SCC Resp. Care program courses.

**RCP 338 (4) C**  
**Fundamentals of Mechanical Ventilation**

The third course in the Respiratory Care Fundamentals series, this course builds upon concepts, knowledge, and skills acquired in RCP 328. Emphasis will be placed on the knowledge and skills necessary to safely prepare, institute, monitor and modify mechanical ventilation in the care of the critically ill adult patient. Successful completion of 2nd quarter Respiratory Care Program courses with a 2.0 or higher GPA.

**RCP 339 (1) C**  
**Mechanical Ventilation Equipment and Techniques**

Covers the application of Respiratory Care therapeutics learned in RCP 338. Learners will apply theory acquired in RCP 338 using models, simulation and laboratory partners for practice. Focuses on safe and effective application of basic, adult mechanical ventilation. Prereq: Successful completion of 2nd quarter Respiratory Care Program courses with a 2.0 or higher GPA.

**RCP 340 (4) C**  
**Adult Critical Care Clinical I**

RCP 340 is the third course in the Respiratory Care clinical series. Emphasis will be placed on integrating respiratory theory knowledge with skills performance by providing the student therapist with the opportunity to practice direct patient care. The learner will be assigned to the Critical Care Unit and will perform the duties associated with the management of the critically ill patient on mechanical ventilation.

**RCP 347 (2) C**  
**Cardiology for Respiratory Care**

Emphasis will be placed on the integration of hemodynamic measurements in the care of the critically ill patient. Various clinical applications and critical care monitoring will be covered in depth. Further emphasis will be placed on the principles of Advanced Cardiac Life Support (ACLS) and the interpretation of electrocardiogram (ECG) data.

**RCP 348 (2) C**  
**Advanced Mechanical Ventilation**

In-depth exploration of the application of mechanical ventilation across the age spectrum. Emphasis on the clinical application of mechanical ventilators and advanced modes of mechanical ventilation. Prereq: Successful completion of 2nd quarter BAS Respiratory Care Program courses with a 2.0 or higher GPA.

**RCP 349 (1) C**  
**Adv Mechanical Ventilation Equipment & Technique**

Covers the application of Respiratory Care therapeutics learned in RCP 348. Learners will apply theory acquired in RCP 348 using models, simulation and laboratory partners for practice. Focuses on safe and effective application of advance mechanical ventilation across the age spectrum. Prereq: Successful completion of 2nd quarter BAS Respiratory Care Program courses with a 2.0 or higher GPA.

**RCP 450 (6) C**  
**Adult Critical Care Clinical II**

RCP 450 is the fourth course in the Respiratory Care clinical series. Emphasis will be placed on integrating respiratory theory knowledge with skills performance by providing the student therapist with the opportunity to practice direct patient care. The learner will be assigned to the Critical Care Unit and will perform the duties associated with the management of the critically ill patient on mechanical ventilation.

**RCP 451 (2) C**  
**Neonatal/Pediatric Pathophysiology**

An in-depth study of neonatal and pediatric respiratory care. Focuses on diseases specific to caring for our smallest patients. Covers fetal growth and development, labor and delivery, resuscitation, disease processes, assessment and therapy. Prereq: Successful completion of the previous quarter's Respiratory Care Program courses with a minimum GPA of 2.0.

**RCP 455 (2) C**  
**Advanced Pharmacology (Respiratory Care)**

Continues the study of medications in the critical care setting and introduces the learner to medications used in the pediatric/perinatal disciplines. Emphasis is on drugs used to treat emergent cardiac abnormalities, common critical care medications, pediatric/perinatal medications and resuscitation products. Prereq: Completion of previous quarter Respiratory Care classes with 2.0 or above.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 231. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 230.

**RCP 458 (4) C****Neonatal/Pediatric Respiratory Care**

Emphasis on advanced concepts and skills needed to care for neonatal and pediatric patients. Covers techniques and equipment to manage neonatal and pediatric patients in the acute care environment, including oxygen therapy, bronchial hygiene, airway care, Continuous Positive Airway Pressure and mechanical ventilation. Prereq: Successful completion of prior quarter's coursework with a GPA of 2.0 or greater.

**RCP 459 (1) C****Neonatal/Pediatric Equipment and Techniques**

Covers the application of Respiratory Care therapeutics in the neonatal/pediatric population learned in RCP 458. In this class learners will apply theory acquired in RCP 458 using models, simulation and laboratory partners for practice. Focuses on safe and effective application of mechanical ventilation and respiratory care therapeutics in the neonatal/pediatric age population. Prereq: Successful completion of the prior quarter's courses with a 2.0 or better.

**RCP 460 (6) C****Neonatal/Pediatric Clinical**

Clinical Practice V (RCP 460) is a continuation of prior clinical experience and is designed to build on the foundation of respiratory care knowledge and skills established in the previous five quarters of the program. This course is designed to provide the student with the knowledge, skills and techniques necessary to safely and effectively treat newborn infants and children suffering from various cardiopulmonary disorders through hands-on experience with the neonatal and/or pediatric patient.

**RCP 463 (2) C****Advanced Pathophysiology for Respiratory Care**

A study of the concepts and principles by which disease alters the normal function of the cardiopulmonary system in critically ill patients. Covers cardiopulmonary assessment and development of the respiratory care plan in the context of: Shock, Pulmonary Thromboembolic disease, Heart Failure, Smoke Inhalation and Burns, Trauma, Near Drowning, Acute Respiratory Distress Syndrome, Chest Trauma, Pneumonia in the critically ill patient, and Lung Cancer.

**RCP 464 (2) C****Pulmonary Rehabilitation and Home Care**

Pulmonary Rehabilitation and Home Care is designed to give the advanced practitioner the knowledge and skills to successfully integrate the technical aspects of Respiratory Care into challenging alternate care settings ethically and safely. Focuses on the concepts, knowledge, and procedures specific to the respiratory care of adults and children with chronic cardiopulmonary disorders, receiving care in the alternative care setting. Emphasis is placed on patient education and health promotion.

**RCP 467 (2) C****Advanced Cardiopulmonary Physiology**

Builds on the topics covered in AHE 217. Covers the interrelationship of cardiopulmonary systems and how the application of therapeutic procedures can alter those normal relationships. Topics include the immunology and fluid transport of the lung, hemodynamics and pulmonary circulation, and additional concepts of acid base physiology. Provides in-depth study of the cardiopulmonary system in the context of critically ill patients.

**RCP 468 (3) C****Adv Cardiopulmonary Diagnostics**

Emphasis will be placed on the theory, application and interpretation of pulmonary function regimens, exercise testing, bronchoscopy, blood gas sampling and analysis, indirect calorimetry and polysomnography. Further emphasis will be placed on the equipment utilized for the aforementioned tests as well as their calibration and quality control.

**RCP 469 (1) C****Diagnostic Equipment and Techniques**

Covers the application of cardiopulmonary diagnostics learned in RCP 468. In this class learners will apply theory acquired in RCP 468 using models, simulation and laboratory partners for practice. Focuses on safe and effective application of diagnostic equipment and procedures across the age spectrum. Covers diagnostic equipment, spirometry, diffusion studies and lung volume determination, cardiopulmonary exercise testing, metabolic studies, bronchoscopy and polysomnography.

**RCP 470 (6) C****Adult Critical Care Clinical III**

Culmination of all previous clinical experiences. Designed to build on the foundation of respiratory care knowledge and skills established in the previous six quarters of the program. Students will be assigned to the Critical Care Unit and will perform all of the required duties of a respiratory therapist in the critical care environment. Emphasis on gaining autonomy and independence in the care of the patient.

**RCP 472 (1) C****Advanced Practitioner Exam Review**

Covers board exams from the National Board for Respiratory Care (NBRC). Emphasizes scope of practice in respiratory care, based on the NBRC exam matrix. Reviews exam format, content tips and techniques for successful completion of the NBRC board exams. Culminates in the mock Therapist Multiple Choice exam. Prereq: Successful completion of the previous quarter Respiratory Care classes with a minimum of 2.0 or greater.

**RCP 476 (3) C****Advanced Patient Assessment**

Develops skills to make appropriate assessments of respiratory patients through utilizing and analyzing history, physical examination, lab data, Chest X-Rays, Pulmonary Function Tests, and EKG data. Uses a case-based format requiring application of clinical reasoning skills to develop and implement plans of care for the cardiopulmonary patients presented. Prereq: Completion of prior quarters' BAS in Allied Health Respiratory Care track classes with a 2.0 or greater.



**RCP 479 (4) C**  
**Senior Capstone Project**

A capstone course in the respiratory care program representing the culmination of student learning throughout the program. Students will take on a project using a faculty and/or community mentor to showcase the work they have done in the respiratory care program. The content varies based on student projects and can take on many forms. Projects will be developed in collaboration with faculty and community mentors and are aligned with student interest.

**Russian****RUSS& 121 (5) N**  
**Russian I**

For those who have not previously studied Russian. Intro to Russian, emphasizing speaking, listening and reading comprehension. Covers the writing system and basic grammar concepts. Studies culture and contemporary customs. Prereq: Eligibility of ENGL& 101 (C).

**Science****SCI 090 (5) S**  
**General Science - Career Link**

Covers major concepts and ideas in science, exploring biology, physics, chemistry, geology, astronomy and ecology. Lab included. Satisfies science requirement of the high school completion program.

**SCI 093 (5) S**  
**Science 093 - Career Link**

Covers fundamental topics in biology including ecosystems, heredity, and evolution. Students will develop a framework for looking at contemporary issues such as climate change and GMOs through a scientific lens while building a basis of knowledge from which to pursue more in-depth study in a variety of medical or research related science fields.

**SCI 107 (4) C**  
**Applied Bioengineering**

Covers water-related issues in the developing world: availability, sanitation, food production and environmental degradation. Includes integrative resource management using local human and material resources combined with developing technologies that are safe, adaptable and affordable. Promotes scientific critical thinking and problem-solving.

**SCI 111 (1) C | N**  
**Geology Field Day**

Covers the best of the region's geology, including the Seattle Fault, ancient glaciers, fossil forests, landslides, Cascade Mountains and northeastern Oregon. Lab credit. May be taken as GEOL 111.

**SCI 112 (1) N**  
**NW Field Trip - Seashore Life**

Explores seashore life in the Pacific Ocean and Puget Sound.

**SCI 113 (1) N**  
**Marsh Ecology - Northwest Field Trips**

Explore local wetlands and the organisms that inhabit wetlands ecosystems with a focus on the local animals and plants. Field trips. Lab.

**SCI 116 (1) N**  
**Edible Plants - Northwest Field Trip**

Focuses on edible and medicinal plants of the Pacific Northwest. Lab credit.

**SCI 118 (1) C**  
**Volcano Field Day**

Intro to the origin and destruction of Cascade volcanoes such as Mount St. Helens, Mount Rainier and Glacier Peak. Lab credit. May be taken as GEOL 118.

**SCI 119 (3) N**  
**Natural History Through Field Studies**

Study aspects of biology, zoology, hydrology, meteorology, geology, botany, and/or soil and environmental sciences through field observation and lab work. Includes a multi-day trip or multiple single-day trips. Transportation fee will be assessed. Previous students should take SCI 129.

**SCI 121 (5) N**  
**Natural Disasters**

We live in a very scary place. We live in earthquake central, just west of volcano junction, along the tsunami coast, where the mudflows meet the sea. We have regional-scale floods, world-class landslides, record-setting avalanches, and truly horrific forest fires. This course examines the science behind these and other natural disasters, here and around the world, exploring the disciplines of geology, meteorology, oceanography and astronomy in the process. We will be using a combination of hands on labs, open source data sets and online tools to investigate the potential hazards in our own back yards. This is a five-credit course which satisfies the lab science requirement for the AA degree. Lab fee applies.

**SCI 122 (1) N**  
**Zoo Science Field Trip**

A field trip-based short course that introduces the concept of zoos in general, and the running of Woodland Park Zoo in particular. Includes five hours of lecture and a one-day field trip. Counts towards the Natural World requirement. Lab science. Click on EXPAND for specific class information.

**SCI 129 (3) N**  
**the Cascades to Puget Sound: Field Studies**

Study aspects of biology, zoology, hydrology, meteorology, geology, botany, and/or soil and environmental sciences through field observation and lab work involving some aspect of the water cycle in the greater Puget Sound area. Includes a multi-day trip or multiple single-day trips. Lab and transportation fees will be assessed.

**SCI 197 (1-5) C**  
**Work Experience-Science**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply science knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**SCI 296 (1-10) C**  
**Natural History: Tropical Ecosystems/Travel Crs**

Hands-on learning opportunities for undergraduates and others who undertake domestic and/or foreign travel. Learn outside the classroom and take advantage of cross cultural materials, flora and fauna, geographical locations, geologic formations, museums, terrestrial ecosystems, regional customs and foods, natural history, marine ecosystems, and field trips which are available only through travel.

**SCI 297 (1-10) C**  
**Natural History: Tropical Ecosystems/Travel**

Hands-on learning opportunities for undergraduates and others who undertake domestic and/or foreign travel. Learn outside the classroom and take advantage of cross cultural materials, flora and fauna, geographical locations, geologic formations, museums, terrestrial ecosystems, regional customs and foods, natural history, marine ecosystems, and field trips which are available only through travel.

**SCI 298 (1-5) C | N**  
**Special Topics**

Seminar of selected topics or activities in the sciences. Prereq: Variable, dependent on topic.



**SCI 299 (1-5) N**  
**Special Problems**  
 Independent study of approved topics in the sciences. Prereq: Permission.

## Science, Technology, Engineering & Math

**STEM 101 (2) C**  
**Orientation to Science & Engineering**  
 Intended for STEM majors. Gives STEM students the techniques to apply active learning strategies to further their personal and professional growth, study skills, critical and creative thinking, and career development. Focuses on identifying college resources, social justice in the sciences and implicit bias in the research field, the scientific method and how to be an ethical scientist, and helping students explore careers in STEM and build their professional network.

**STEM 111 (3) S**  
**Stem Exploration: IT All Begins with a Question!**  
 Covers science process skills such as graphing, data analysis, experimental design, scientific communication, and collaborative work. These are the fundamental skills that scientists and engineers use daily and are needed by students to succeed in any STEM class. The course will use topics from Biology, Chemistry, and/or Physics, but is designed in such a way as to be suitable for students with no science background.

**STEM 118 (2) C | S**  
**Science, Equity, and Social Justice**  
 Examines the role of science in, and its application to, issues of equity and social justice through selected topics. Foundational history and a basic grasp of various topics in STEM introduced. These facts will provide a platform from which to launch an analysis of current issues of inequality in the United States (e.g., systemic oppression of peoples based on race, gender, sexual orientation, etc.). Prereq: ENGL&101 with 2.0 or higher.

## Service Learning

**SLN 101 (2) N**  
**Service Learning and Leadership**  
 To support the values of citizenship and leadership, this course provides the opportunity for students to earn credit for service to the college and/or community. Includes class seminars and observations in addition to field work.

**SLN 105 (1-2) C**  
**Service Learning: Business**  
 The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

**SLN 106 (1-2) C**  
**Service Learning: Business**  
 The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

**SLN 107 (1-2) C**  
**Service Learning: Business**  
 The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

**SLN 108 (1-2) C**  
**Service Learning: Business**  
 The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

**SLN 110 (1-2) C**  
**Service Learning: Communications**  
 The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

**SLN 111 (1-2) C**  
**Service Learning: Communications**  
 The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

**SLN 112 (1-2) C**  
**Service Learning: Communications**  
 The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

**SLN 113 (1-2) C**  
**Service Learning: Communications**  
 The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

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## Social & Human Services

### SHS 100 (5) C Introduction to Human Services

Provides an overview of the social and human services field from the perspective of the individual human services worker. Explores societal conditions, assumptions, and needs that impact delivery of services. Includes discussion of areas of knowledge, professional values, and skills. Examines the characteristics of the human services agency, including professional roles, career opportunities, and challenges. Prerequisite: eligibility for ENGL&099 and MATH087/091.

### SHS 101 (2) C SHS, Chemical Dependency, and Academics

Designed for the beginning social and human services student, this course provides basic academic, professional, and personal skills vital for academic success. Defines social and human services with a focus on critical thinking, professionalism, time management, learning communities, and the use of campus resources. Prerequisite: Eligibility for ENGL&099 and MATH087/MATH091. Co-req: SHS100.

### SHS 103 (5) C Social Welfare Policy

Introduction to social welfare policy, social justice, and systems. Emphasis on social welfare policies, systems, and services designed to respond to social issues: public welfare, child welfare, mental health, chemical dependency, aging, poverty, health, disabilities, and corrections. Prerequisites: SHS100 and SHS101 (each with 2.0 or higher); eligible for ENGL099; and eligible for MATH087 or MATH091.

### SHS 106 (5) C Principles of Interviewing and Counseling

Intro to beginning-level interviewing and counseling skills in multicultural settings. Demonstration of human services values and knowledge of diverse populations' needs through counseling techniques: developing relationships; identifying problems, solutions, and goals; and evaluating progress. Prerequisites: SHS100 and SHS101, each with 2.0 or higher; eligible for ENGL099; and eligible for MATH087 or MATH091.

### SHS 108 (5) C Group Dynamics & Counseling

Introduction to group work, including group processes, communication patterns, group and individual goal-setting, leadership, and decision-making. Includes group participation, role-playing, and simulations. Prerequisites: SHS100 and SHS101, each with 2.0 or higher; eligible for ENGL099; and eligible for MATH087 or MATH091.

### SHS 120 (3) C Introduction to Disabilities Study and Practice

This course surveys the historical perspectives, cultural attitudes and stereotypes that create barriers to personal and collective empowerment for individuals with disabilities. The course covers the social-political aspects of the disability rights movement and examines laws governing civil rights of individuals with disabilities. Students explore the intersection of gender, class, race and the human body with emphasis on social justice and privilege. Prereq: Eligibility ENGL& 101 and Math 084.

### SHS 121 (5) C Introduction to Care Navigation

Introduction to the knowledge, skills, and attitudes necessary to practice care navigation for the benefit of the client. Focus on human services and healthcare systems, social determinants of health, health literacy, chronic illness, risk and protective factors. The first of two courses leading to a certificate in care navigation. Prereq: eligible for ENGL 099; and eligible for MATH 087 or MATH 091; or instructor permission.

### SHS 122 (5) C Care Navigation: Systems of Care

Explores at an advanced level: healthcare communication strategies, health insurance systems, population health management, transitions of care, risk and protective factors in wellness promotion, preventive care, information technology in healthcare, and care plans. Prereq: eligible for ENGL 099; and eligible for MATH 087 or MATH 091; completion of SHS 121 with minimum 2.0 GPA or instructor permission.

### SHS 123 (5) C Advanced Care Coordination and Navigation

Third in a three-course certificate in Care Coordination and Navigation. Focuses on client characteristics, rehabilitation systems, care transitions, technology trends in health-care, preventive care, resource identification and mapping, chronic illness in the context of population management strategies, and advanced care planning. Prereq: Eligibility ENGL& 101, MATH 084 or equivalent and SHS 121 and 122 or instructor permission.

### SHS 124 (3) C Navigating Behavioral Health Systems

Explores navigation for populations with behavioral health needs. Overview of behavioral health systems, eligibility, and access issues are presented. Topics include: acute and chronic mental health diagnoses, health disparities, work with interdisciplinary teams, behavioral health resources, interventions, and referral, and integration of primary care, substance abuse treatment, and behavioral health. Prereq: ENGL& 101 and elig for MAT 084 or 087 or 091 or permission.

### SHS 125 (3) C Care Navigation for Older Adults

Explores the role of the care coordinator and navigator with older adults. Presents theories of aging. Focuses on individual and family centered coordination, communication and health literacy specific to older adults, chronic diseases and preventive care, working with an interdisciplinary team, care transitions, resource and referral and end of life issues. Prereq: Eligibility for ENGL& 101, and eligibility for MATH 084 (or 087 or 091); or Instructor's permission.

### SHS 130 (5) C Foundations of Gerontology

Provides an interdisciplinary overview of the field of gerontology. Psychological, physiological, and biological processes, as well as social theories and ethical practices, are examined in a diverse context. Prereq: Eligibility for ENGL 099, and MATH 087 or 091.

### SHS 131 (5) C Contemporary Issues in Aging

Explores health & human services policies and programs, social issues, demographic trends, laws, and the diverse needs of aging adults and their families. Prerequisites: SHS130 with a 2.0 or higher; eligibility for ENGL&099; and eligibility for MATH 087 or MATH091.



**SHS 150 (1) C****HIV/AIDS Brief Risk Intervention**

Includes history, trends, transmission, infection control, testing, counseling, BRI, and psychosocial issues. Meets requirements for human services and chemical dependency professionals. Approved by the WA State Division of Alcoholism and Substance Abuse.

**SHS 197 (3) C****Field Placement: Social and Human Services**

Supervised community-based field experience in which students apply knowledge and develop skills by working in public and private agencies and organizations. Prereq: Permission

**SHS 198 (3) C****Field Placement: Social and Human Services**

Work experience in human services agencies, with individual and group supervision provided by agency professionals to share experiences and further develop work-related skills. Prereq: Permission.

**SHS 199 (4) C****Field Placement: Social and Human Services**

Work experience in human services agencies, with individual and group supervision provided by agency professionals to share experiences and further develop work-related skills. Prereq: Permission.

**SHS 205 (3) C****Crisis Intervention and Management**

Intro to crisis theory and techniques for the beginning mental health/human services professional. Students will develop assessment techniques and interviewing skills with high-stress populations presenting with psychiatric, health, drug and alcohol, sexual assault, intimate partner and domestic violence, bereavement, and suicide and homicide crises. Prereq: Eligible for ENGL& 101 and MAT 084.

**SHS 209 (5) C****Grief and Loss in Social and Human Services**

Explores both the grief and loss experiences in the context of the helping professions. Analyzes models and types of grief and loss. Researches resources and interventions for clients in the social and human services. Examines transitions, situations, and circumstances that result in grief and loss, as well as cultural responses to them. Prereq: eligible for ENGL099; and eligible for MATH087 or MATH091.

**SHS 210 (3) C****Intro to Diversity in Human Services Practice**

Examines U.S. society and the diversity within it, as well as the effects of societal structures on clients. Topics include an overview of general principles of cultural diversity and cross-cultural services delivery to individuals from many diverse backgrounds. Prereq: SHS100 and SHS101, each with 2.0 or higher; eligibility for ENGL099; and eligibility for MATH087 or MATH091.

**SHS 215 (3) C****Adolescent Development and Treatment**

Overview of prevention, assessment and treatment, and recovery and relapse issues of addiction amongst adolescents. Also explores public policies regarding young adults with addiction. Prereq: Psych 200 with a 2.0 or higher; or Psych 207 with a 2.0 or higher.

**SHS 222 (3) C****Conflict Management**

Intro to understanding and responding effectively to conflict situations. Assess real life conflict cases and design corresponding intervention strategies through video and case studies. Complete a conflict style inventory and practice conflict communication skills. Prereq: Eligible for ENGL& 101 and MATH 084.

**SHS 224 (3) C****Leadership Theory and Skills**

Covers selected major theories of effective leadership and application of leadership skills in the work setting. Examines the characteristics of effective leaders, and evaluates students' professional strengths for potential leadership development. Prereq: ENGL& 101 and MATH 084.

**SHS 225 (1) C****Relapse Prevention**

Defines behavioral and chemical characteristics of relapse and what relapse prevention involves. Focuses on relapse prevention categories, requirements of clients for a relapse prevention program, characteristics that have an impact on relapse, antecedents to relapse and some of the dysfunctional thinking patterns. Covers clinical and practical techniques and skills in an experiential environment. Prereq: SHS 235 and eligible for ENGL& 101 and MATH 084.

**SHS 230 (3) C****Suicide Risk Assessment**

This class provides an introduction to suicide assessment and prevention. Students will be introduced to topics such as signs and symptoms of suicidal/self-harm behavior, facts and myths about suicidal behavior, conducting an assessment interview, risk factors and protective factors, the treatment of suicidal individuals, the contagion effect, and self-care for those working with suicidal/self-harm individuals. Prerequisite: eligible for ENGL& 101 and MAT 084.

**SHS 231 (5) C****Pharmacology of Addictions**

Studies pharmacological addictions of alcohol and other drugs. Explores the physiological and psychological effects of drugs, clinical signs, symptoms, and behaviors associated with addiction, effects of drug and alcohol use on the nervous system, drug classifications and medication assisted treatment (MAT). Prereq: SHS 235 with 2.0 GPA; eligibility for ENGL&099, and Math 087 or 091. Meets educational requirements for courses for Substance Use Professional included in WAC 246-811-030.

**SHS 232 (5) C****Addiction, Adolescents and Family Systems**

Explores adolescent and family addiction issues from developmental, clinical, social, cultural and treatment perspectives. Focus is on family theories and conceptual frameworks, the impact of addiction on adolescent and family development, assessment and diagnosis, the progression of addiction/disease for families and adolescents, implications for treatment, aftercare and relapse. Prerequisite: SHS 235 with a 2.0; Eligibility for ENGL&099; and MATH 087 or MATH091.

**SHS 233 (5) C****Chemical Dependency Counseling**

An overview of drug addiction counseling using evidence-based theories and assessments. Emphasis will be placed on cultural and social diversity, motivational interviewing/engagement, stages of change, S-BIRT and ASAM, ethical behavior, and harm-reduction. Prereq: Successful completion of SHS 106 and SHS 235.

**SHS 235 (5) C****Drug Addiction and Society**

Overview of physiological, psychological, psycho-social, and systemic concerns related to drug addiction. Explores prevention, intervention and treatment. Prereq: Eligibility for ENGL 101 and Math 087 (or equivalent).

**SHS 245 (3) C**  
**Mental Health Overview**

Provides an overview of mental health and community mental health systems. Covers major psychiatric disorders and their common symptoms, examines evidence-based practices in mental health treatment, and reviews mental health resources.ack, meditation, psychosomatic diseases and sPrerequisite: ENGL& 101 with a minimum grade of 2.0.

**SHS 250 (4) C**  
**Client and Community Advocacy**

Covers the role of the advocate in a helping situation, use of community advocacy resources and effective use of the media, law, negotiation and political processes to achieve needed services for people. Prereq: Eligible for ENGL& 101 and MATH 084.

**SHS 255 (5) C**  
**Mental Health and Co-Occurring Disorders**

Overview of mental health and co-occurring disorders. Covers symptomatology of frequently diagnosed mental disorders; criteria for substance abuse and dependence; evidence-based practices for treatment and local services available for individuals, families, and the community. Prereq: ENGL 101, MATH 084 and SHS 100, all with a 2.0 or higher.

**SHS 270 (3) C**  
**Ethics in Human Services and Chemical Dependency**

Explores the WA Administrative Code, federal codes, and professional codes of ethics that apply to human services and chemical dependency professionals. Examines ethical theory, ethical reasoning processes, and ethical analysis. Prereq: Eng 101, Math 87, and SHS 100, each with a 2.0 or higher.

**SHS 275 (3) C**  
**Chemical Dependency and Domestic Violence**

Specifically designed for those working with chemically addicted, abusive clients and their interactions with family members. Study of treatment goals for domestic violence to foster client understanding of anger, making anger a useful tool, and using healthy and appropriate modes of communication. Prereq: Eligible for ENGL& 101 and MATH 084.

**SHS 280 (3) C**  
**Chemical Dependency Case Management**

Emphasis on oral and written communication skills. Formulate up-to-date, accurate, and understandable case files and records. Learn federal and state confidentiality regulations in handling chemical dependent client records. Formulate concise treatment plans in accordance with legal requirements. Prereq: SHS 235; Eligible for ENGL& 101 and MATH 084.

**SHS 296 (1) C**  
**Special Topics**

Receive credit for participation in approved human services professional workshops on topics such as stress management, welfare rights, aging, alcoholism, family therapy, depression, law and mental health.

**SHS 297 (2) C**  
**Special Topics**

Receive credit for participation in approved human services professional workshops on topics such as stress management, welfare rights, aging, alcoholism, family therapy, depression, law and mental health.

**SHS 298 (1-5) C**  
**Special Topics**

Receive credit for participation in approved human services professional workshops on topics such as, but not limited to, stress management, welfare rights, aging, alcoholism, family therapy, depression, law, and mental health. Prerequisites: Eligible for ENGL& 101 and MATH 084/091/087.

**SHS 299 (1-5) C**  
**Independent Study or Research**

Individual or group research projects on human service programs and problems. May include field or library research. Prereq: Requires a learning contract.

**Social & Human Services****CDS 197 (3) C**  
**Field Practicum: Chemical Dependency**

Supervised community-based field experience in which students apply knowledge and develop skills by working in public and private agencies and organizations. Prereq: Permission.

**CDS 198 (3) C**  
**Field Practicum: Chemical Dependency**

Supervised community-based field experience in which students apply knowledge and develop skills by working in public and private agencies and organizations. Prereq: Permission.

**CDS 199 (4) C**  
**Field Practicum: Chemical Dependency**

Supervised community-based field experience in which students apply knowledge and develop skills by working in public and private agencies and organizations. Prereq: Permission.

**CPP 101 (5) C**  
**Introduction to Community Policing**

Overview of the Seattle Police Department's function and operational procedures. Focuses on policing philosophy, theory and procedure. Understand the different dynamics of the police profession and the progression of the policing philosophy.

**Social Sciences Resources****SSC 101 (3) N**  
**Intro to Research Skills**

Develop critical thinking as applied to the research process by examining strategies for locating, evaluating, and using information. Explore issues related to information ethics, such as plagiarism and copyright, in addition to issues related to our contemporary online information environment. Emphasis on developing proficiency using encyclopedias, databases, and the library catalog. Learn to write focused research questions and learn strategies for organizing research.

**SSC 187 (5) C**  
**Information Resources for Social Justice**

Explores theories of mainstream and alternative cultures and their impact on information in a democratic society. Addresses concerns about the political and economic aspects of information related to the ongoing struggle for equality and human rights. Examines various research strategies for identifying, locating, evaluating and applying information resources for social justice.

**SSC 197 (1-5) C**  
**Work Experience-Social Science**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply social science knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**SSC 297 (1-10) C****Travel/Study Experience**

Hands-on learning opportunity for students in domestic and/or foreign travel. Focuses on learning outside the classroom and taking advantage of cross-cultural opportunities. Includes historic sites, geographical locations, geological formations, museums, art centers, regional customs and foods, language enhancement, specialized research libraries, local universities and legislatures available only through travel.

**SSC 330 (1-5) C**  
**Information Literacy for Undergraduate Research**

Explores strategies, topics, and concepts to develop research practices for Bachelor's level study. Focuses on in-depth investigation of the organization, retrieval, and evaluation of professional and discipline-specific digital and print information sources.

**Sociology****SOC& 101 (5) C | N | S**  
**Introduction to Sociology**

Introduces students to the scientific study of society and to several sociological concepts, including socialization, stratification, research methods, social theory, group dynamics, social class, gender, sexuality, race, ethnicity, media, family, deviance, and social and cultural change. Students learn how to connect research to concepts and use the sociological imagination, the relationship between self and society, to deepen their understanding of social life.

**SOC 102 (5) C**  
**Introduction to American Culture**

Examines American cultural values, beliefs, and practices. Students explore core social institutions, such as the family, politics, and the media and learn about patterns of inequality associated with race, ethnicity, social class, gender, and sexuality. Field trips, films, participation in campus events, and observation activities may support cultural learning and facilitate cross cultural analysis.

**SOC 105 (5) S**  
**Society of Black Americans**

Evaluation of the sociological impact of the African-American experience in relation to various social systems in America.

**SOC 106 (5) C | S**  
**Sociology of Asian Americans**

Examines Asian American experiences in the United States from a sociological perspective. It focuses on Asian-American racial/ethnic communities and social institutions and explores settlement patterns, education, employment, anti-Asian violence, media representations, family and gendered identities, and political empowerment. Patterns of inequality, including prejudice, discrimination, and the model minority myth, are core themes.

**SOC 150 (5) C | S**  
**Race and Ethnic Relations in the United States**

Examines the majority-minority pattern of interaction in American society. Includes theories of race relations and issues shaping intra- and interracial ethnic relations.

**SOC& 201 (5) C | N**  
**Social Problems**

Introduces students to core sociological concepts and theories through the lens of social problems. The focus is on examining processes by which members of society define social issues as problems and evaluating social change strategies. Students apply concepts and theories to a range of social problems, such as poverty, crime, discrimination, economic inequality, addiction, health issues, war and terrorism, and environmental issues.

**SOC 215 (5) C | N**  
**Criminology**

Survey of Criminology. Covers legal definitions, research methods, types of criminal behavior, trends and patterns, recidivism, characteristics of offenders, environmental influences, theories of crime and delinquency prevention, and social policy.

**SOC 220 (5) C**  
**Sociology of Gender & Sexuality**

Explores the social construction of sex, sexuality, and gender over time and across cultures. Examines gender as a fundamental organizing aspect of social life and study patterns of gender inequality. Students learn about ways in which social structures and personal experiences interact to both reproduce and challenge hierarchical systems.

**SOC 225 (5) S**  
**Psychology of Addiction**

Psychology of addiction, a critical examination of the behavior and mental processes associated with addiction. Systemic approaches to investigation through psychosocial, biological, cognitive and sociobehavioral areas in psychology. Lecture, research, presentation and critical examination. 5 credit class. 200 level course. Prerequisite: PSYC 100 General Psychology or SOC 101 Intro to Sociology This is a dual PSYC/SOC course.

**SOC 230 (5) N | S**  
**Human Sexuality**

Survey of sexual behavior. Covers historical, physiological, psychological and social components of sexuality and its deviations. May be taken as PSYC 230.

**SOC 245 (5) N | S**  
**Social Psychology**

Examines the effect of others on the individual in areas such as self-concept, social cognition, conformity, helping, loving and liking, competition and cooperation and prejudice and discrimination. Research and autobiography by two of the following groups provide content and illustration: African Americans, Asian Americans, Native Americans and Hispanic Americans. May be taken as PSYC 245.

**SOC 250 (5) C**  
**Marriage, Family and Intimate Relationships**

Surveys the concept of family as a mode for personal living. Analyzes personal adjustment, parent-child relationships, marital and alternative structures and contemporary issues facing today's family systems.

**SOC 253 (5) S**  
**Organizational Behavior**

Organizational behavior as seen through sociological theory. Concepts show how managers can improve organizational effectiveness by attending to the human side of the enterprise. Topics such as leadership, conflict theory, motivation, social interaction theory, power, politics, group dynamics and organizational design are examined for the effects on employees and their performance.

**SOC 271 (5) N**  
**Introduction to Deviance and Social Control**

Examination of deviance, deviant behavior, and social control. Deviance as a social process influenced by power; theories of deviance and deviant behavior; nature and social organization of societal reactions; and social and legal policy issues.

## Spanish

**SPAN& 121 (5) C | N | S**  
**Spanish I**

Begins the systematic study of Spanish focusing on listening, speaking, reading, writing, grammar, and cultural aspects of the countries in which Spanish is spoken. No prior knowledge of Spanish required. Prereq: Eligibility for ENGL& 101 (C).

**SPAN& 122 (5) C | N | S**  
**Spanish II**

Continued systematic study of Spanish focusing on listening, speaking, reading, and writing. Includes study of the cultural aspects of the regions where Spanish is spoken.

**SPAN& 123 (5) C | N | S**  
**Spanish III**

Continuation of SPAN&122. Continuing study with intensive focus on listening, speaking, reading, and writing. Further study of the cultural aspects of the regions where Spanish is spoken.

**SPAN& 221 (5) N | S**  
**Spanish IV**

Continuation of SPAN& 123. Review of grammatical structures, intensive practice in writing, conversations and reading on a variety of topics. Intro to Hispanic culture, literature and art. Prereq: SPAN& 123 or permission.

**SPAN& 222 (5) N**  
**Spanish V**

Continuation of SPAN& 221. Emphasis on the four aspects of language: reading, writing, listening and speaking through composition, oral presentation and guest speakers. Prereq: SPAN& 221 or permission.

**SPAN 236 (5) C**  
**Spanish American Colonial Literature**

Surveys literary expressions of Colonial times through 18th century in Spanish America and Peninsular Spain. Covers representative and outstanding prose works of 16th and 17th centuries. Also offered as LIT 236.

**SPAN 238 (5) C**  
**Chicano Narrative**

Intro to significant works in Chicano literature. Study of genre development. Understand the implications of interdependence among diverse cultural groups. Also offered as LIT 238.

**SOC 298 (1-5) C**  
**Special Topics in Sociology**

Independent study in selected sociology topics under faculty supervision. Prereq: Permission.

**SOC 299 (1-5) C**  
**Special Problems in Sociology**

Small group seminar to discuss selected sociology topics. Prereq: Permission.

**SPAN 299 (1-5) C | N**  
**Independent Study in Spanish**

Independent study of selected topics in Spanish arranged with instructor. Prereq: Permission and completion of 100 and 200 series or equivalent.

## Specialty Desserts

**BAK 101 (4) C**  
**Intro to Desserts & Breads: Theory**

Intro to baking/cooking methods and to the scientific principles used in this field. Covers ingredient responses to temperature, friction and storage; mise en place; ingredient functions and characteristics; tools/equipment; and trade terminology. Includes discussion of yeast doughs, quick breads, syrups, icings, sauces and creams, pastries, pies and tarts, cake mixing and baking. Prereq: Admission to program.

**BAK 102 (3) C**  
**Bread and Food Preservation**

Presents theory and ingredients, including why specific baking techniques work. Emphasizes the formation and exercise of judgment in baking practice, relationships between procedures and products, and evaluation of product quality. Includes discussion of artisan bread production, German and rye breads, laminated doughs, vegetable ferments, beer and wine, charcuterie, artistic design doughs, cheese reports and five-year plan and site visit reports. Prereq: BAK101 with a minimum grade of 2.0.

**BAK 103 (4) C**  
**Science and Practice of Baking with Chocolate**

Presents advanced theory and ingredients in the chocolate making process, fair trade practices, cacao bean growing and chocolate making. Learn the scientific principles of sugar process, sugar alcohol, sugar cooking stages, fat functions and characteristics. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

**BAK 105 (2) C**  
**Restaurant Baking: Theory**

For culinary arts students. Expands on science and principles of baking, including yeast doughs and formulas, icing techniques, basic cake types and characteristics of desserts. Prereq: Successful completion of 2nd quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

**BAK 111 (6) C**  
**Introduction to Desserts & Breads: Practicum**

Application of baking theory to production. Includes mise en place and preparation of a variety of doughs, breads/rolls, breakfast breads/pastries, cookies, tarts, sponge and tea cakes and decorated cakes. Prereq: Admission to program.

**BAK 112 (8) C**  
**Beginning Desserts and Breads: Practicum**

Further application of baking theory to production, including exercising judgment and product success/failure analysis. Includes preparation of pastry creams, egg foams, butter creams, meringues, mousses, soufflés, custards, frozen desserts, holiday desserts, compotes, chocolate candies, sauces and fillings. Prereq: Successful completion of 1st quarter Specialty Desserts and Breads Program courses with a minimum GPA of 2.0 in each course.

**BAK 113 (8) C**  
**Intermediate Desserts and Breads: Practicum**

Development of professional bakery skills, including organization, accuracy and communication. Practice assessment of product texture, taste and appearance. Includes preparation using advanced techniques of intricate chocolate work, European cakes and plated desserts, with increased emphasis on presentation and artistic skills. Prereq: Successful completion of 2nd quarter Specialty Desserts and Breads Program courses with a minimum GPA of 2.0 in each course.

**BAK 115 (1) C**  
**Restaurant Baking: Practicum**

For culinary arts students. Production of baked goods including ganache, custards, creams, puddings, mousses and purees. Prereq: Successful completion of 2nd quarter Culinary Arts courses with a 2.0 or better.



**BAK 116 (1) C****Fine Dining Baking: Practicum**

For culinary arts students. Applies baking theory to production of yeast doughs (bread, puff pastry and choux), focaccia, cakes, icings, decorations, mousses, tortes, puff pastries and fine plated desserts. Prereq: Successful completion of 3rd quarter Culinary Arts courses with a minimum GPA of 2.0 in each course.

**BAK 117 (1) C****Introduction to Cheese Making**

For culinary academy students. Learn cheese making and fermentation techniques in the culinary field, including cheese diversity, milk composition, and the eight basic steps. Prereq: Successful completion of previous quarter's Specialty Desserts and Breads or Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

**BAK 123 (2) C****Adv Buff. Desserts/Wed Cakes/Preservation-Theory**

Learn, analyze, and develop an understanding for the components of successful wedding cakes and petit fours. You will explore current industry standards in regards to flavor profiles, design components and structure. This course includes a review and discussion on a variety of preservation methods and techniques for preserving summer produce. Prereq: Successful completion of 3rd quarter Specialty Desserts and Breads Program courses with a minimum GPA of 2.0 in each course.

**BAK 124 (8) C****Adv. Buffet Desserts/Wedding Cakes/| Preservation**

Design and develop a line of wedding cakes and petits fours using the latest industry techniques. Produce jam and preserves using organic fruits and vegetables. Includes practicing the seed to plate cooking model and designing and marketing a bakery display case. Prereq: Successful completion of 3rd quarter Specialty Desserts & Breads courses with a minimum GPA of 2.0 in each course.

**BAK 125 (8) C****Advanced Desserts and Breads: Practicum**

Design and develop a line of bakery goods. Purchase and inventory goods and calculate cost analysis as an extension of the class project. Prereq: BAK 113 or permission.

**BAK 126 (3) C****Advanced Whole Grain Baking Theory**

Explore the unique properties associated with a wide variety of fresh milled whole grains as applied to baking as well as alternative sugars in pastry work. Learn scientific principles applied to yeast products, fermented foods, and food preservation including flour facts and alcohol fermentation. Prereq: Successful completion of previous quarter's Specialty Desserts and Breads Program courses with a minimum GPA of 2.0 in each course.

**BAK 299 (1-5) C****Special Projects/Commercial Baking**

Independent study course for individual projects in the desserts/pastry field. Prereq: permission.

**Supervision and Management****SMG 100 (3) S****Leadership and Supervision**

Intro to management. Covers leadership theories, style skills in various organizational settings; developing techniques for productive work groups; managing a diverse work force; motivating employees; handling difficult people and situations; running effective meetings; and handling the responsibilities of being a leader, manager and supervisor.

**SMG 103 (3) S****Supervising a Diverse Workforce**

Examines perceptions held by supervisors and employees in connection with culturally and behaviorally diverse workers. Examines working with and supervising diverse population groups. Explores current legislation and challenges of an evolving workforce.

**SMG 120 (3) S****Hiring Personnel**

Examines supervisor's role in staffing. Covers job analysis, descriptions and classifications, recruiting, selection, EEO and new employee orientation.

**SMG 197 (1-5) S****Internship or Cooperative Education Experience**

Provides practical work experience and employment contacts by integrating academic studies with actual on-the-job training. Orientation to Internships required prior to registration. Prereq: Permission.

**SMG 210 (3) S****Project Management**

Covers project planning basics: timelines, evaluation, implementing budgeting concepts and formulating a budget request strategy with specific and measurable outcomes. Focuses on team concepts. Includes computer lab applications.

**SMG 220 (3) S****Personnel Performance Management**

Covers principles and techniques for employee performance programs, appraisals, coaching and counseling, disciplinary process and wage surveys. Explores reward systems, common disciplinary practice and employment law. Covers assessment of training needs, planning, development and evaluation of training programs.

**SMG 222 (3) S****Management and Labor Relations**

Covers the supervisory role in employee and labor relations. Includes history of management thought, labor negotiations, laws affecting labor agreements, union contracts and the supervisor's role in the negotiating process.

**SMG 243 (2) S****Its the Law: Contracts and Liabilities**

Covers the law as it relates to contracts and liabilities in nonprofits. Focuses on legal issues that nonprofit staff and boards need to be aware of, including personnel contracts, grant contracts, personal service contracts, fund-raising contracts, service provider contracts, antitrust and related liabilities. Includes employment laws, officer/director liabilities and indemnification.

**SMG 298 (1-10) S****Independent Study-Supervision and Management**

Provides opportunity for research, advanced study, or special projects. Work independently with an instructor. Credits vary. Prereq: Permission.

**Surgical Technology****SURG 111 (6) C****Surgical Lab**

Covers principles and techniques of operating room procedures. Includes gowning and gloving, aseptic technique, creating and maintaining a sterile field, draping materials, basic instrumentation and patient transport. Prereq: Permission.



**SURG 113 (10) C****Surgical Theory I**

Intro to surgical technology, including legal and ethical aspects, relationships with co-workers, hospital organization and inter-departmental relations, physical and psychological aspects of patient care, operating room techniques and procedures. Prereq: Permission.

**SURG 115 (2) C****Clinical Orientation**

Covers observation of the environment, routines, supplies and equipment, patient-team interaction and application of scientific principles. Prereq: Permission.

**SURG 121 (6) C****Surgical Specialty/Professional PREP**

Intro to the principles and practice of surgical pharmacology and anesthesia related to the surgical patient. Learn about minimally invasive surgical instrumentation, equipment and supplies. Prereqs: SURG 111, 113, 115.

**SURG 123 (8) C****Surgical Theory II**

Examines microbiology, pharmacology, and anesthesiology relating to the surgical patient. Includes additional peri-operative care techniques and surgical procedures, pathophysiology, and the technologist's role in surgery. Covers general, orthopedic, gynecological, genitourinary-re productive, and ophthalmic specialties. Prereq: Successful completion of SURG 113, or Instructor's permission. Co-requisite: SURG 121 and SURG 125.

**SURG 125 (4) C****Clinical Practice I**

Provides clinical practice, with focus on development of entry-level skills. Prereq: Permission.

**SURG 133 (8) C****Surgical Theory III**

Intro to circulating duties and job applicant skills. Covers advanced surgical specialties such as ear, nose and throat, vascular, cardiovascular, thoracic, neurological, plastic/reconstructive and pediatric procedures. Prereq: Permission.

**SURG 135 (10) C****Clinical Practice II**

Provides advanced clinical practice to develop entry-level skills. Prereq: Permission.

**Hearing Impairment, Survey of****SPS 141 (9) C****Sterile Processing Services 141**

Provides advanced clinical practice to develop entry-level skills. Prereq: AHE 140 w. a 2.0

**Sustainable Building Science Technology****SBST 301 (3) S**

Overview of the principles of Building Science and how it is applied to the design, operation and maintenance of buildings and their systems. Covers the interaction of those systems, and the careers that use and are impacted by these principles and their applications.

**SBST 302 (2) S****Building Components and Systems**

Overview of building components, space conditioning and lighting systems, their interactions, and the building science issues surrounding and impacting them.

**SBST 314 (2) S****Professional Portfolio**

Document prior work experience by developing an E-portfolio to receive Workforce Experience Practicum credit.

**SBST 315 (10) S****Work Experience Practicum**

Credits based on the successful completion of the Professional Portfolio course SBST 314. Students must have demonstrated 2-5 years of relevant work experience in their area of interest.

**SBST 321 (2) S****Building and Energy Codes in Washington State**

Overview of building and energy codes and requirements. Prerequisite: Admission to BAS-SBST Program.

**SBST 322 (3) S****Energy Analysis and Auditing**

Covers energy auditing and analysis skills for commercial buildings.

**SBST 325 (1-10) S****Sustainable Building Science Technology Internsh**

Observe, reflect and practice sustainable building science technology techniques in a technical, post-secondary environment. Find a building science placement in the field of interest and work with a site supervisor to develop and deliver relevant curriculum. The site supervisor and college faculty advisor will evaluate the internship.

**SBST 331 (2) S****Financing Energy Efficiency and Renewable Energy**

Overview of energy economics.

**SBST 332 (3) S****Building Energy Codes in Washington State**

Overview of building energy codes in Washington State.

**SBST 333 (4) S****Building Controls for Energy Efficiency**

Overview of building components.

**SBST 401 (2) S****Utility Rates Regulations and Economics**

Overview of utility rate structure.

**SBST 402 (3) S****Lighting**

Overview of building lighting systems.

**SBST 421 (3) S****Energy Policy**

Overview of energy policy.

**SBST 422 (4) S****Facility Management**

Overview of facilities management.

**SBST 431 (4) S****Professional Communication**

Overview of professional communication in the building science industry

**SBST 432 (3) S****Fiscal Management for Facility Managers**

Overview of fiscal management for facility managers.

**SBST 489 (4) S****Sustainable Building Science Technology Capstone**

Develop a project based on previous classes and internship experiences.

## Undergraduate Research

### UGR 214 (1-5) C | N Introduction to Scientific Research

Preparation for successful completion of an independent research project. Includes the application of scientific method, ethics, research methods, proposal writing and presentation techniques.

### UGR 294 (1-5) C | N | S Independent Research

Work collaboratively with peers and faculty. Design, complete and publicly present an original research project.

## Visual Media

### VME 110 (4) C Professional Practices I

Explores the varied career paths found in visual media. Emphasis is placed on creative styles and trends in image making and storytellers of today. Entry-level issues such as working conditions, time management, organizational strategies and professional ethics will also be examined. Students will begin learning the language of media and how to critique work of their peers.

### VME 111 (4) C Professional Practices II

Explores professional business communications. Examines methods of written communication for the visual problem solvers. Explore script writing, the creative pitch, presentations, etc. Learn multimedia storytelling, narrative forms and techniques. Develop a better understanding of using images and audio to advocate, communicate or address a specific subject or issue. Prerequisite: Successful completion of the program through preceding quarter.

### VME 120 (4) C Lighting Techniques I

Covers the basic methods of commercial lighting; the laws, principles, and practices of light; the qualities of direct/indirect sunlight and tungsten light sources; lighting for form, texture. Introduces standards for the safe operation of lighting equipment in a studio environment.

### VME 121 (4) C Lighting Techniques II

Covers studio techniques for lighting people. Addresses safe operation of studio equipment for portrait lighting setups. Introduces three-dimensional contrast in a traditional portrait studio setting. Includes subject rapport, subject posing and development of a theme-based narrative using advanced lighting techniques while demonstrating set construction skills. Prerequisite: Successful completion of the program's previous quarter.

### VME 131 (4) C Conceptual Solutions I

Emphasizes research and creative problem solving to achieve a successful solution to a stated visual problem. First of two courses. Students experiment with different presentation techniques and deliverables to solve a series of eleven one week assignments designed to force students to be creative in a short amount of time. Prereq: Successful completion of the program through preceding quarter.

### VME 145 (4) C Digital Imaging I

Addresses the terminology and ethics of capturing digital images. Covers the functions and operation of HDSLR cameras. Introduces techniques for determining optimum exposures and basic compositional aesthetics. Includes development of an organized file management system utilizing Adobe Lightroom and parametric editing in Capture One.

### VME 146 (4) C Digital Imaging II

Covers the creative and technical requirements of digital image optimization using Adobe Photoshop Creative Cloud. Includes interface navigation, tools, layers and filters, creation and manipulation of image selections, adjustments of color and contrast, use of retouching, masking, cropping, and basic image compositing, and the export of images for print and web. Prerequisite: Successful completion of the first quarter of the Associate of Applied Science program in Visual Media.

### VME 147 (4) C Digital Imaging III

Introduces advanced image editing techniques and production workflows in Adobe Photoshop. Focuses on precise color correction, refined selections, and multiple image compositing. Includes advanced retouching and image output and evaluation. Requires the creation of a cohesive final project of professional quality utilizing these advanced image editing tools and techniques. Prereq: Successful completion of the previous quarter within the VME program.

### VME 150 (4) C Visual Media I

This course provides a bridge between still and motion working with a DSLR camera. Introduction to the Adobe Premiere and technical aspects of video production. Students will design, shoot, and edit several short projects. They will be introduced to a digital, non-linear, post-production environment.

### VME 151 (4) C Visual Media II

This course examines production methods, pre-production and post-production techniques, basic motion graphics, time-lapse video, slow motion and audio design. Working with crane/jib/sliders and other various tools. Students must work collaboratively as well as individually throughout the quarter.

### VME 153 (4) C Visual Media III

Builds on production methods, pre-production, and post-production techniques learned in previous courses. Introduces multi-camera solutions, as well as color correction and grading using Adobe SpeedGrade. Emphasis placed on professional audio and sound effects using Pro Tools for mixing and mastering audio. Students learn how to work effectively, and develop and simulate a professional workflow for a specific project. Prereq: Successful completion of the program through preceding quarter.

### VME 160 (4) C Studio Techniques I

Focus on portrait & lifestyle photography techniques: seeing and using available light; using on-camera strobe units; choosing appropriate poses & lighting; story-telling sequencing photos; & adding words & music to increase emotional & saleable impact. Includes retail sales materials, presentations, and pricing strategies. Students encouraged to explore solutions and be creative in their approach to visual problem-solving. Prereq: Successful completion of program through preceding quarter.

**VME 170 (4) C**  
**Audio Production I**

Introduces critical listening techniques, basic analog and digital theory, as well as best practices for sound recording and audio editing to develop skills as effective audio storytellers. In the field, students will learn to use equipment typical to the industry to record ambiences, sound effects, and voices. Using Adobe Audition and Premiere students will layer sounds to create audio narratives.

**VME 197 (3) C**  
**Work Experience - Visual Media**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply visual media knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring. Prereq: Instructor's permission (Must be employed, interning, or volunteering in a position approved by program faculty or the Cooperative Education Office.)

**VME 220 (4) C**  
**Digital Imaging V**

Introduces beginner & intermediate concepts & techniques for creating & rendering motion graphics using Adobe After Effects. Focuses on video compositing & animation, integration of titles, basic green screen & keying skills, & 3d/360 video integration. Requires completion of a cohesive final project that integrates multiple applications of After Effects capabilities and techniques utilizing these image rendering and animation tools. Prereq: All previous program courses with a 2.0 or higher.

**VME 232 (4) C**  
**Conceptual Solutions II**

Final of two courses with an emphasis on research and creative problem-solving to achieve a successful solution to a stated visual problem. Students experiment with different presentation techniques and deliverables to solve a series of eleven one-week assignments designed to compel students to be creative in a short amount of time. Prereq: Successful completion of the previous quarter.

**VME 233 (4) C**  
**Conceptual Solutions III**

Third course in a series with an focus on storytelling through photography and video work. This class will emphasize key script elements such as plot structure, character and scene development. Students will use production design and photographic techniques to produce deliverables that have compelling narrative or character traits. The class work will focus on a series of two to three-week assignments which are designed to compel students to be creative in a short amount of time.

**VME 245 (4) C**  
**Audio Production I**

Introduces critical listening techniques, basic analog and digital theory, as well as best practices for sound recording and audio editing to develop skills as effective audio storytellers. In the field, students will learn to use equipment typical to the industry to record ambiences, sound effects, and voices. Using Adobe Audition and Premiere students will layer sounds to create audio narratives. Prereq: successful completion of the program through preceding quarter.

**VME 250 (4) C**  
**Visual Media IV**

Advanced digital video production focusing on the skills needed to complete professional digital video productions pertaining to location and studio environments. Students will produce material including short documentaries, interviews, studio productions, and music videos. Students will rotate through the roles of a production team while producing projects. Prereq: Successful completion of the program through preceding quarter.

**VME 251 (4) C**  
**Visual Media V**

Begins the final capstone visual media production. Covers the fundamentals of producing & directing techniques of digital video production. In teams, students learn the process of producing a major video production: concepting, script writing, story development, planning, timelines, props, casting, & budgeting. Explores storytelling using 360 video & virtual reality environments to enhance the experience. Prereq: Successful completion of the program through preceding quarter.

**VME 252 (4) C**  
**Visual Media VI**

Builds on the skills and knowledge acquired in previous Visual Media courses. Introduces advanced editing techniques including compositing footage, color balancing, chroma-keying, advanced effects, and sound mixing and manipulation. Concludes with a capstone project that is collaboratively produced and demonstrates advanced skills in editing techniques. Prereq: Successful completion of the program through preceding quarter.

**VME 261 (4) C**  
**Studio Techniques II**

Second in a series of 3 classes focused on technique. Explores how to understand the needs of the client, the audience, & the art direction of a campaign, as well as professional requirements of corporate & editorial photography. Continued work on understanding lighting controls while working on location. Students engage in real projects to develop conceptual and creative solutions to produce images that tell a compelling story. Prereq: Successful completion of the program through preceding qtr.

**VME 262 (4) C**  
**Studio Techniques III**

The final course, in a series of three, focused on technique. Explores how to understand the needs of the client, the audience, and the art direction of a campaign. Focuses on food & product photography, identifying some of the challenges and how to resolve them. It offers an in-depth research and practice on how different foods, textures, & products (metal, glass, fabric, plastic, etc.) respond to different types of light. Prereq: Successful completion of the program through preceding quarter.

**VME 270 (4) C**  
**Professional Business Practices: Visual Media**

Provides practical experience with pricing and negotiating fees, writing proposals and design briefs, organizing efficient timelines, managing workflows, and applying basic accounting and business practices. Students acquire work contracts with a client and apply their design skills in exchange for a fair wage or equitable trade. Students are provided with ethical guidelines for conduct and behavior within the visual media profession. Prerequisite: Successful completion of the previous quarter.

**VME 276 (4) C**  
**Portfolio Show**

Students will collaboratively participate in the planning and organization of the portfolio show. This will include, but is not limited to, Branding, Marketing, Web-Design and Development, Photography, Videography, Exhibit Design, Social Media and Promotion. Students are required to design and install their own work for the show.

**VME 280 (4) C**  
**Special Projects I**

The first in a series of 3 courses designed to expand current visual media knowledge & skills, offering students the opportunity to work on a major self-initiated visual media project. Emphasizes research and visual experimentation that leads to a successful visual media solution. By engaging in a unique quarter-long project, students have the opportunity to develop strong portfolio pieces with the goal of employment. Prereq: Successful completion of the program through preceding quarter.

**VME 281 (4) C**  
**Special Projects II**

Second in a series of three courses designed to expand current graphic design knowledge and skills, offering students the opportunity to work on a major self-initiated design project. Emphasizes research and the design process that leads to a successful design solution. By engaging in a unique quarter-long project, students have the opportunity to develop strong portfolio pieces with the ultimate goal of employment. Prereq: Successful completion of the program through preceding quarter.

**VME 282 (4) C**  
**Special Projects III**

The last in a series of three courses designed to expand current graphic design knowledge and skills, offering students the opportunity to work on a major self-initiated design project. The course emphasizes research & the design process that leads to a successful design solution. By engaging in a unique quarter-long project, students have the opportunity to develop strong portfolio pieces with the ultimate goal of employment. Prereq: Successful completion of the program through preceding qtr.

**VME 286 (4) C**  
**Portfolio**

Develop, design and prepare a portfolio of work that represents the student's creative voice and professional direction, for presentation to multiple clients, representatives and agencies. Includes various presentation methods, including electronic portfolios. Create marketing materials: business card, stationery and self-promotion. Prereq: Successful completion of the program through preceding quarter.

**WA Bldg Officials****WABO 101 (3) S**  
**Public Service in Washington State**

This is the first course in the first year of the WABO short-term certification program. This course examines WA State jurisdictions, characteristics of effective public servants, and general guidelines for public service.

**WABO 102 (3) S**  
**Skills for Success in Public Service**

This is the second course in the first year of the WABO short-term certification program. This course examines the interpersonal and customer service skills needed for public servants working directly with the public.

**WABO 103 (3) S**  
**Permit Specialist Course**

This is the third course in the first year of the WABO short-term Code Accreditation certification program. This course introduces students to the codes that jurisdictions expect Permit Specialists to have basic knowledge of. Exposure will be to the 2015 International Residential Code and 2015 Washington State Energy Code.

**WABO 201 (3) S**  
**Code Administration for Inspectors**

This is the first course in the second year of the WABO short-term certification program, focusing on construction inspectors. The course examines data collection, technical accuracy and production efficiency, balancing these demands in a highly visible role with government authorities, for-profit businesses and the general public.

**WABO 202 (3) S**  
**Public Service and Regulation for Inspectors**

This is the second course in the second year of the WABO short-term certification program, focusing on construction inspectors. The course examines data collection, technical accuracy and production efficiency, balancing these demands in a highly visible role with government authorities, for-profit businesses and the general public.

**WABO 203 (3) S**  
**Building Inspector Course**

This is the third course in the second year of the Washington Association of Building Officials short-term Code Accreditation certification program. This course introduces students to the codes of which jurisdictions expect Building Inspectors to have basic knowledge. Exposure will be to the 2015 International Residential Code and 2015 Washington State Energy Code.

**Watchmaker****HIN 111 (6) N**  
**Introduction to Watch Technology**

This introductory course will allow students to survey the history of time measurement and the watch and clock trade. Students will develop a foundation in the fundamentals of safe shop practices including lab hazard, accident prevention and first aid. Introduction to trade terminology associated with tools, equipment, technical drawing, measuring devices and applications appropriate to the trade and physical properties of materials.

**HIN 112 (6) N**  
**Watch Technology I: Tools, Equipment & Measureme**

This course will focus on applying knowledge of tools and equipment including care and maintenance in a lab setting. Students will learn the types and appropriate use of jeweler's saw, tweezers, screw drivers, files and the watchmaker's lathe. Students learn the fundamentals of hardening, tempering and annealing steel; measuring techniques and applying the metric system in the use of instruments and gauges. Students to make technical drawings and to manufacture tools and parts using drawings.



**HIN 113 (10) N****Watch Technology I: Practicum**

This is a 10 credit practicum where students begin to apply the information and knowledge gained in HIN 111 and HIN 112. In a lab environment, students will practice making tools and develop basic skills in the manufacture and repair of parts for time pieces. Identification and application of tool and equipment use while exercising safety precautions in a watchmaker's shop will provide the context for this direct learning experience. Students will practice with measuring techniques and begin to apply problem-solving skills to the fundamentals of manufacturing.

**HIN 121 (6) N****Watch Technology II: Professional Knowledge**

Learn or review the math necessary to calculate formulas used in manufacturing and watch repair. Use formulas to find the length of mainsprings, calculate running time and beats per hour. Apply various polishing materials and techniques to master the manufacture of small parts.

**HIN 122 (6) N****Watch Technology II: the Watchmakers Lathe**

Intro to use, care and maintenance of specialty lathes using the watchmakers' turns, the Jacot tool, and pivot polishing machine.

**HIN 123 (10) N****Watch Technology II: Practicum**

Apply knowledge from HIN 121 and HIN 122. Practice manufacturing watch stems and pivoting. Take the first intermediate exam. Identify and apply the appropriate tools, equipment and safety precautions in a horological repair shop.

**HIN 131 (6) N****Watch Technology III: Winding and Setting Mechan**

In this course students learn to correct common errors in the mainspring barrel, the barrel bridge and mainplate. Introduction to common types of setting mechanisms and practice correct disassembly, assessment and adjustment, re-assembly and lubrication procedures. Students learn the mathematical formulas for determining correct size of mainsprings. Pre-req: HIN 121, 122 and 123. Co-req: HIN 132 and 133.

**HIN 132 (6) N****Watch Technology III: Watch Gear Trains**

Students are introduced to the mathematics involved in working with the gear train and tooth form, module, pitch and distance between centers including calculations to determine running time and vibrations per hour for mechanical watches and ratios. Students learn to dismantle, assemble, maintain and repair the gear train of a watch. Pre-req: HIN 121, 122 and 123. Co-req: HIN 131 and 133.

**HIN 133 (10) N****Watch Technology III: Practicum**

This is a ten-credit practicum in which students will apply the information and knowledge gained in HIN 131 and HIN 132. In lab environment students will practice jewel setting and adjusting. Skills will be developed to prepare for and complete the third WOSTEP intermediate exam (winding, setting, gear train). Students will continue to develop their skills of identification and application of the appropriate tools and equipment while exercising safety precautions in a horological repair shop. Pre-req: HIN 121, 122 and 123. Co-req: HIN 131 and 132.

**HIN 141 (4) N****Watch Technology IV: Escapements**

Students are introduced to the role of escapement in the watch. History and development of different escapements and their influence on timekeeping are explored.

**HIN 142 (4) N****Watch Technology IV: External Parts**

Students learn about the different case styles and the parts that complete the case including crystals, crowns, push buttons, dials, hands, and gaskets.

**HIN 143 (8) N****Watch Technology IV: Practicum**

This is an eight-credit practicum where students apply the information and knowledge gained in HIN 141 and HIN 142.

**HIN 211 (6) N****Watch Tech V: Introduction to Precision Timing**

Students are introduced to the concepts of precision timing with emphasis on the eight influences of isochronisms (friction, external influence, regulating pins, escapement, magnetism, temperature, poisoning of balance wheel, poisoning of hairspring). Students apply the theoretical concepts of precision timing to practice watches: analyzing errors and making corrections to improve the timekeeping of the watches

**HIN 212 (6) N****Watch Tech V: Introduction to Electronic Watches**

Students learn the fundamentals of electronics necessary to understand how quartz watches work. The concepts of tension, current, capacity, power, consumption, electric field, magnetic field, functioning of stepping motors, energy source, and functioning of the transistors in switching (e.g. in integrated circuit) will be introduced. Students will be introduced to equipment designed specifically for testing quartz watches, and will learn to use the equipment to analyze the various components of watches.

**HIN 213 (10) N****Watch Tech V: Practicum**

Students are introduced to the repair of pocket watches and/or wristwatches, the service, repair and replacement of external parts of watches. Practice includes work on precision timing, quartz watches, short jobs (battery, crystal, crown and stem replacement) and customer repairs.

**HIN 221 (6) N****Watch Technology VI: Precision Timing 2**

Continue study of the theory and practical application of the principles of precision timing. Pre-req: HIN 211, 212 and 213. Coreq: HIN 222 and 223.

**HIN 222 (6) N****Watch Technology VI: Automatic Watches**

Intro to the various self-winding (automatic) mechanisms for watches. Practice testing, adjusting, disassembly and assembly of automatic mechanisms and study the history and development of these mechanisms. Pre-req: HIN 211, 212 and 213. Coreq: HIN 221 and 223.

**HIN 223 (10) N****Watch Technology VI: Practicum**

Apply knowledge from HIN 221 and 222. Practice repairing automatic watches and continue working on precision timing. Further develop skills to identify and apply the appropriate tools, equipment and safety precautions in a horological repair shop. Pre-req: HIN 211, 212 and 213. Coreq: HIN 221 and 222.



**HIN 231 (6) N****Watch Technology VII:  
Advanced Precision Timing**

Students refine the art of precision timing. In this course students synthesize all the previous work in precision timing. The precision of a watch is dependent upon each unit of the watch being clean and well adjusted. In this class students use all the skills developed throughout the program, checking each unit systematically so that repairs are made in a timely fashion. Pre-req: HIN 221, 222 and 223. Co-req: HIN 232 and 233.

**HIN 232 (6) N****Watch Technology VII: Chronographs**

Students learn to repair the main types of chronographs those with column wheels and those with cams. The following material is covered: the function of chronographs, identification of the components of chronographs, checking the general condition of the components, checking the correct fitting of all the components, understanding and correct application of lubrication, identifying errors and carrying out required corrections. Pre-req: HIN 221, 222 and 223. Co-req: HIN 231 and 233.

**HIN 233 (10) N****Watch Technology VII: Practicum**

This is a ten-credit practicum in which students will apply the information and knowledge gained in HIN 231 and HIN 232. In lab environment students will practice repairing chronograph watches and continue working on precision timing. Students will further develop their skills of identification and application of the appropriate tools and equipment while exercising safety precautions in a horological repair shop. Pre-req: HIN 221, 222 and 223. Co-req: HIN 231 and 232.

**HIN 241 (4) N****Watch Technology VIII: After-Sales Service**

Students learn the range of skills necessary to manage a watch repair shop.

**HIN 242 (4) N****Watch Technology VIII: Review of Courses**

Highlights of the two-year Watch Technology Program are reviewed in preparation for the final exams.

**HIN 243 (8) N****Watch Technology VIII: Practicum**

This is an eight-credit practicum where students apply the information and knowledge gained in HIN 241 and 242. In a lab environment, students will practice repairing all types of watches and review the theory of watchmaking.

**Web/Information Technology****WEB 105 (3) C****Working On a Web Project**

Overview of different web-related careers including web team job descriptions, functions, workflow, processes, and overall project management.

**WEB 110 (5) C****Web Authoring I**

Covers the fundamental mechanics of web page production starting with the absolute basics of creating properly structured websites using the HyperText Markup Language (HTML) and Cascading Style Sheets (CSS). Students will learn how to write their own code to create web pages that include text, links, images, tables, and forms as well as how to launch their website on the Internet using the File Transfer Protocol (FTP). Prereq: BTM 111 with a 2.0 or higher, or appropriate score on SAM Challenge.

**WEB 112 (4) C****Typography for the Web**

Introduces the elements of traditional typography and brand identity as applied to web design to communicate information effectively using overall typographic principal and scale. Co-requisite: concurrent enrollment in WEB 110, or instructor's permission.

**WEB 114 (4) C****Graphics for the Web**

Basic to intermediate web production techniques using Adobe's Illustrator and Photoshop. Topics include digital imagery concepts, developing and editing pixel and vector based graphics for the web, integrating text and images, slicing web compositions and creating very basic animation. Prereq: WEB 110 with a 2.0 or higher; or, concurrent enrollment in WEB 110.

**WEB 120 (5) C****Web Authoring II**

Explores how to write code to create modularly-built responsive websites that include a proper page layout, navigational structure, form validation and interactivity, and well-formatted and readable text to ensure accessibility across major browsers and devices. This course follows WEB110, building on a student's existing knowledge of creating websites using HyperText Markup Language (HTML) and Cascading Style Sheets (CSS). Prereq: WEB 110 with 2.0 or higher, or Instructor's permission.

**WEB 130 (5) C****Web Authoring III**

Design and develop a web standards compliant and responsive website. Utilize HTML5, CSS3, JavaScript & jQuery (client side) scripting and Bootstrap. Introduces emerging web related technologies. Create a final project to include in student's portfolio. Utilize Agile methodology and Github workflow to participate in a group project. Prereq.: WEB 120 and WEB 150, each with a 2.0 or higher.

**WEB 150 (5) C****Introduction to JavaScript**

Examines computer programming theory and basics with the use of JavaScript language. Uses a hands-on approach to building interactive websites with JavaScript and demonstrates how to simplify the web development process with the use of jQuery. Studies several popular web techniques. Prereq: WEB 110 with a grade of 2.0 or higher or permission.

**WEB 160 (3) C****Writing for the Web**

Provides an overview and detailed look at the user-centered design techniques used to write successful human-readable and machine-readable search engine optimized copy for a website. PREREQ: WEB 110 with a 2.0 or higher, or instructor's permission.

**WEB 170 (5) C****Content Management Systems with Wordpress**

Overview of the basic principles and practices of professional website design and development while focusing on content management and custom theme creation using WordPress (an open source technology). Prerequisite: WEB 120 with 2.0 or higher. Co-requisite: ITC 240.

**WEB 200 (5) C****Theory of Web Design**

Examines the basic principles and practices of professional website design, including: discovery, site structure, page layout, navigation, color theory, typography, and best coding practices. Prereq: WEB 110 with 2.0 or higher, or Instructor's permission. Coreq: WEB 120.

**WEB 202 (5) C****User Interface & Experience Design for the Web**

Provides an overview and detailed look at how the User Interface & User Experience gets fulfilled via the design, functionality, features, and content of a website project while successfully achieving strategic business goals and user needs. Prereq: WEB 120 and WEB 200, each with 2.0 or higher.

**WEB 204 (5) C****Usability Research Methods for the Web**

Provides an overview of the different design and user research methods that are conducted throughout a web design or redesign process in order to improve designs and experiences for end users. Methods include: Competitive Analysis, Heuristic Evaluation, Card Sorting and Usability Testing. Prereq: WEB110 with a minimum grade of 2.0.

**WEB 205 (2) C****Web Career Strategies**

Presents various tools and skills needed to transition into the web industry. Learn about web careers, presenting skills, finding appropriate positions and creating a portfolio. Prereq: WEB 120 with 2.0 or higher and ITC 200. Coreq: WEB 210 or permission.

**WEB 210 (5) C****Advanced Web Design & Development Projects**

Provides both design and development students with the hands-on experience of designing and producing an effective web site for a live client while practicing a team workflow process. Prereq: WEB 170, and WEB 200, each with a 2.0 or higher.

**Welding Fabrication****WFT 100 (5) S****Welding Theory**

Exploration of the applications and criteria for selecting the most widely used welding and weld-related metal joining processes, including, GMAW, FCAW, SMAW, GTAW, submerged metal arc, oxyacetylene, brazing, soldering and cutting, plasma arc cutting and resistance welding. Covers types of welds and weld joints.

**WFT 105 (5) S****Print Reading and Welding Symbols**

Learn to read and interpret industrial prints for both mechanical and structural welded fabrications. Includes interpreting various views and types of prints and welding symbols and their application. Prereqs: Placement into Engl 105 and Math 110 or instructor permission. Coreq: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

**WFT 111 (5) S****Materials and Testing**

Covers theory and application of metallurgical principles applied to weld design and heat affected zone (HAZ), heat treating and distortion (pre-post), and heat effects on crystalline structure of Ferrous and non-ferrous metals. Includes methods of destructive and nondestructive testing. Prereq: Placement into Engl 105 and Math 110 or instructor permission. Coreq: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

**WFT 120 (6) S****Intro to Welding Oxyacetylene/ Shielded Metal Arc**

Practice safe and efficient use of oxyacetylene flame for cutting and joining applications. Perform sound welds using the Shielded Metal Arc Welding (SMAW) process. Prereq: Placement into Engl 105 and Math 110 or instructor permission. Coreqs: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

**WFT 121 (6) S****SMAW Shielded Metal Arc Welding**

Learn advance configurations and position for welding with the Shielded Metal Arc Welding process including vertical and overhead. Prepare for the WABO certification testing procedure. Prereq: Placement into Engl 105 and Math 110 or instructor permission. Coreqs: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

**WFT 124 (6) S****Gas Metal Arc Welding**

Lab practice and competencies with equipment, multiple positions and applications of GMAW uses. Combines weld theory, operation of OXY-Acetylene and SMAW processes, using mild steel, low alloy steel, aluminum, and stainless steel. Prereq: Placement into Engl 105 and Math 110 or instructor permission. Coreqs: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

**WFT 125 (6) S****FCAW Flux Core Arc Welding**

Lab practice and competencies with equipment, multiple positions and applications of FCAW uses (Inner shield/Dual Shield). Combines weld theory, operation of OXY-Acetylene, and SMAW processes, using mild steel, low alloy and stainless steel. Prereq: Placement into Engl 105 and Math 110 or instructor permission. Coreqs: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

**WFT 127 (6) S****Gas Tungsten Arc Welding**

Learn equipment, theory of operation and applications of the Gas Tungsten Arc Welding (GTAW) process, also called TIG and Heliarc, that is used in pressure piping systems, aerospace products and with heat-sensitive metals.

**WFT 128 (6) S****Fabrication Carbon Arc / Plasma Arc Cutting**

Learn the practical transfer of blueprint information onto metal using a variety of techniques. Covers applications of geometric shape constructions and divisions in the shop environment. Demonstrate proficiencies with Carbon Arc Cutting, Plasma Arc Cutting, and manual OXY Fuel Cutting.

**WFT 144 (6) S****Shipyard Intensive Welding**

Learn to adapt welding techniques to the marine industry. Apply Flux Core Arc Welding (FCAW), tack welding, joint fit-up, back-gouging and other skills in a shipyard work environment. Includes practice with welds in vertical and overhead positions for marine operations and accomplishing welds outdoors in all weather conditions and in areas not easily accessible. Prereq: WFT 125.

**WFT 197 (3) S****Industry Internship**

Provides practical work experience and employment contacts by integrating academic studies with actual on-the-job training. Orientation to Internships required prior to registration. Prereq: Permission.

**WFT 220 (8) S****Pipe Shielded Metal Arc (SMAW)**

Learn more advanced configurations and positions for welding with the E 7018, and E 6010 Shielded Metal Arc Welding process on pipe including vertical and overhead. Cut and bevel pipe with oxy fuel and hand tools. Prepare for the WABO pipe certification testing procedure.

**WFT 227 (7) S****Advanced Fabrication I**

Covers knowledge of all shop equipment and theory of operation and applications of the SMAW, GMAW, FCAW, and GTAW processes through project-oriented exercises. Design and create pre-approved individual project.

**WFT 228 (8) S**  
**Pipe Gas Tungsten Arc Welding (GTAW)**

Learn more advanced configurations and position for welding with the Gas Tungsten Arc Welding (GTAW) on pipe including vertical and overhead. Cut and bevel pipe with oxy fuel and hand tools. Prepare for AWS pipe certification testing procedure.

**WFT 238 (7) S**  
**Advanced Fabrication II**

Improve skills in all major areas including design and development, estimating, layout, cutting (machine torch & plasma), forming, fit up, tack welding, and product assessment. Fabricate an approved individual design project.

**WFT 241 (6) S**  
**Wabo Test PREP SMAW Plate**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Shielded Metal Arc Welding (SMAW) process on steel plate. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Welder Performance Qualification Reports (WPQR) prereq: WFT 121.

**WFT 242 (6) S**  
**Wabo Test PREP GMAW Plate**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Gas Metal Arc Welding (GMAW) process on steel plate. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Welder Performance Qualification Reports (WPQR) prereq: WFT 124.

**WFT 243 (6) S**  
**Wabo Test PREP FCAW Plate**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Flux Core Arc Welding (FCAW) process on steel plate. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Welder Performance Qualification Reports (WPQR) prereq: WFT 125.

**WFT 244 (6) S**  
**Wabo Test PREP GTAW Plate**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Gas Tungsten Arc Welding (GTAW) process on steel plate. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Welder Performance Qualification Reports (WPQR) prereq: WFT 127.

**WFT 245 (6) S**  
**Wabo Test PREP SMAW Pipe**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Shielded Metal Arc Welding (SMAW) process on steel pipe. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Welder Performance Qualification Reports (WPQR) coreq: WFT 220.

**WFT 246 (6) S**  
**Wabo Test PREP GTAW Pipe**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Gas Tungsten Arc Welding (GTAW) process on steel pipe. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Welder Performance Qualification Reports (WPQR) coreq: WFT 228.

**WFT 297 (1-12) S**  
**Special Topics in Welding Fabrication**

Special topics for an individual or group in welding fabrication field. Prereq: Permission.

## Wine Technology

**WIN 101 (4) S**  
**Introduction to Enology & Viticulture**

An introduction to the science of winemaking, history and geographical distribution; grape varieties and wine types; influence of climate and soil; wine fermentation, handling, storage and bottling methods; wine disorders; winery sanitation; legal compliance. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 102 (3) S**  
**Enology Laboratory Analysis**

Intro to vineyard and winery laboratory practices including basic chemistry principles, laboratory techniques and commonly used analysis methods for musts and wines. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 101, WIN 112, WIN 121, WIN 123, WIN 131, WIN 133, and permission of instructor. Corequisite: WIN 103 and WIN 107.

**WIN 103 (4) S**  
**Elements of Wine Production**

Introduction to the elementary production of wines including considerations that take place during the harvesting of grapes, transportation, stemming and crush. May include field trip if season permits. Orientated for the beginning student. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 101.

**WIN 104 (4) S**  
**Elements of Wine Production II**

Intermediate course in topics in winemaking that will emphasize the theories and practices of various fermentation process, theories of racking, topping, aging, and preservation methods. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 103, WIN 107. Corequisite: WIN 108.

**WIN 105 (4) S**  
**Elements of Wine Production III**

Advanced overview of topics in winemaking. Emphasizes the final stages of wine production including the usage and maintenance of barrels, introduction to blending wines, and topics in bottling and packaging. Students must be 18 years of age to participate in wine tasting. Wine Program lab fees apply. Prerequisite: WIN 103 and WIN 104.

**WIN 107 (1) S**  
**Winery Production I**

Practical application of theories and principles of grape harvest/processing & wine fermentation activities studied and discussed in WIN 103, Elements of Wine Production. This course combines real-time lecture and hands-on practicum. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 105, WIN 112, WIN 122, and permission of instructor.

**WIN 108 (1) S****Winery Production II**

Practical application of theories and principles from WIN 104. Lab fee. Prereq: WIN 103, 107 or permission. Coreq: WIN 105.

**WIN 109 (1) S****Winery Production III**

Advanced studies in winemaking. Practical application of the theories and principles of WIN 105. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisites: WIN 104 and WIN 108. Corequisite: WIN 105.

**WIN 110 (3) S****Introduction to Wine Science**

An introduction to scientific aspects of wine composition and production for the student with a limited background in chemistry and microbiology. Prereq: WIN 101, 123, 133, MATH 098, CHEM 139.

**WIN 112 (5) S****Wine Science**

An introduction to scientific aspects of wine composition and production for the student with a limited background in chemistry and microbiology. The course prepares students to understand scientific material presented in more advanced enology courses. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisites: WIN 101, 123, and 133; or instructor's permission.

**WIN 121 (3) S****Introduction to Viticulture**

Introduction to the theory of grape growing including botany, anatomy, history, distribution, propagation, varieties, wine type, climate, production practices, and common diseases and pests. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 122 (4) S****Wine Chemistry and Microbiology**

Covers wine chemistry and microbiology including wine acidity, sulfur dioxide, protein and phenolic equilibria and other concerns. Learn to make informed decisions on style, crush options, cellar practices, fining, stabilization and quality assurance. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 112 or instructor permission.

**WIN 123 (4) S****Sensory Evaluation**

An introduction to wine sensory evaluation methods including statistical analysis of trials, philosophy of wine styles and the common evaluation methods of representative wines used in sensory testing. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 131 (4) S****Introduction to Washington Wines**

Intro to wines produced in Washington, including history, viticulture practices and winemaking styles. Includes sensory evaluation of representative Washington wines. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 132 (3) S****Wine History: Ancient Times to the Enlightenment**

A survey of wine and its role in history, religion, art, culture and society from pre-history to the Age of Enlightenment. Includes sensory evaluation of representative wines. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 133 (4) S****Introduction to Wines of the World**

Introduction to the world's wine-producing regions, including history, viticulture practices and winemaking styles. The seated class includes sensory evaluation of representative wines. Materials fees will be assessed. The online class encourages tasting groups and provides a guide for creating one. Students must be 18 years of age to participate in wine tasting.

**WIN 134 (3) S****Wine History: the New World and Modern Times**

A survey of wine and its role in history, religion, art, culture and society in the global era; including the discovery and development of the wine industry in the New World, as well as contemporary European history from the 18th Century to contemporary times. Includes sensory evaluation of representative wines. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 141 (4) S****Wine Marketing and Sales**

Introduction to wine marketing and sales methods, basic approaches to packaging, advertising, promotion, retail and wholesale selling of wine. A materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 142 (4) S****Wine Business -Winery Operations**

Overview of winery operations with emphasis on inventory, pricing, forecasting, sales methods, allocating and distribution of wine from the manufacturer. The course covers compliance for Washington State. Includes equipment, insurance, bonding, production, general management, and space needs of a winery. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 143 (4) S****Wine Business-Distribution Network and Suppliers**

Further examination of Sales and Distribution. Reviews the roles of brokers and distributors. Topics will include the costs of distribution including margins, mark ups, freight and taxes. Covers decisions related to import and export of wine. Regulatory agencies and legal requirements. Students must be 18 years of age to participate in wine tasting. Recommended that WIN 141 and 142 be taken in advance of this class.

**WIN 145 (4) S****Wine Business - Entrepreneurship and Innovation**

Systematic look at components of successful wine-related businesses with emphasis on the decisions faced by entrepreneurs. Concepts of financial management, profitability, break-even analysis, capital budgeting, and cash flow analysis. Students will be exposed to key aspects of the business including creating a business plan, regulatory climate for making and selling wine, and brand promotion. Recommended that WIN 141 and WIN 142 be taken prior to WIN 145 but not required for registration.

**WIN 151 (4) S****Introduction to Food and Wine Pairing**

Learn the basic elements of the character and key components of wines. Includes the four primary taste sensations present in everyday food (salty, sweet, bitter and savory) and how these affect the taste of wine. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting.



**WIN 152 (4) S****Advanced Food and Wine Pairing**

This course will evaluate, discuss and investigate classical and new cuisines and how they can be paired with wines throughout the world. Food preparation demonstrations and various methods of preparation will be covered as it relates to wines. The course will focus on classic cuisines, new cuisines and regional preparations and wines paired with them. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 151.

**WIN 153 (4) S****Food and Wine Pairing - Varietals I**

Focuses on Cabernet Sauvignon, Merlot, Pinot Noir, Chardonnay and Sauvignon Blanc. Prereq: WIN 101, 151, 152 (or concurrent enrollment) or permission.

**WIN 154 (4) S****Food and Wine Pairing - Varietals II**

Focuses on Zinfandel, Rhone style Syrah, Viognier, Pinot Grigio and others. Prereq: WIN 101, 151, 152 (or concurrent enrollment) or permission.

**WIN 155 (4) S****Food and Wine Pairing - Varietals III**

Focuses on Italian reds and whites, Rieslings and/or other specific varietals. Prereq: WIN 153 or 154 or permission.

**WIN 157 (2) S****Food and Wine Pairing - Desserts**

Focuses on dessert wines: sweet wines, sparkling wines, red varietals and others. Prereq: WIN 153 or 154 or permission.

**WIN 160 (4) S****Sommelier Service and Beverage Management**

This class will focus on product knowledge, professional standards in service, and management of alcoholic beverages in retail and foodservice industry. The student will gain practical knowledge of table service, regulations, and compliance, conducting tastings, cellar management, and pricing, cost controls, and development of wine lists. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 133 or concurrent enrollment or instructor permission.

**WIN 170 (4) S****Food & Wine Pairing: Other Ferments**

An introduction to beer sensory evaluation, service and food pairing methods. The course will cover beer history including Purity Laws, the brewing process, ingredients, beer styles, brewery operation and quality control, beer categories and styles. The student will study the business of beer including the purchasing, storage and handling of beer, beer manufacture and distribution. Materials fee will be assessed. Students must be 18 years of age to participate in tasting.

**WIN 197 (1-5) S****Internship in Wine Technology**

Students apply academic learning and skills in wine making, marketing, distribution, and industries related to their field study. Course credit can be earned through current employment or the development of opportunity or leads found in conjunction with the Work-Source Office. Student must complete hours and submit a Training Agreement, Learning Outcomes, and a Self-Evaluation in order to pass. Prerequisite: approval from a Faculty Mentor (Instructor) and Embedded Career Specialist.

**WIN 224 (4) S****Advanced Sensory Evaluation**

A continuation of WIN 123, Sensory Evaluation, with more focus on blind tastings, anatomy of the human sensory preceptors, and a strong focus on classical style comparisons. Group work, group tastings, varietal expressions, and production methods which bring about aromas and characteristic will be explored. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisites: WIN 101 and WIN 123.

**WIN 233 (4) S****Advanced Wines of the World - France & Spain**

In depth study of France and Spain's wine producing regions including grape varieties, origin of cultivars, geological exploration, vine cultivation and viticulture, history of the regions winemaking, food specific to each region, and regulations for wine categories. Sensory evaluation of representative wines assessed in each class. Materials fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisites: WIN 133

**WIN 234 (3) S****Adv. Wines of the World: Europe**

In depth study of Italy, Germany and Austria wine producing regions including grape varieties, origin of cultivars, geological exploration, vine cultivation and viticulture, history of the regions winemaking, regional foods, and regulations for wine categories. Sensory evaluation of representative wines assessed in each class. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisites: WIN 133.

**WIN 235 (3) S****Advanced Wines of the World: New World**

In depth exploration of the New World wine producing regions, including identifying key differences in production, taste, cost, and other factors making each wine region unique. Explore the influence of the increasingly important role of varieties since the 20th century. Sensory evaluation of representative wines assessed in each class. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 133.

**WIN 253 (3) S****Advanced Food and Wine Pairing: Old World**

Advanced course designed to provide an appreciation of the history and culture of food and wine traditions with a focus on Old World Wine—including France, Italy, Greece, Turkey, Austria and Germany. Focus on major grape varietals, appellations, laws, geography, climate and soils that define the terroir of each grape growing region. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 151 or concurrent enrollment.

**WIN 254 (3) S****Advanced Food and Wine Pairing: New World**

Appreciation of the history and culture of food and wine traditions with a focus on New World Wine—including Spain, Argentina, Chile, Australia, New Zealand, South Africa and the United States. Focus on the major grape varietals, appellations, and terroir of each grape growing region. Course will explore the gastronomic identity of each region. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 151 or concurrent enrollment.



**WIN 257 (4) S**  
**Advanced Food and Wine Pairing Dessert**

A focused study of the cohesive pairing in bringing desserts and wine together. Course covers the various styles and production of sweet, fortified and dessert wine and the history and development of desserts, pastry and confection. Included in this class will be the production and plating, pairing and presentation of wine and desserts as partners. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 151 or concurrent enrollment.

**WIN 258 (3) S**  
**Advanced Food and Wine Pairing Cheese**

Introduces the philosophies and techniques involved in bringing cheese and wine together in a cohesive pairing. Focus on the eight styles of cheese, cheese production, storage and selection. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 151 or concurrent enrollment or instructor permission.

**WIN 299 (1-5) S**  
**Wine Special Topics**  
Special Topics.**Women's Studies**

See *Gender & Women's Studies*, page xxx.

**Wood Construction****WCO 110 (18) C**  
**Introduction to Professional Woodworking**

Intro to wood construction skills and safety, including safe operation of basic hand and power tools, wood construction terminology and materials.

**WCO 141 (18) C**  
**Residential Remodel and Preservation Carpentry**

Covers specific techniques in residential remodeling including bathrooms and kitchens, stairs, scaffolding design and construction, sheetrock demolition, installation and repair and siding application. Prereq: WCO 110.

**WCO 142 (4) C**  
**Introduction to Carpentry and Blueprint Reading**

Intro to becoming a professional carpenter. Focuses on career pathways, craftsmanship, vocabulary, blueprint reading, and jobsite and tool safety. Covers materials, products, tools and best practices for constructing sustainable residential and light commercial construction. Emphasizes developing a strong work ethic, communication skills and collaboration strategies. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

**WCO 143 (5) C**  
**Building Site System Site Selection to Layout**

Develops skills in site selection, building layout, surveying, and moisture management. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

**WCO 144 (9) C**  
**Foundation System Forms to Concrete Finishes**

Develops skills in building foundations including form construction, concrete and cement placement, reinforcement and finishing. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

**WCO 145 (9) C**  
**Framing Systems Floor to Ceiling**

Develops skills in structural framing systems including building physics, framing layout, alternative and traditional framing techniques and energy efficiency strategies. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and 120.

**WCO 146 (5) C**  
**Roof System Framing to Roofing Installation**

Develops skills in roof systems including framing styles, roofing techniques, flashing, ventilation, roofing materials, and installation strategies and techniques. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

**WCO 147 (4) C**  
**Stair System Rough Framing to Finished Stairwell**

Develops skills in stair systems, including interior and exterior framing styles, layout techniques, and design strategies and techniques. Covers appropriate selection of materials, products, tools and best practices for constructing durable stairways in residential and light commercial buildings. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

**WCO 148 (9) C**  
**Exterior Finishes Building Enclosure Finish Trim**

Develops skills in building exterior systems including building enclosure design, siding installation techniques, installing insulation, window types and installation, flashing techniques and strategies, and trim design and installation techniques. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

**WCO 149 (9) C**  
**Interior Finishes Door Installation to Trim**

Develops skills in building interior systems including drywall installation and finishing, door and trim installation, finish carpentry techniques and strategies. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

**WCO 151 (18) C**  
**Intro to Cabinetmaking Fundamentals**

Learn to work safely and efficiently with hand, portable, and stationary tools to produce jigs and fixtures to increase productivity. Covers basic principles of joining and assembling, blueprint reading, layout procedures, developing a cut list, milling procedures, and fabrication techniques to successfully produce required projects. Use working drawings, layout on a story stick or on a CAD program to construct a router table.

**WCO 153 (18) C**  
**Basic Cabinetmaking Fundamentals**

Build a series of jigs and fixtures to produce basic traditional joinery. Use working drawings to produce a frameless cabinet based on the 32mm system of cabinet construction, and a face frame cabinet for personal hand tool storage. Includes workplace standards for self-confidence, interpersonal communication and safe use of equipment and tools, and individual skills development.

**WCO 155 (18) C**  
**Adv Cabinetmaking Architectural Woodworking Fund**

Design, layout and construct three pieces of furniture using advanced joinery techniques, applications of veneers, and previously learned construction techniques. Emphasizes mortise and tenon joinery, tapered legs and application of basic veneering techniques. Within certain criteria, choose own dimensions, materials and detailing.

**WCO 157 (18) C**  
**Independent Capstone Project**

Propose a culminating project of interior furnishings (casework, furniture, and millwork) of a custom or limited production fabrication. Devise a coherent engineering approach to the concept and manage all project tasks. Emphasizes individual time management, problem solving, creativity, and professional growth. Expand fabrication skills. All projects must be faculty approved.

**WCO 197 (1-15) C**  
**Work Experience-Wood Construction**

Earn work experience credit in the wood construction field. Prereq: Permission.

**WCO 203 (3) C**  
**Introduction to Vectorworks**

Introduction to drafting and design using the cross-platform program Vectorworks. Offered at the Wood Technology Center. Prereq: BTM 098 or permission.

**WCO 299 (1-18) C**  
**Special Projects Boatbuilding**  
 Special Projects in Boatbuilding

## Wood Technology Center

**WTC 110 (18) C**  
**Introduction to Professional Woodworking**

Intro to wood construction skills and safety, including safe operation of basic hand and power tools, wood construction terminology and materials.

**WTC 131 (14) C**  
**Introduction to Composite Boatbuilding**

Introduces fiberglass boatbuilding as well as wood joinery. Students work in teams to lay up, by hand, a complete fiberglass hull and then trim it with wood. Industry standards in safety and production will be modeled. Prereq: WCO 110 with a minimum GPA of 2.0.

**WTC 132 (4) C**  
**Introduction to Marine Electrical Systems**

Introduces basic AC and DC electrical systems as found on recreational and small commercial vessels. Safe installation and troubleshooting of engine starting and charging systems, DC house systems for lights, pumps, navigational gear and shore power AC systems. Prereq: WCO 110 with minimum GPA 2.0.

**WTC 133 (10) C**  
**Wooden Boat Joinery and Repair**

Construction and repair of both contemporary and traditional wooden boats. Topics include: tools, wood types, adhesives, pattern making and interior joinery on wood and composite vessels. Personal and shop safety are emphasized. Prereq: MRT 101 and MRT 102 with a minimum GPA 2.0 for each course.

**WTC 134 (8) C**  
**Introduction to Marine Mechanical Systems**

Introduces basic gas and diesel engine operating principles, service, maintenance and troubleshooting. Course also covers marine sanitation systems, various marine pumps and plumbing. Prereq: MRT 101 and MRT 102 with minimum GPA 2.0 for each course.

**WTC 135 (14) C**  
**Advanced Composites**

Complex fiberglass boatbuilding and repair problems, including repair of damaged fiberglass structures, plug and mold building, and advanced composites, including resin infusion. Direct hands-on experience in safe and productive use of machinery and supplies is emphasized. Prereq: MRT 103 and MRT 104 with a minimum 2.0 GPA for each course.

**WTC 136 (4) C**  
**Marine Electrical II**

Advanced vessel electrical systems, sizing of battery banks, AC battery charging systems, inverter systems, engine operation gauge systems, gen-sets and galvanic corrosion. Preparation for ABYC Marine Electrical Certification exam. Prereq: MRT 103 and MRT 104 with minimum 2.0 GPA for each course.

**WTC 137 (1-10) C**  
**Internship**  
 Internship.

**WTC 138 (1-18) C**  
**Advanced Wooden Boat Joinery and Repair**

Provides the opportunity to build one's own boat or undertake a more comprehensive boat restoration project. Emphasis is on performance in a professional manner in safety and project execution. Course is optional. Prereq: MRT 105 and MRT 106 with minimum GPA of 2.0 for each course.

**WTC 141 (18) C**  
**Residential Remodel and Preservation Carpentry**

Covers specific techniques in residential remodeling including bathrooms and kitchens, stairs, scaffolding design and construction, sheetrock demolition, installation and repair and siding application. Prereq: WCO 110.

**WTC 142 (4) C**  
**Introduction to Carpentry and Blueprint Reading**

Focuses on career pathways, craftsmanship, vocabulary, blueprint reading, and jobsite and tool safety. Covers materials, products, tools and best practices for constructing sustainable residential and light commercial construction. Emphasizes developing a strong work ethic, communication skills and collaboration strategies. Prereq: WTC 110 and proof of First Aid/CPR/AED training.

**WTC 143 (5) C**  
**Building Site System Site Selection to Layout**

Develops skills in site selection, building layout, surveying, and moisture management. Covers appropriate selection of appropriate materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WTC 110 and proof of First Aid/CPR/AED training.

**WTC 144 (9) C**  
**Foundation System Forms to Concrete Finishes**

Develops skills in building foundations including form construction, concrete and cement placement, reinforcement and finishing. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

**WTC 145 (9) C**  
**Framing Systems Floor to Ceiling**

Develops skills in structural framing systems including building physics, framing layout, alternative and traditional framing techniques and energy efficiency strategies. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and 120.

**WTC 146 (5) C**  
**Roof System Framing to Roofing Installation**

Develops skills in roof systems including framing styles, roofing techniques, flashing, ventilation, roofing materials, and installation strategies and techniques. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

**WTC 147 (4) C**  
**Stair System Rough Framing to Finished Stairwell**

Develops skills in stair systems, including interior and exterior framing styles, layout techniques, and design strategies and techniques. Covers appropriate selection of materials, products, tools and best practices for constructing durable stairways in residential and light commercial buildings. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

**WTC 148 (9) C**  
**Exterior Finishes Building Enclosure Finish Trim**

Develops skills in building exterior systems including building enclosure design, siding installation techniques, installing insulation, window types and installation, flashing techniques and strategies, and trim design and installation techniques. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WTC 110 with a 2.0 GPA and proof of First Aid/CPR/AED training.

**WTC 149 (9) C**  
**Interior Finishes Door Installation to Trim**

Develops skills in building interior systems including drywall installation and finishing, door and trim installation, finish carpentry techniques and strategies. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

**WTC 151 (18) C**  
**Intro to Cabinetmaking Fundamentals**

Learn to work safely and efficiently with hand, portable, and stationary tools to produce jigs and fixtures to increase productivity. Covers basic principles of joining and assembling, blueprint reading, layout procedures, developing a cut list, milling procedures, and fabrication techniques to successfully produce required projects. Use working drawings, layout on a story stick or on a CAD program to construct a router table.

**WTC 153 (18) C**  
**Basic Cabinetmaking Fundamentals**

Build a series of jigs and fixtures to produce basic traditional joinery. Use working drawings to produce a frameless cabinet based on the 32mm system of cabinet construction, and a face frame cabinet for personal hand tool storage. Includes workplace standards for self-confidence, interpersonal communication and safe use of equipment and tools, and individual skills development.

**WTC 155 (18) C**  
**Adv Cabinetmaking Architectural Woodworking Fund**

Design, layout and construct three pieces of furniture using advanced joinery techniques, applications of veneers, and previously learned construction techniques. Emphasizes mortise and tenon joinery, tapered legs and application of basic veneering techniques. Within certain criteria, choose own dimensions, materials and detailing.

**WTC 157 (18) C**  
**Independent Capstone Project**

Propose a culminating project of interior furnishings (casework, furniture, and millwork) of a custom or limited production fabrication. Devise a coherent engineering approach to the concept and manage all project tasks. Emphasizes individual time management, problem solving, creativity, and professional growth. Expand fabrication skills. All projects must be faculty approved.

**WTC 161 (6) C**  
**Construction Job Readins**

Prepare for entry-level employment as a beginning apprentice in a building/construction trade. Focuses on job hunting materials and skills, entry requirements for various trades, and knowledge of the union apprenticeship system.

**WTC 163 (4) C**  
**Blueprint Reading**

Learn basic blueprint terms and symbols and follow the plan in a construction application. Focuses on job hunting materials and skills.

**WTC 164 (0.5) C**  
**Industrial 1st Aid/CPR**

Covers cardiopulmonary resuscitation (CPR) and basic industrial first aid as it applies to the building and construction trades. Learn to apply correct life saving techniques, assess and treat the sick and injured.

**WTC 165 (0.5) C**  
**Road Flagging**

Prepare for road flagging certification. Learn to establish and maintain a safe traffic flow in a construction zone, understand hazardous and safe behaviors in flagger situations, and review material to successfully pass the Washington State 3-year flagger certification examination. Continuing Education class.

**WTC 167 (3) C**  
**Const Trades Training I**

Survey of skills and responsibilities of 12 building/construction trades. Visit the training centers of several trades: carpentry, laborer, electrician, plumber, drywall installer, brick layer, painter, cement mason, sheet metal worker, and ironworker.

**WTC 172 (1) C**  
**Forklift Operation & Crt**

Covers functions and parts of a forklift, OSHA forklift regulations, safety habits, and proper picking, placing, and moving of a variety of loads through a work site. Take the test to become an OSHA certified forklift operator, a federal requirement in industry.

**WTC 174 (2) C**  
**Tools/Material Id/Handl**

Intro to construction-related tools and building materials. Learn proper use of tools and materials: lumber, brick, blocks, scaffolds, wheelbarrows, and shovels. Emphasizes occupational safety.

**WTC 177 (2) C**  
**Fitness and Nutrition I**

Develop competency in personal dietary management and physical fitness through regular stretching and aerobic exercise to assure a more injury free and healthier career in construction.

**WTC 179 (1) C**  
**OSHA 10 Safety**

Occupational Safety and Health Administration regulates construction safety, and certifies workers on safety practices. OSHA 10 (first level) provides 10 hours of safety training: intro to OSHA, personal protective equipment, stairways and ladders, electrical, fall protection, confined space, scaffolds, cranes, excavations, and materials handling.

**WTC 203 (3) C**  
**Introduction to Vectorworks**

Introduction to drafting and design using the cross-platform program Vectorworks. Offered at the Wood Technology Center. Prereq: BTM 098 or permission.

**Workforce and  
Trades Leadership**

**WTL 100 (18) S**  
**Construction Trades Preparation**

Comprehensive preparation for obtaining and retaining an apprenticeship in a construction craft trade, through a blend of classroom instruction, technical skills training, intensive supervised skills practice, and interactive/experiential tours of apprenticeship training programs and construction sites. This course is offered in partnership with ANEW (Apprenticeship and Non-Traditional Employment for Women); please contact the department for information on registration process.

**YouthBuild**

**YBLD 100 (9) S**  
**Introduction to Construction Trades**

This course is designed to introduce students to the skills and responsibilities of the building and construction trades. The purpose of this course is to train students to identify and utilize various construction related tools and building materials. Students receive training on the proper use of tools and materials including lumber, brick, blocks, scaffolds, wheelbarrows, shovels, hammers, drills and other building related materials.

**YBLD 102 (9) S**  
**Intro to Construction Trades - Advanced**

This course is designed to continue education in the skills and responsibilities of the building and construction trades. The purpose of this course is to train students to identify and utilize various construction related materials. Students receive training on various components to residential construction.

**YBLD 103 (6) S**  
**Professional Leadership Skills for the Trades**

This course is designed to teach students essential leadership skills required to work in the trades. Through individual and small group work, students learn to identify and utilize their leadership skills.

**YBLD 104 (1) S**  
**Scaffold & Ladder Certification**

Covers basic knowledge, information and awareness for individuals to properly use a scaffold(s) and ladder(s) within the State of Washington and perform scaffold and ladder techniques safely.

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**CARLE, CAITLIN M.****English**

B.S., University of Missouri  
M.A., Western Washington University

**CASTLETON, BARBARA****Intensive English Language Program**

B.S., University of Oregon  
M.A.-TESOL, The Ohio University

**CLAPPER, KIRK (DOUG)****Automotive Technology**

Northshore Vocation School  
ASE Certification

**COLLINS, DOUGLAS****ESL**

B.A., University of Florida  
M.A., University of Washington

**COATES-WHITE, STEPHEN J.****Counseling**

B.A., Whitman College  
M.Ed., Seattle University

**CROYDON, ALYSON****Intensive English Language Program**

B.A., London University  
M.A.-TESOL, School for International Training  
(SIT) Graduate Institute, Vermont

**CUSHNIE, LARRY****Political Science**

M.A., University of Washington  
M.A., International Institute  
Ph.D., University of Washington

**DAANE, ABIGAIL****Physics**

M.S., Clemson University  
Ph.D., Seattle Pacific University

**DANFORTH, BARBARA****Home & Family Life***A.A., North Seattle College**B.A., University of Washington***DE LEON, SHEILA****ESL***B.A., University of Washington**M. Ed-TESOL, Seattle University***DELA-CRUZ, ROBERT****English***B.S., United States Military Academy at West Point; U.S. Command and General Staff College, Fort Leavenworth**M.A., University of Pittsburgh***DI FRANCO, JORDAN****Chemistry****DODD, CYNTHIA****Workforce Development****DORMAN, RYAN****Math***B.A., B.S., M.A., University of Washington***DOWNS, RICHARD****Math***B.S., University of Minnesota**M.S., Oregon State University**M.S., Ph.D., University of Washington**Registered Mechanical Engineer, State of Washington***ENDSLEY, STEPHANIE****Chemistry***B.A., Gustavus Adolphus College**M.S., University of Washington***ENGEL, ALBERT****Engineering***B.S., Vanderbilt University**M.S., Stanford University***FERGUSON, JEAN****ESL***B.A., State University at Albany**M.A., New York University***FLANNARY-OLAYVAR, KEORA****Career Link***B.A. and B.S., Washington State University**M.S., Eastern New Mexico University***FUJIMOTO, AKEMI****ESL***B.A., English, Soka University, Japan**M.I.T., School for International Training***GANDHAM, RAVI****Computer Science***B.S., Nagarjuna University, India**M.S., University of Georgia***GARCIA, JOSEPH E.****Justice Involved Solutions***M.A., Occidental College***GORLAND, GARY****ESL***B.A., Michigan State University**M.Ed. University of Washington***GILMAN, HOLLY****English***B.A., M.A.T., University of Washington***GROLLMUS, DENISE****Communication***B.A., Oberlin College**M.F.A., Pennsylvania State University**Ph.D., University of Washington***GUERICKE, DAPHNE****ESL***B.A., University of Goettingen, Germany**M.A., University of Hamburg, Germany**M.A., University of Colorado - Boulder***HANKINSON, STEPHANIE****English***B.A., University of California, Davis**M.A., California State University, Sacramento**Ph.D., University of Washington***HARAN, SHARYN****Business & Office Occupations***B.A., Northeastern Illinois University**M.Ed., University of British Columbia***HARNESS, JANE****High School 21+/GED®/College Prep***B.A., M.A., Seattle University***HARRIS, CHRISTOPHER****Pastry & Specialty Baking***Professional Technical Teaching Certificate,**Western Culinary Institute***HERMAN, DAVID****Professional Technical****HIRSHBERG, WENDI****Home & Family Life***B.A., Washington State University***HICKEY, MICHAEL****English/Creative Writing***B.A., University of Arizona**M.F.A., University of Washington***HOUOT, ROBERT****Commercial Cooking & Classical Cuisine***Chef Diploma, Culinary Arts, Geradmer, France***HUNTLEY, REBECCA****Home & Family Life***B.A., Washington State University**M.A., University of Denver***INGELS, DANIELLE****Workforce Education****ISHII, JONATHAN****Justice Involved Solutions***B.A., Seattle University***JOHNSON, JUDITH****ESL***B.A., University of California**M.A., Seattle University***JOINER, ANNE****Intensive English Language Program***B.A., University of Washington**M.A., TESOL, Eastern Michigan University***JOHNSON, KENNETH****Welding****JOHNSTON, CHRISTOPHER****Justice Involved Solutions****JONES, RICHARD****Automotive Technology***Certificate, Automobile Body Repair and Refinishing***KABELEOVA (GALA), HANA****B.A.S., Hospitality Management***M.A., Ph.D., Charles University***KAPP, JANET****Nutrition***B.S., University of Arizona**Teaching Certificate, Arizona State University**M.P.H., University of Washington**Registered Dietitian***KILSHOLM, AMY****Justice Involved Solutions****KIKUCHI, PAUL****Music***B.A., Bennington College**M.F.A., California Institute of the Arts***KING, SHANNON****Intensive English Language Program***B.A., University of Kansas**M.A.-TESOL, Seattle University*



**KINGSTON, LAURA****English**

B.A., Pacific Lutheran University  
M.A., Western Washington University

**KRULL, DAVID****B.A.S., Hospitality Management**

B.A., University of Washington  
J.D., Seattle University School of Law

**KUWADA, KALI****Psychology**

B.A., Western Washington University  
M.A., Antioch University  
M.A., University of Washington  
Ph.D., Antioch University

**LARSEN, GWENDOLYN (ASTRID)****Psychology**

B.A., Montana State University  
M.A., Antioch University

**LOEBE, DAVID****ESL**

B.A., University of Washington  
M.Ed.-TESOL, University of Georgia

**LOPEZ, LETICIA (TISH)****English**

A.A., Ventura Community College  
B.A., Claremont McKenna College  
M.A., University of Washington

**LYSAKER, KRISTIN****ESL**

B.A., University of Wisconsin  
M.Ed., Seattle University

**MADISON, DEREK****Mathematics**

M.A., University of Washington

**MARTINEZ, DANIKA****Career Link****MATSUO, AMIKO****Art**

B.A., University of California, Los Angeles  
M.F.A., Kansas State University

**MCCARTHUR, SANDY****Mathematics**

B.A., University of Puget Sound  
M.A., University of Washington

**MCCARTHY, REBECCA****Academic Programs**

B.F.A., Cornish College of the Arts  
M.L.S., Rollins College  
Ph.D., Florida Atlantic University

**MCCRATH, MICHAEL****Anthropology**

B.A., University of Washington  
M.A., M.Ed., University of Hawaii

**MCCRATH, MICHAEL****Anthropology**

B.A., University of Washington  
M.A., M.Ed., University of Hawaii

**MCDONOUGH, JILL****ESL / High School 21+ / GED® / College Prep.**

B.A., Western Washington University  
TESOL Certificate, Western Washington University  
M.Ed., Seattle University

**MCKNIGHT, KELLY****English**

B.A., University of Texas at Austin  
M.Ed., Western Washington University

**MILLER, TINA****ESL**

B.A., Wheaton College, Illinois  
TESOL Certificate, California State University

**MOSS, JENNIFER****English, Creative Writing**

B.A., Grinnell College  
M.F.A., University of Iowa  
M.I.T., Seattle University

**MUJAHID, HARIS****Accounting**

M.B.A., Franklin University

**MURCIA, RUBEN****Biology**

B.S., Universidad de Montemorelos  
M.S., San Diego State University

**NACHMAN, JON****High School 21+ / GED® / College Prep**

B.A., University of Michigan  
M.A., University of Washington

**NELSON, RANDALL****Library/Distance Learning**

B.A., M.L.S., M.A., University of Washington

**NAYLOR, PATRICIA****Library**

M.L.I.S., University of Washington

**NGUYEN, LOC****Professional Technical**

A.S., Northeast Wisconsin Technical Institute  
B.A., Saigon University  
B.S.M.E., Milwaukee School of Engineering  
Professional Technical Teaching Certificate

**OEHLSCHLAEGER-BROWNE, JAN****Communication**

B.A., University of Washington  
M.S., Portland State University

**OLSON, HENRY****Microbiology**

B.S., The University of British Columbia  
Ph.D., University of Washington

**PERRY, KEVIN****Career Link****PETERSON, CURTIS****Career Link**

B.S., Minnesota State University Moorhead  
M. Ed., University of Washington

**PETERSON, ELIZABETH****Psychology**

B.A., Colby College  
M.A., Ph.D., Kent State University

**PETERSON, RICHARD****Workforce Education****PIKUL, JESSICA****Chemistry**

B.A., Reed College  
Ph.D., University of Washington  
Graduate Certificate in Environmental Management

**POST, FRANK****Math**

B.A., M.Ed., University of Washington

**QUININE, DONTÉ****Communication**

B.A., Oregon State University  
M.A., Gonzaga University

**QUILLIAN, SUZANNE****Developmental English**

B.A., M.A., Southern Methodist University

**ROMANESCHI, TERESA****Short-Term Training Program, Intensive English Language Program, Pivot Point**

B.A., University of Washington  
TESOL Certificate, Seattle Pacific University  
M. Ed., University of Washington

**RUIZ, JESUS****Diesel Mechanics**

Certificates in Diesel Mechanics,  
Mack Trucks  
Professional Technical Teaching Certificate

**RUPIK, DOUGLAS****Professional Technical****SAENZ, ADELA****Short-Term Training Program**

B.A., Western Washington University  
M.A., University of Phoenix

**SAUER, MARTIN****Mathematics**

B.A., M.B.A., Washington State University

**SCHEER, KARL**  
**Intensive English Language Program**  
*B.A., Western Washington University*  
*M.Ed., Seattle University*

**SCHOENE, ELIZABETH**  
**Physics**  
*B.S., Harvey Mudd College*  
*Ph.D., University of Oregon*

**SILAS, BARBARA**  
**ESL**  
*B.A., University of Oregon*  
*M.A., TESOL, Seattle University*

**SIMMONS, NATALIE**  
**Mathematics**  
*B.S., Washington State University*  
*M.A., Antioch University*

**SKAMSER, SARAH**  
**Landscape and Horticulture**  
*B.S., Michigan State University*  
*State of Washington Landscaper Certificate*  
*& Nursery Certificate*  
*Professional Technical Teaching Certificate*

**SMITH, KIMBERLY**  
**Pastry & Baking Arts**  
*A.A.S., South Seattle Community College*  
*C.E.P.C., American Culinary Federation*

**SPENCE, DREW**  
**Justice Involved Solutions**

**SPIZZIRRI, LEO**  
**Math**  
*B.S., University of Washington*  
*M.A., University of California, Santa Cruz*

**STERN, CAROLYN**  
**ESL**  
*B.S., Cornell University*  
*M.Ed., Lesley University*

**STOFER, ANNETTE**  
**AFT Seattle/ESL/Intensive English Language Program**  
*B.A., Iowa State University*  
*K-12 Certification, University of Iowa*  
*Advanced TESOL Certification, Seattle University*

**STOWERS, ALLEN**  
**Sociology**  
*B.A., M.A., Western Washington University*  
*Occupational Teaching Certificate*

**STRONGMAN, ELIZABETH**  
**Short-Term Training Program**  
*B.A., M.Ed., Seattle Pacific University*

**SUNDE, ESTHER**  
**Library/Distance Learning**  
*B.A., University of Washington*  
*M.A. TESOL, University of California*  
*M.L.S., University of Washington*

**TALBOT, PAIGE**  
**English**  
*B.A., Lewis & Clark College*  
*M.A., University of Colorado*

**THOMPSON, MICHAEL**  
**History & Literature**  
*B.A., M.A., Ph.D., Washington State University*

**TOUTONGHI, JOHN**  
**Math**  
*B.S., Seattle University*  
*M.A., University of Washington*

**TRAN, ASHA**  
**Spanish**  
*B.A., Earlham College*  
*M.A., University of Washington*

**TSUKIJI, DARRELL**  
**Culinary Arts**  
*B.A., University of Washington*  
*M.B.A., City University*

**USHIMARU, KYLENE (KIM)**  
**Home & Family Life**

**VEGA, AMANDA**  
**Anatomy & Physiology**  
*B.S., University of Mount Union*  
*M.S., Ph.D., University of Wisconsin*

**VU, BAXI**  
**ESL**  
*B.S., M.A., Seattle University*

**WACHER, AIBIGAIL**  
**Math**  
*B.S., Simon Fraser University*  
*M.S., University of British Columbia*  
*Ph.D., Oxford University*

**WARD, MOLLY**  
**Career Link**  
*B.A., Washington State University*  
*M.A., University of Washington*

**WEBER, TERRY**  
**Worksource Center**

**WHITHAM, KATHREN**  
**English & Humanities**  
*B.A., M.A., Western Washington University*

**WILKINS, PAMELA**  
**Library/Distance Learning**

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*A.A., Seattle Central Community College*  
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*M.A., Seattle University*

**WINELAND, WENDY**  
**Career Link**

**WONG, KATHLENE**  
**Workforce Development**

**WOOD, TIMOTHY**  
**Career Link**

**YEDLIN, REBECCA**  
**High School 21+ / GED® / College Prep.0**  
*B.A., Evergreen State College*  
*M.S., Capella University Online Learning*

**ZOU, JIAN**  
**Math**  
*B.S., Wuhan University of Industry, China*  
*M.S., Ph.D., University of Toronto*

# ACADEMIC CALENDAR

## Summer Quarter 2021

Classes begin	Mon, June 28
Independence Day Holiday	Mon, July 5
Quarter ends	Fri, Aug 20

## Fall Quarter 2021

Classes begin	Mon, Sept 27
Veterans Day holiday	Thurs, Nov 11
Thanksgiving holidays	Thu–Fri, Nov 25–26
Quarter ends	Thurs, Dec 16

## Winter Quarter 2022

Classes begin	Tues, Jan 4
Dr. Martin Luther King Jr. holiday	Mon, Jan 17
Presidents Day holiday	Mon, Feb 21
Quarter ends	Wed, Mar 23

## Spring Quarter 2022

Classes begin	Mon, Apr 4
Memorial Day holiday	Mon, May 30
Quarter ends	Fri, June 17

Calendar subject to change; please verify dates with the colleges.



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Students are encouraged to sign up to receive emergency text messages to cell phones and personal emails through SeattleCollegesAlerts. The SeattleCollegesAlerts system will make a best effort to send messages if there is an emergency that causes the campus to close unexpectedly or if there is an incident that may pose a safety concern for the community. For more information or to sign up, go to the link on your campus website or at [www.seattlecolleges.edu](http://www.seattlecolleges.edu) or send an email to [alerts@seattlecolleges.edu](mailto:alerts@seattlecolleges.edu).

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