



#### 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 guiet 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.



# **Getting Started at North**

**Admissions** (206) 934-3663 (206) 934-3688 Financial Aid (206) 934-3663 Registration (206) 934-0079 TTY

#### 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

# **Academic & Student Support Services**

1 = 2 = 4

#### Facts at a Glance\*

Annual attendance 2017, 2019

### 2017-2018 ANNUAL PROFILES

Allitual attenuance 2017–2016	15,554
Special Enrollments	
Distance Education	8,011
Running Start	494
International Students	1,102
Worker Retraining	413

#### **FALL 2017 PROFILES**

#### Students \*\*

Median age	31
Ethnic diversity	48%
Male/Female	35%/52%
With bachelor or higher degrees	22%
Employed	44%
full-time	26%
With dependents	22%
single parents	6%
Full-time/Part-time attendance	29%/71%

#### **Programs**

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

#### **Course Funding Sources**

State-funded	64%
Contract-supported	9%
Student-supported	27%

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

# **Advising**

(206) 934-3658 advisornorth@seattlecolleges.edu 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 and Internships Career Services

(206) 934-6074

careerservices@seattlecolleges.edu 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 (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/services/internships/

Internships provide students with the opportunity to earn college credit while gaining practical work experience in their field of study. The Internship Program begins with CWE 101, which is a 2-credit course designed to assist students in 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

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.

<sup>\*\*</sup> State-funded

# **Computer Labs**

(206) 934-3630

itservices.northseattle.edu/content/open-computer-lab

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 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 SID number.

# Counseling

(206) 934-3676

northseattle.edu/counseling

Counseling offers North students individual appointments, classes, workshops, and online self-help to identify career interests and select programs of study. Counseling can help students improve concentration, study skills, and test taking; lower 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 45.

# **eLearning/Distance Education**

(206) 934-3738

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 international@seattlecolleges.edu Fax (206) 934-3794 ip.northseattle.edu

International Programs (IP) oversees admissions of international students for study in the U.S. as well as Study Abroad Programs for domestic students. IP provides international student admissions, activities, and services for students who have nonresident visas. IP processes admission applications for international students and assists them after admission. Contact this office for information about international admissions or for assistance with academic issues, immigration regulations, housing, or personal concerns. Field trips and other student activities promoting intercultural communication and enhanced experience of American culture are also provided. Students interested in Study Abroad should contact the IP office to learn about programs and scholarship opportunities.

See page 26 for more information.

# **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, communitybased 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 customerfriendly 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.

# **Testing Center**

(206) 934-3674 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. For testing schedule and detailed information, visit the website or the Testing Center.

# **Student Learning Center**

(206) 934-4752 northseattle.edu/tutoring HSSR building next to the Grove Café

The Student Learning Center offers comprehensive one-onone 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.

#### Veterans Services

School Certifying Official: Greggory Tessensohn (206) 934-7309

gregory.tessensohn@seattlecolleges.edu 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 Gl 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 34 for financial aid information.

# **Gender Equity Center**

(206) 934-3696 northseattle.edu/womens-center

The Gender Equity Center connects current and prospective students to resources, referrals, and information, such as housing assistance, health care, child care, intimate partner/ domestic violence, and contraception. To foster diversity, equity, and care, the Gender Equity Center also helps organize, plan, and sponsor campus events and initiatives on gender and sexuality to support a welcoming campus environment. In collaboration with Student Leadership, the Gender Equity Center connects students with clubs such as the Feminist Alliance, the LGBTQ Club, and Sexes and Scholars Book Club.

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

# Student Life

# **WorkForce Education Programs**

(206) 934-3787 nsccwfe@seattlecolleges.edu 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 e 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.

# **Art Gallery**

(206) 934-4557

northseattle.edu/programs/art/art-gallery-north

North's Art Gallery seeks to foster the appreciation of the visual arts on North's campus. We actively engage 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. It is located next to the Bookstore in IB1430.

11 a.m. to 3 p.m., Monday through Friday 5 to 8 p.m., Wednesday and Thursday evenings

#### **Bookstore**

(206) 934-4678 northscc.bncollege.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 6 p.m., Monday and Tuesday 8 a.m. to 4:30 p.m., Wednesday through Friday

#### Child Care Center

(206) 934-3644 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

## **Food Services**

(206) 934-3728

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

The well-being and safety of students are of utmost importance. The office provides security services, maintains a campus crime log, and provides notices of possible threats. In the event of an on-campus crime, serious accident, or injury, students should call 911 first and then notify campus security. Contact the office for non-life-threatening incidents or injuries as well. Campus pay phones are programmed for one-button free calls to security and 911.

See page 42 for additional information on personal safety.

#### **Student Clubs**

(206) 934-3641

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

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/

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 wide 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

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. Call (206) 934-3646 for more information.

#### **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. 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

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.

# **Affiliate Organizations**

## **Alumni Association**

(206) 934-3604

www.facebook.com/nsccalumni nsceducationfund.org/alumni

The North Seattle College Alumni Association aims to build and sustain meaningful relationships with our past students, fostering support of current and future students' success. Any student who has attended North, regardless of whether they completed a certificate or degree, is considered an alumni.

The Alumni Association provides a way to recognize our alumni and encourage alumni mentoring of current students, provide input to enhance college programs and services, and support identification and mentoring of future students. We believe that greater alumni participation directly benefits the students and programs at the college while providing networking opportunities for the alumni themselves.

Like us on Facebook, follow us on Twitter, or contact us using the form below to sign up and share your story about your experience at North Seattle College. Membership is free. Join online at nsceducationfund.org/alumni.

# **North Seattle College Education Fund**

(206) 934-3604

NSCCEducationFund@seattlecolleges.edu nsceducationfund.org

A nonprofit 501(c)(3) organization guided by a volunteer board of directors composed of community and business leaders, the Education Fund provides support for North students through scholarships and emergency assistance, and for faculty and staff through professional development grants. The Education Fund also assists with the purchase of classroom equipment and supports other college programs that benefit students. Student scholarships are awarded annually. The Education Fund's mission is to support the students, faculty, staff, and programs at North Seattle College. Faculty and staff benefit from our work through the following program support, grant, and award programs.

# **Programs of Study at North**

#### **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 5.

## 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.

# **8 Directions for Your Education and Training**

- 1. College Transfer
- 2. Professional/Technical Programs
- 3. Bachelor's Degrees
- 4. Continuing & Contract Education
- 5. Bridge to College/Pre-College
- 6. eLearning / Distance Education
- 7. International Programs
- 8. Worker Retraining Program



# **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 pages 5-9.

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 pages 6-9 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:

- Biological sciences, environmental/resources sciences, chemistry, geology, and earth sciences
- 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 ENGL& 102	English Composition I			
COMMUNICA	Composition II	10		
	Applied Mathematics			
QUALITATIVE,	SYMBOLIC REASONING	5		
	a minimum of two different prefixes with 10 credits in a discipline area.			
VISUAL, LITE	RARY AND PERFORMING ARTS	15		
ECON& 202	Micro Economics	5		
INDIVIDUAL,	CULTURES AND SOCIETIES	15		
Follov MATH -OR- N	Business Calculuswing can be substituted:  1&151 Calculus I  MATH&124 Calculus w/Geometry II  ogical, and/or Earth Sciences	5		
Note: Must include at least one 5-credit laboratory course				
THE NATURAL	L WORLD	15		
ACCT& 201 ACCT& 202 ACCT& 203 BUS& 201 BUS& 210	Financial Accounting I	5 5		
BUSINESS CO	OURSES	25		
U. S. CULTUR	RES	5		
TOTAL PROGR	RAM 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
ART	102	Design5
ART	111	Drawing
ART	112	Drawing
ART 1	14 Begi	nning Digital Photography, ART 121 Beginning
Prin	tmakin	g, ART 201 Beginning Painting, or ART 211
Beg	inning S	Sculpture

**ART** 

ART

**ART** 

ART **ART** 

ART

ART

GROUP 1 - 2-DIMENSIONAL ART

			ose two art history courses from the following:			
ART 251 Art History – Ancient, ART 252 Art History –						
			ART 253 Art History – Modern, ART 255			
			– Art of Asia, ART 257 Art History – Art of			
the Global South						
	ART	210	Digital & Graphic Art – Photoshop +			
	ART	251	Illustrator			
	ARI		wing can be substituted:			
			252 – Art History5			
			istory courses are taught at Seattle Central			
			ner college.			
	ART		Survey of Western Art: Renaissance – Present. 5			
			istory courses are taught at Seattle Central			
			ner college.			
	ART		The Art Business			
	GENE	RAL ED	UCATION COURSES			
	Individ	luals. C	cultures & Societies5			
	The Natural World					
	Computation Course					
	Select 5 credits from notated courses below:					
	MATH 107 (or above), BUS 116 (or above),					
			110 (or above)5			
	ENGL8		English Composition I 5			
	ENGL8	£102	Composition II			
	ART E	LECTIV	ES GROUP 1: 2-DIMENSIONAL ART			
	Approv	ved Art	electives must be taken in sequence; however,			
	completion of a sequence is not required.					
	ART	113	Drawing			
	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			
	ADT	40.	and Monoprint			
	ART	124	Screen Printing5			
	ART	201	Painting			

202 Painting......5

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

240 Book Arts......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	Sculpture5		
ART	212	Sculpture5		
ART	213	Sculpture5		
ART	221	Ceramic Art		
ART	222	Ceramic Art		
ART	223	Ceramic Art		
ART	281	Jewelry Design I		
ART	282	Jewelry Design II5		
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

MINIMUM 5

#### 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	REQU	IREMENTS – MATHEMATICS		
Choos	e five o	credits from the following courses:		
	MATH	1 116 Applications of Math: Management,		
	Life,	and Social Sciences		
MATH8		Pre-Calculus I5		
MATH8		Pre-Calculus II5		
MATH				
	§ 151			
MATH8		Calculus II		
MATH MATH	220 224	Linear Algebra		
		Vector Calculus		
	-	IREMENTS – COMPUTER SCIENCE		
		edits from the following courses:		
CSC CSC	110 111	Introduction to Computer Programming 5 Computers for Math and Science 5		
CSC	142	Computer Programming I5		
CSC	143	Computer Programming II		
ENGR		Computer Programming5		
LIVOIT		compater riogramming		
Assoc	iate (	of Science (A.S.)		
		IREMENTS – ENGLISH		
ENGL8	101	English Composition I		
ENGL8	102	Composition II		
AREAS	OF K	NOWLEDGE DISTRIBUTION REQUIREMENTS		
See ac	dvisor f	or list of approved courses or use links below.		
Visual	Visual, Literary, and Performing Arts			
	Courses in this area include languages, literature,			
	art, music, drama, and communication. Choices			
		include a minimum of two different course		
	•	kes and no more than 5 credits each of a world		
		age at the 100 level; a studio/performance may be applied to the distribution requirements.		
Individ		Iltures, and Societies		
marvia		ses in this area include social sciences, such		
		nthropology, 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-M	PRE-MAJOR REQUIREMENTS			
Course	e seled	ction should be in compliance with major require-		
		licated by the four-year institution to which the		
	student is planning to transfer. See an advisor or counselor			
prior to	o begir	nning your program of study.		
The Na	atural V	Vorld		
	Cour	ses in this area include physical and life		
		nces and certain mathematics, computer		
		nce, and social science courses. Choices		
		include a minimum of two different prefixes;		
		dits must be in a lab science.		
ELECT				
		or list of approved courses.		
Electiv	e			

# **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

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.wwu.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

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.

# **Professional & Technical Programs**

See page 117 for details about North's programs.

# **Bachelor's Degrees**

North Seattle College offers four Bachelor of Applied Science degrees: International Business, Residential and Commercial Property Management, Application Development, and Early Childhood Education. These degrees build on associate degrees that provide workplace skills in specific career areas. When compared with traditional bachelor's degrees, applied baccalaureate degrees incorporate more applied, hands-on learning focused on a particular industry. They are designed with strong internship components.

Tuition rates are different for upper-division courses; see the rate chart on page 19.

# **Application Development**

Math and Science Division (206) 934-7025

The Bachelor of Applied Science in Application Development at North Seattle College provides a bachelor's degree opportunity for students who already have Information Technology (IT) degrees, such as Associate of Applied Science (A.A.S.), or students who are interested in the programming field and have at least two years' worth of college credit. The B.A.S. degree focuses on the industry-relevant education and skills needed by software developers and programmers who develop, create, and modify general computer applications software, mobile applications, or specialized utility programs. Students learn to analyze user needs and develop software solutions and design or customize software. The emphasis is on solving real-world application problems through industrybased projects that meet customer needs and emerging software trends.

A minimum of a 2.5 cumulative GPA and a 2.5 GPA or higher in all IT courses. Any General Education requirements taken as part of the associate degree can be transferred in to satisfy requirements. Contact the program office for further information.

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

#### **DEGREE REQUIREMENTS**

Associate of Applied Science (A.A.S. or A.A.S.-T) or equivalent degree, preferably in an Information Technology-related field, such as programming, database development, or web development.

PREREQUISITES - IT COURSES			
Database Development/Programming in SQL5			
Web Programming/Web Development			
Programming			
5 credits of Object-Oriented Programming strongly			
recommended (Equivalent courses may be substituted)			
PREREQUISITIES - IT CREDITS 20			
PREREQUISITES - GENERAL EDUCATION			
Quantitative/Symbolic Reasoning (QSR)			
QSR course in Computer Science, Statistics or			
Mathematics (Statistics recommended)			
(Equivalent courses may be substituted)			
ENGL& 101 English Composition I			
PREREQUISITES - GENERAL EDUCATION CREDITS 10			
TECHNICAL SPECIALTY COURSES			
AD 300 Component Software5			
AD 315 Discrete Mathematics in Computer			
Programming			
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 Management5			
AD 410 Web Application Practicum 5			
AD 420 Cloud Computing - Software As Service5			
AD 430 Mobile Application Practicum5			
AD 440 Cloud Computing Practicum5			
AD 450 Data Science			
AD 470 Data Science Practicum 5			
AD 490 Internship/Capstone Project AD-B.A.S5			
TECHNICAL SPECIALTY CREDITS 70			
RELATED INSTRUCTION			
General Education Prerequisites comprise 10 of 60 credits			
required.			
Visual, Literary and Performing Arts10			
Contact the Advising Center for acceptable courses.			
Individual, Cultures and Societies			
Contact the Advising Center for acceptable courses.			
The Natural World			
At least one 5-credits lab required.			
Contact the Advising Center for acceptable courses.  Communication			
5 credits in a Composition, Writing-intensive,			
or Basic Speaking Skills course			
General Education Elective			
Credits may be selected to best suit the needs			
of the baccalaureate program.			
ELECTIVES			
See Advising Center for list of courses.			
Includes any credits taken towards the associate degree and/			

180

or technology prerequisites. TOTAL PROGRAM CREDITS

# **Early Childhood Education**

**Workforce Instruction Division** (206) 934-4587

The Early Childhood Education B.A.S. (ECE B.A.S.) 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 B.A.S. degree is an extension of the Early Childhood Education Associate of Applied Science (A.A.S.) degree, which is built around the statewide Stackable Certificates in Early Childhood Education. However, students with A.A. or A.A.S. 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.

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

#### **PREREQUISITES**

ECED&	107	Health, Safety, and Nutrition5
ECED&	160	Curriculum Development
ECED&	170	Environments-Young Child
EDUC&	115	Child Development
EDUC&	130	Guiding Behavior
EDUC&	150	Child Family and Community3
TECHN	ICAL S	PECIALTY COURSES
ECE	305	Early Childhood Education Approaches
		and History
ECE	310	Cognition and General Knowledge 5
ECE	315	Language, Literacy and Communication 5
ECE	320	Creative Expression
ECE	350	Practicum: Interactions
ECE	355	Anti-Bias Education
ECE	405	Partnership and Collaboration in Early Care
		and Education3
ECE	410	Inclusive Early Childhood Education 4
ECE	415	Children and Media3
ECE	420	Social and Emotional Foundations 5
ECE	430	Linguistically Diverse Learners5
ECE	450	Child Development and Assessment 5
ECE	480	Leadership and Professional Community5
ECE	490	Capstone
GENER	AL EDI	JCATION
ENGL&	101	English Composition I
	ENGL	&101 is counted toward general education
		ements. Must be eligible for ENGL& 101
	throug	gh English Placement Exam or completion
		GL 097/ENGL 098.
ENGL&	102	Composition II
		ving can be substituted:
		& 235 Technical Writing
Visual,	Literar	y and Performing Arts15

Individual, Cultures, and Societies	.20
The Natural World	.10
One course must include lab.	
Quantitative/Symbolic Reasoning	5
College-level MATH 101 or higher	

#### **ELECTIVES**

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

ELECT	ELECTIVES CREDITS				
ADDIT	IONAL	CREDITS			
INFO	101	Introduction to Information Resources	2		

#### **International Business**

Workforce Instruction Division (206) 934-6131

TOTAL PROGRAM CREDITS

The International Business B.A.S. (IB B.A.S.) degree is designed for students who desire to work in any organization that does business internationally as well as those who already work in the field. It is designed to leverage a student's already existing business, accounting, or logistics coursework and experience, and add upper-division courses that specifically prepare the student to work in an international arena. The IB B.A.S. degree is an extension of the General Business Associate of Applied Science Transfer (A.A.S.-T) degree and the Accounting Associate of Applied Science Transfer (A.A.S.-T) degree. However, students from several different associate degree programs will be qualified to enter the baccalaureate degree program.

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

#### **DEGREE REQUIREMENTS**

A.A., A.S., A.B., A.A.S., A.A.S.-T degree earned with a minimum 2.0 GPA

#### **PREREQUISITES**

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

ACCT& 201	Principles of Accounting I
	Counts towards B.A.S. elective credits.
ACCT& 202	Principles of Accounting II
	Counts towards B.A.S. elective credits.
ACCT& 203	Principles of Accounting III5
	Counts towards B.A.S. elective credits.
BUS& 201	Business Law5
	Counts towards B.A.S. elective credits.

BUS	Follow MATH	Business and Economic Statistics 5  ving can be substituted: &146 Intro to Statistics	Elective		
FNGI &		s towards B.A.S. elective credits.  English Composition I			eneral Education credits. (Commonly fulfilled by
LINGLO		s towards B.A.S. General Education credits.		accou	unting/business courses from associate degree.)
		be eligible for ENGL&101 through English	TOTAL I	PROGE	RAM CREDITS 180
	Placer	ment Exam or completion of ENGL 097 or ENGL 098.			
TECHN	ICAL S	PECIALTY COURSES			
CWE	494	International Business Internship Preparation 1	Doci	don:	tial and Commercial
CWE	495	Baccalaureate Internship			
IBN	301 302	International Management	Prop	erty	/ Management
IBN IBN	303	International Marketing	Workfo	rce Ins	struction Division
IBN	310	Operations Management	(206) 9	34-61	L31
IBN	311	International Business Law	The Re	sident	tial and Commercial Property Management
IBN	320	International Finance 5			A B.A.S.) program prepares students for a career
IBN	350	International Business Practicum5			dential or commercial property management.
IBN	401	International Project Management			sciplinary curriculum, combining business,
IBN IBN	402 410	Management of Information Systems 5 International Entrepreneurship		_	and real estate courses. The RCPM B.A.S. is an
IBN	420	Global Business Strategy			a business, accounting, or real estate A.A.ST upper-division courses in property management.
IBN	490	Research Skills for International	_		m several different business, accounting, and real
		Business			ams will be qualified to enter the RCPM program.
GENER	AL ED	UCATION COURSES	Note: A	dvand	ced placement testing, work experience, and
CMST	215	International Communication and Relations 5			edits may result in course waivers, credit
Followin	ng can	be substituted:	transfe	r, and	advanced placement.
		Public Speaking			
		Micro Economics	Bache	lor o	of Applied Science (B.A.S.)
		Macro Economics	Associ	iate d	degree or equivalent
ENGLA		Composition II	PRERE		•
		&235 Technical Writing5			fulfills required program general education
MATH		Applications of Math: Management,			ther prerequisite courses fulfill required program
		Life and Social Sciences	elective		
		ving can be substituted:	ACCT&	201	Principles of Accounting I
		&141 Pre-Calculus I	ACCT&	202	Principles of Accounting II
MAIH&		Business Calculus			Principles of Accounting III5
		ving can be substituted: &151 Calculus I	BUS		Business and Economic Statistics 5
Visual.		ry, and Performing Arts			wing can be substituted:
,		vo World Language courses.	FNGI &		l&146 Intro to Statistics  English Composition I
	See a	dvising for course list.	RES		Real Estate Law
Individu		Itures and Societies	0		wing can be substituted:
		ourse. See advising for course list.			&201 Business Law
The Na		/orld	TECHN	ICAL S	SPECIALTY COURSES
		dit lab class. See advising for course list.	CWE	495	Baccalaureate Internship3
U.S. Cu		5	INFO	300	Information Literacy for Undergraduate
0.0.00		ving can be substituted: Global Studies (any U.S.			Research
	or GS	designated course) See advising for course list.	RCPM	301	Principles of Residential Property
GENER	AL EDI	JCATION CREDITS 60	RCPM	202	Management
ELECTI	VES		NUPIVI	302	Development
		Elective credits includes 25 credits from	RCPM	303	Intro to Development and Construction
		equisites as listed and notated above, excluding	•	-	Management
		nd 35 credits as noted below.	RCPM	304	Principles of Commercial Property
	, _				Management

RCPM	310	Specialty and Affordable Housing
RCPM	311	Marketing & Leasing of Residential
RCPM	313	Real Estate
1101 111	010	Estate
RCPM	315	Introduction to Negotiations
RCPM	320	Financial Accounting for Property
DODIA	222	Management
RCPM RCPM	330 350	Leadership and Team Building
INGFIVI	330	Management
RCPM	401	Project Management for Property
		Management
RCPM	402	Supervision and Management 4
RCPM	403	Real Estate and Fair Housing Law
RCPM	410	Professional Ethics in Property
RCPM	420	Management
RCPM	494	Practicum Portfolio
		UCATION COURSES
CMST&		Public Speaking
ECON&		Micro Economics
ECON&	202	Macro Economics
ENGL&		English Composition I
		be eligible for ENGL&101 through English
ENIOL 0		ment Exam or completion of ENGL 097/098.
ENGL&		Composition II
		&235 Technical Writing
MATH	116	Applications of Math: Management,
		Life, and Social Sciences
Followin		be substituted:
		&141 Pre-Calculus I
		MATH&142 Pre-Calculus II
		//MATH&148 Business Calculus
Vigual		ry, and Performing Arts
		Itures, and Societies
		/orld,
		include at least 5 credits of lab science.
U.S. Cu		5
		ving can be substituted: Global Studies
		nmended courses: 205 Multicultural Communications
		105 Intercultural Communications
FLECTI		REQUIRED ELECTIVES
		ective credits can be taken one of two ways:
		edits of required electives + 37 credits of
	100	/200-level courses
		edits of required electives + 25 credits of
		/200-level courses
		from course listed below:
ACCT& ACCT&		Principles of Accounting I
		Principles of Accounting III
		Business Law

	Following can be substituted:			
	RES 170 Real Estate Law			
BUS	210 Business and Economic Statistics 5			
	Following can be substituted:			
	MATH&146 Introduction to Statistics			

#### **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.

# **Continuing & Contract Education**

# **Continuing Education Classes**

(206) 934-3705 learnatnorth.org

Continuing Education is committed to enriching lives by:

- **Expanding horizons**
- Serving the community
- Offering opportunities for lifelong learning

Continuing Education encourages lifelong learning through noncredit classes for fun, professional development, and personal enrichment. Class offerings change quarterly and cover a range of interests: computer skills, design, business, arts, cooking, fitness, entertainment, language, cultural experiences, and more. All Continuing Education classes qualify as clock hours for teachers and CEUs for au pairs.

# **Customized Business Training**

(206) 934-6075

Customized training allows a company to respond to the need to upgrade and expand the technical and professional skills of its employees. Classes are provided at the company's site or at North.

# Bridge to College/ Pre-College

# Basic & Transitional Studies Division (206) 934-4720

Basic Studies provide instruction for those who want to improve their English, improve basic verbal and math skills, earn a high school diploma or GED in order to get a better job, continue their education and prepare for college-level work, or enter college while still in high school. Each of the programs in this area is designed to meet a particular set of student needs.

#### **BRIDGE TO COLLEGE PROGRAMS:**

- Developmental Education
- Career and College Ready English as a Second Language
- Concurrent High School / College Programs

#### **PRE-COLLEGE PROGRAMS:**

- Adult Basic Education
- English as a Second Language Beginning & Intermediate
- GED Preparation
- High School Completion
- High School 21+

# **Bridge to College Programs**

# Developmental Education

# English, Mathematics and Human Development Courses

English (206) 934-7309 / Math (206) 934-3746 northseattle.edu/programs/pre-college-english northseattle.edu/programs/pre-college-math

Many students entering college or returning after some time away from studies need additional work to prepare for college-level courses. For these students, the Seattle Colleges offer 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 (ENGL), mathematics (MATH), and human development (HDC).

# Career and College Ready English as a Second Language

(206) 934-7303

Placement in transitional ESL classes (advanced, Levels 5-6) is done by the CASAS Test. These courses prepare students for college-level work, with increasing emphasis on note taking, composition, oral presentation, and class discussion at high levels. These classes do not count as credit for college-level work. Tuition for these classes is \$25 per quarter (subject to change).

Note: International students should take ESL classes through International Programs, page 26.

# Concurrent High School/ College Programs

## **Running Start**

(206) 934-3682

northseattle.edu/running-start

Running Start is a program that allows qualified high school juniors and seniors to register for college-level courses while remaining enrolled at their local public 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 provide proof of placement into college-level English or 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.

See page 22 for more information.

# College in the High School

Arts, Humanities, and Social Sciences Division (206) 934-3709

northseattle.edu/college-high-school

The College in the High School program at North Seattle College is a cooperative program between the Seattle Public Schools and the Seattle Colleges. Students have the opportunity to earn college and high school credit simultaneously while remaining on their high school campuses. The courses are taught by qualified high school teachers who collaborate with NSC faculty mentors (course leads) to ensure that the work students perform is college-level, providing students with insight to the academic standards of college courses.

# **Pre-College Programs**

#### Adult Basic Education

(206) 934-7303

northseattle.edu/programs/abe-ged

Adult Basic Education (ABE) classes are for adults who already know English but wish to improve their basic reading, writing, and math skills. Students can start at a level matching their current skills and progress at their own pace. Classes in basic math and reading, writing, and communication skills are designed to help adults become more self-sufficient, improve their job prospects, prepare for the General Education Development (GED), or qualify for entry into postsecondary education programs. Course descriptions are listed under ABE. Classes are noncredit. Tuition is low, currently \$25 per quarter (subject to change).

# **English as a Second Language**

(206) 934-7303

northseattle.edu/programs/esl

English as a Second Language (ESL) classes, Levels 1-4, are offered to help non-native speakers communicate in English and increase their understanding of American culture. Conversation, pronunciation, reading, writing, grammar, and digital literacy are taught, with special emphasis on the English skills needed for survival and employment. These noncredit courses cost \$25 per quarter (subject to change). Course descriptions are found under ESL. When students test high enough, they can move on to Transitional ESL, Levels 5 and 6, which concentrates on college-preparation skills.

# **GED Preparation**

(206) 934-7303

northseattle.edu/programs/abe-ged

The General Educational Development (GED) is a certificate of successful completion of the four-part GED test. It is an equivalent of a high school education and is usually accepted in place of a diploma. The GED Preparation program prepares adult students 18 and older to take the exams. Students review reading, math, grammar, writing, social studies, science, and test taking. Tuition is \$25 per quarter (subject to change).

Prerequisite: Placement by orientation coordinator or instructor permission.

GED 050 GED Test Preparation

GED 051 GED Math

**GED** 060 Advanced GED Preparation

061 Advanced GED Math **GED** 

See page 23 for additional information.

# **High School Completion**

(206) 934-7303

northseattle.edu/programs/high-school-completion

For students who have not completed work for a high school diploma, High School Completion offers the opportunity to earn the diploma through two options: the Standard High School Diploma and the Associate Degree Conversion Diploma. Students planning to work toward a high school diploma should meet with the high school advisor for information.

See page 24 for details and possible tuition waivers.

# **High School 21+**

An alternative to the GED, High School 21+ (HS 21+) is a competency-based program that adds high school-level education and training to Basic Skills classes so that students can complete high school while transitioning into college or Professional Technical programs at North. Students who complete the program receive a high school diploma, not an equivalency. With HS 21+, students can take ABE, GED, HSC, Advanced ESL, I-Best, and college-level classes and receive high school credit. They can also take portfolio classes in subjects like fine arts, health, physical education, and Washington state history, which allows them to document and use prior learning in these fields while working at their own pace. They can also use skills learned on the job or in the military to receive high school credits.

HS 21+ students work closely with North's ABE advisors to review high school transcripts (foreign transcripts accepted) as well as life and work experience. Together they work to craft an individualized educational plan to receive the high school diploma as a part of a customized pathway to college and careers. Tuition is \$25 per quarter.

# 6

# eLearning/ Distance Education

(206) 934-3738 elearning.northseattle.edu

North offers many credit courses that do not require campus visits. Online classes are designed so students can keep in close contact with their instructors using a Learning Management System, which includes discussion rooms and/or email. Hybrid courses blend on-campus and "virtual" classroom instruction, saving travel time and expense. Studentteacher ratios in these classes are the same as classes held on campus. All distance education classes transfer the same as on-campus credit classes. Students can earn an A.A. degree completely online or with many fewer campus visits.

See page 25 for complete information on all eLearning options.

# International Programs

(206) 934-3672 Fax (206) 934-3794 international@seattlecolleges.edu ip.northseattle.edu

North Seattle College is proud to welcome a diverse population of international students from all over the world. These students can choose to study in North's Intensive English program, career training, and college transfer programs. Many are also active in campus activities and organizations.

The International Programs Office is dedicated to helping students succeed in their studies and adjust to life in Seattle, offering assistance with admissions, academic and immigration advising, scholarships, and housing. A three-day arrival orientation program prepares students to begin a successful academic experience, and the Intentional Programs Office provides special programming and advising services for international students throughout their time at the college.

# **Intensive English Program**

The Intensive English program is for students who study at different levels based on their English proficiency. Quarterly classes develop skills in conversation, listening, reading, writing, grammar, study skills, note taking, vocabulary, and American culture. Advanced students may also take regular college classes. Upon successful completion of the Intensive English Program (IEP) or testing into college-level English, they may enter one of the college's academic or technical programs.

See page 27 for more information.

# **International High School Completion**

(206) 934-3672

ip.northseattle.edu/high-school-completion-plus

International students who have not completed a high school diploma have the opportunity to earn a Washington state high school diploma and an associate degree at the same time through North's High School Completion Plus program. Students planning to work toward a high school diploma should meet with the international high school advisor in the International Programs Office for information.

# **Travel/Study Abroad**

(206) 934-3672

northseattle.edu/programs/study-abroad

North Seattle College offers a variety of international study opportunities, including quarter-length and short-term options. These offerings are updated annually, so interested students should contact the International Programs Office to learn about programs and scholarship opportunities.

8

# Worker Retraining Program

(206) 934-3787

northseattle.edu/workforce-education

Worker retraining at North Seattle College is a package of services, opportunities, and specialized instructional programs to help you return to work as soon as possible. A person may be eligible for Worker Retraining assistance if he or she:

- Is unemployed and is collecting Washington state unemployment benefits
- Has exhausted unemployment benefits in the past two years
- Has been working in the home, experiences a significant loss of income, and needs to re-enter the workforce
- Has received a WARN letter
- Has closed a business due to economic downturn
- Is working in a not-in-demand job
- Has lost a job because of a disaster
- Has separated from the military with an honorable discharge within the last 24 months
- Has suffered a loss of more than 50 percent of household income due to a divorce, separation, or death of a spouse or partner within the last 24 months

Worker Retraining benefits include:

- Priority registration
- Tuition assistance career planning services
- High-wage, high-demand training programs
- Tutoring assistance
- Employment security staff on campus
- Assistance with TAA and CAT/TB paperwork
- Liaison to other agencies, programs, and funding
- See page 28 for additional information.

# **Professional/Technical Programs**

North Seattle College offers degrees and certificates in more than 40 workforce education areas. The programs vary in length from one to seven quarters of full-time coursework and are designed to prepare students for careers and/or to expand skills in their career area. Several Professional Technical programs offer short-term training certificates. Students may build skills and add certificates to progress in their fields. North Seattle College, including these programs, is accredited by the Northwest Commission of Colleges and Universities.

# **Accounting**

**Workforce Instruction Division** 

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

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	
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	
ACCT	260	Peachtree Accounting	
ACCT	261	Accounting Information Systems	
ACCT	267	Not-for-Profit Financial Management	
ACCT	271	Ethics in Accounting	
CWE	110	Internship	3
RELATE	D INS	TRUCTION	
BUS	124	Excel for Business	.5
BUS	131	Integrated Communications I	.5
BUS	169	Using Computers in Business	.5
		ving can be substituted:	
		L Software Applications	
BUS	200	Law and Society	5
		ving can be substituted:	
		201 Business Law	
BUS		Business and Economic Statistics	.5
		quisite: MATH 098 or higher	
BUS	236	Interpersonal Communications	
		for the Workplace	
U.S. Cu			
		ving can be substituted: Global Studies course	<del>)</del>
		dvising for list of approved courses.	
TOTAL F	PROGR	AM CREDITS	93

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

The Associate in Applied Science – Transfer (A.A.S.-T) degree is built upon technical skills for job preparation but also includes a college-level general education component common to all the A.A.S.-T degrees. The Accounting A.A.S.-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 Seattle College.

#### **TECHNICAL SPECIALTY COURSES**

ACCI	131	QUICKBOOKS	. ၁
ACCT&	201	Principles of Accounting I	.5
	Follov	wing can be substituted:	
	ACCT	110 Intro to Accounting/Bookkeeping I	.5
ACCT&	202	Principles of Accounting II	.5
	Follov	wing 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	
BUS	210	Business and Economic Statistics	.5
BUS	236	Interpersonal Communications	
		for the Workplace	
ECON8	201	Micro Economics	
ECON8	202	Macro Economics	.5
RELATI	ED INS	STRUCTION	
ENGL&	101	English Composition I	.5
	Must	be eligible for English 101 through English	
	Place	ement Exam or completion of English 097/098.	
MATH	116	Applications of Math: Management, Life,	
		and Social Sciences	.5
		substitute MATH&141 or any math class	
		MATH&141 as a prerequisite.	
The Na		Vorld	.5
		insfer to an applied baccalaureate program,	
		course in physical, biological, and/or	
		science is required.	
U.S. Cu			.5
	Follov	wing can be substituted: Global Studies	
RELATI	ED INS	STRUCTION: ELECTIVE	
ACCT	251	Intermediate Accounting I	.5
ACCT	252	Intermediate Accounting II	
ACCT	256	Taxation of Corporations and Partnerships	
ACCT	261	Accounting Information Systems	.5
ACCT	265	Accounting for Not-for-Profit and Government	
		Entities	
ACCT	267	Not-for-Profit Financial Management	
ACCT	270	Cost Accounting	
ACCT	271	Ethics in Accounting	
ACCT	272	Fraud Examination	
ACCT	273	Introduction to Financial Crimes	
ACCT	274	Forensic Accounting	
ACCT	275	Auditing	. 5

BUS&	101	Introduction to Business
BUS	112	Issues in the American Workplace 5
BUS	114	Introduction to Marketing5
BUS	118	Project Management Introduction
		and Overview
BUS	119	Leadership and Management Skills 3
BUS	151	Introduction to Entrepreneurship 5
BUS	169	Using Computers in Business 5
BUS	186	Sustainable Business5
BUS	215	Introduction to International Trade Business 5
BUS	229	Project Management Tools Techniques
		and Control
CMST8	220	Public Speaking
TOTAL	CREDI"	TS: 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**

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 preventive 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
	Follo	wing can be substituted:	
	Prior	accounting course or Instructor permission	

#### **TECHNICAL SPECIALTY COURSES**

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

#### **Accounting Office Assistant I Short-Term Certificate**

Accounting Office Assistant I Certificate provides the student with a basic understanding of accounting principles and procedures, business computer software, and computational skill building. The certificate is designed to provide foundational skill development and incremental course completion that can be applied to the Accounting Office Assistant Certificate II, the Bookkeeping Certificate in Accounting, the Computerized Accounting Technology Certificate, and the Associate of Applied Sciences Degree in Accounting. This is an I-BEST supported certificate.

#### **PREREQUISITES**

Completion of the Accounting Office Assistant I Certificate

#### TECHNICAL SPECIALTY COURSES

ACCT	120	Introduction to Accounting/Bookkeeping II .	5
ACCT	131	QuickBooks	5
CWE	102	Job Shadow	2
	Follov	ving can be substituted:	
	CWE	101 Portfolio, Job Search, and Interviewing	2
TOTAL PROGRAM CREDITS 12			

#### Advanced Tax Preparation Certificate

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 COURSES**

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	PROGE	RAM CREDITS	35

## **Allied Health**

#### Workforce Instruction Division

This program provides students with the prerequisite courses required to apply for admission to a nursing program or advanced allied health program. Advanced allied health programs have additional prerequisites. 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 B.A.S. 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.

# Allied Health Sciences Associate of Applied Science — Transfer (A.A.S.-T)

# PREREQUISITES

Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior coursework. Coursework 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 a 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, Litera	ry, and Performing Arts	5
Reco	mmended courses:	
HUM	105 Intercultural Communications	5
-OR- C	CMST&210 Interpersonal Communications	5
Individual, Cu	Iltures, and Societies	5
Reco	mmended courses:	
PSYC	&100 General Psychology	5
-OR- S	SOC&101 Intro to Sociology	5
Lab Science		5
Reco	mmended courses:	
CHEM	M&121 Intro to Chemistry	5
-OR- E	BIOL&160 General Biology w/Lab	5

#### **RELATED INSTRUCTION**

See Advising for courses that fulfill related instruction/foundation science requirement.

# **Architectural Engineering Drafting**

#### Workforce Instruction Division

This program prepares students for a variety of entry-level jobs in engineering, construction firms, and public agencies in the construction and design industry. Students learn basics of conventional hand drafting, CAD and Building Information Modeling (BIM), basic applied mechanics, cost estimating, shop drawing preparation, and construction materials and processes. The two-year sequence leads to an Associate of Applied Science degree. A one-year certificate is also offered. Students may also take short-term certificate programs in 3-D Modeling Techniques using BIM or AutoCAD.

Archi	tectur	al Engineering Drafting Certificate
TECH	NICAL S	SPECIALTY COURSES
TDR	109	Architectural Engineering Lab
	may l	be repeated each quarter.
TDR	111	Basic CAD Drafting for Construction and Design
TDR	112	Intermediate CAD Drafting/Construction and Design
TDR	113	Basic Drafting
TDR	115	Civil and Site Drafting
TDR	124	Materials and Methods of Construction 5
TDR	134	Systems in Buildings
TDR	144	Design and Construction Environment 5
		STRUCTION
BUS	236	Interpersonal Communications
503	230	•
	Follo	for the Workplace
		wing can be substituted:
ССТ		.00-level approved human relations course.
EET	109	Mathematical Applications for
	Falls.	Circuit Analysis5
		wing can be substituted: Higher-level math course
ENICI		MATH 102 College Algebra
ENGL	&101	English Composition I
		wing can be substituted:
		dits ENGL 105 and 5 credits General Education
TOTAL	CREDI	TS 53
Archi	toctur	al Engineering Drafting Associate
		Science (A.A.S.)
•	•	•
Comp	ietion (	of Certificate Requirements: 53 credits
TECH	NICAL S	SPECIALTY COURSES
TDR	100	Basic BIM for Design and Construction 5
TDR	101	Intermediate BIM for Design
		and Construction
TDR	109	
	Total	of two 2 credits required –
		be repeated each quarter.
TDR	•	Applied Mechanics I
TDR	269	Construction Estimating
		<u>-</u>
		STRUCTION
		cation Courses
	& 230	Technical Writing
Gener		cation Elective
		ct from approved General Education categories.
	See t	the Advising Center.
ELEC	ΓIVES	
IT	101	Software Applications
	Follo	wing can be substituted:
		outer Skills Elective:
		169 Using Computers in Business
		CSC 111 Computers for Math & Science

TOTAL PROGRAM CREDITS

BUS

## **Aviation Electronics**

Workforce Instruction Division

#### **Aviation Electronics I: Wire Assembly Certificate**

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:

Following can be substituted:

169 Using Computers in Business . . . . . . . . . . . 5

		B carr se casemarear		
	Equiv	alent computer experience		
<b>ENGL</b>	097	English 097: Integrated Reading		
		and Writing I	10	
	Follov	wing can be substituted: Higher ENGL course		
	-OR- E	ENGL 098 College Prep Writing IV	5	
MATH	084	Algebra I	5	
	Follov	wing can be substituted: Higher MATH course		
	-OR- H	Have taken equivalent or higher MATH course		
TECHN	IICAL S	SPECIALTY COURSES		
EET	107	Introduction to Aviation Electronics	5	
EET	108	Introduction to Fiber Optics	5	
EET	109	Mathematical Applications for		
		Circuit Analysis	5	
	Follov	wing can be substituted:		
	MATH	1&141 Pre-Calculus I	5	
EET	137	Introduction to Robotics	5	
EET	161	D.C. Principles of Electronics	5	
EET	162	A.C. Principles of Electronics	5	
TOTAL	CREDI	TS 2	9-30	

#### Aviation Electronics II: Electronics Technician Certificate

#### **Workforce Instruction 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 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:

Math courses listed below:			
BUS	169	Using Computers in Business 5	
	Follov	ving can be substituted:	
	Equiv	alent computer experience	
ENGL	097	English 097: Integrated Reading and	
		Writing I	
		ving can be substituted: Higher ENGL course	
		ENGL 098 College Prep Writing IV 5	
MATH	084	Algebra I	
		ving can be substituted: Higher MATH course	
		lave taken equivalent or higher MATH course	
TECHN	ICAL S	SPECIALTY COURSES	
EET	105	Introduction to Technology2	
EET	106	Introduction to Soldering	
EET	107	Introduction to Aviation Electronics5	
EET	108	Introduction to Fiber Optics 5	
EET	109	Mathematical Applications for	
		Circuit Analysis5	
		ving can be substituted:	
ССТ		I&141 Pre-Calculus I	
EET	112	Fundamentals of Fluid Power &	
ггт	121	Alternative Energy	
EET EET	131 137	Introduction to Robotics	
EET	161	D.C. Principles of Electronics	
EET	162	A.C. Principles of Electronics	
EET	163	Solid State Electronics	
EET	170	Digital Electronics & PLCs I 5	
		UCATION COURSES	
BUS	236	Interpersonal Communications	
БОЗ	230	for the Workplace	
	Folloy	ving can be substituted:	
		105 Intercultural Communication	
		SP 101 The Global Society	
		SP 110 Introduction to Global Studies 5	
	-OR- F	POLS 112 Contemporary World 5	
	-OR- 9	SOC&101 Introduction to Sociology 5	
	The a	bove course or listed substitutes	
	meet	s the Human Relations requirement.	
		236 is the preferred course.	
ENGL&		English Composition I	
		ving can be substituted:	
		&230 Technical Writing	
	-OR- E	ENGL&235 Technical Writing5	

60-63

**TOTAL PROGRAM CREDITS** 

# **Bookkeeping**

**Workforce Instruction Division** 

#### **Bookkeeping Assistant Certificate**

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 A.A.S. 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 six months.

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

Tests must have been taken within the last two 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 Skill Building	.2		
BUS	124	Excel for Business	.5		
BUS	169	Using Computers in Business	.5		
CWE	101	Portfolio, Job Search, and Interviewing	.2		
	Follow	wing can be substituted: CWE 102 Job Shadow	.2		
TOTAL	TOTAL PROGRAM CREDITS 12				

#### **Bookkeeping Certificate in Accounting**

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 I5		
ACCT	120	Introduction to Accounting/Bookkeeping II 5		
		5,		
ACCT	131	QuickBooks		
ACCT	257	Business Tax Accounting		
ACCT	267	Not-for-Profit Financial Management 5		
BUS	124	Excel for Business		
BUS	169	Using Computers in Business 5		
BUS	236	Interpersonal Communications		
		for the Workplace		
CWE	110	Internship3		
TOTAL	TOTAL PROGRAM CREDITS 43			

#### **Broadband Cable**

Workforce Instruction Division

#### **Broadband Cable Certificate**

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 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. Students can take a short-term certificate in Green Energy.

This certificate program prepares students for entry-level positions in the broadband cable TV industry.

#### **PREREQUISITES**

For placement testing: contact Testing Center, (206) 527-3674. To begin program, students must test into the English and Math courses listed below:

PUC 160 Uning Computare in Pusiness

B02	169 Using Computers in Business
	Following can be substituted:
	Equivalent computer experience
<b>ENGL</b>	097 English 097: Integrated Reading
	and Writing I
	Following can be substituted: Higher ENGL course
	-OR- ENGL 098 College Prep Writing IV 5
MATH	084 Algebra I
	Following can be substituted: Higher MATH course
	-OR- Have taken an equivalent or higher course

<b>TECHN</b>	ICAL S	PECIALTY COURSES	
EET	108	Introduction to Fiber Optics	.5
EET	131	IT Essentials I – A+ Certification	.5
EET	132	IT Essentials A+ Certification Advanced	.5
EET	135	Introduction to Broadband	.5
EET	160	Introduction to Electricity and Electronics	.5
	Follow	ving can be substituted:	
	EET 1	61 D.C. Principles of Electronics	.5
RELATE	ED INS	TRUCTION	
BUS	236	Interpersonal Communications	
		for the Workplace	.5
	Follow	ving can be substituted:	
	HUM	105 Intercultural Communication	.5
	-OR- IS	SP 101 The Global Society	.5
	-OR- IS	SP 110 Intro to Global Studies	.5
	-OR- P	OLS 112 Contemporary World	.5
	-OR- S	SOC&101 Introduction to Sociology	.5
TOTAL I	PROGR	RAM CREDITS	30

### **Business**

### Certificate of Accountancy

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

ACCT& 201 Principles of Accounting I........5

#### **PREREQUISITES**

ACCT&	202	Principles of Accounting II	,		
ACCT&	203	Principles of Accounting III5	,		
ACCT	255	Individual Income Tax	)		
TECHN	ICAL S	PECIALTY COURSES			
ACCT	251	Intermediate Accounting I	j		
ACCT	252	Intermediate Accounting II5	)		
ACCT	256	Taxation of Corporations and Partnerships 5	)		
ACCT	261	Accounting Information Systems 5	)		
ACCT	265	Accounting for Not-for-Profit and			
		Government Entities	,		
ACCT	270	Cost Accounting	)		
ACCT	271	Ethics in Accounting	)		
ACCT	275	Auditing5	)		
TOTAL F	TOTAL PROGRAM CREDITS 40				

## **Administrative Specialist Short-Term Certificate**

The students will learn valuable skills and tools to enhance their employment opportunities by being able to demonstrate competencies in math skill, written communication, interpersonal communication, and customer service interactions. This is a three-quarter program, but students can complete this program in less time if desired. The target audience is administrative employees who wish to build new skills and enhance current skills in order to become proficient and demonstrate on-the-job competencies.

TECHNICAL SPECIALTY COURSES				
BUS	116	Business Math/Spreadsheets	5	
BUS	131	Integrated Communications I	5	
BUS	236	Interpersonal Communications		
		for the Workplace	5	
TOTAL	TOTAL PROGRAM CREDITS 15			

### **Certificate of Entrepreneurship**

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.

ACCT 131 QuickBooks is recommended but not required.

#### **REQUIRED COURSES**

ACCT&	201	Principles of Accounting I	5
BUS	118	Project Management Introduction	
		and Overview	5
BUS	151	Introduction to Entrepreneurship	5
	Follov	wing can be substituted:	
	BUS	154 Exploring Entrepreneurship	5
BUS	152	Entrepreneurship Product/Service/Pricing/	
		Marketing	5
BUS	153		
		Financials	5
BUS	156	Introduction to E-Business/Commerce	5
	Follo	wing can be substituted:	
	BUS	169 Using Computers in Business	
BUS	186	Sustainable Business	5
BUS	236		
		for the Workplace	5
TOTAL	PROG	RAM CREDITS 38-4	0

#### **Computerized Accounting Technology Certificate**

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 I5
ACCT	120	Introduction to Accounting/Bookkeeping II 5
ACCT	131	QuickBooks
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 QuickBooks5

#### **RELATED INSTRUCTION BUS BUS BUS** 169 Using Computers in Business . . . . . . . . . . . . 5 Following can be substituted: IT 101 Software Applications......5 **BUS** 236 Interpersonal Communications **CWE** 110 ENGL& 230 Technical Writing......3 **TOTAL CREDITS** 63 **Customer Service Certificate** Customer Service certificates combine office support training

in communications, customer relations, information technology, and on-the-job work experience to prepare students for entry-level positions as customer service representatives.

#### **TECHNICAL SPECIALTY COURSES**

BUS	Prere -OR- 0 or 25 May b	Keyboarding/Skill Building	4
	Eligib	ole for ENGL&101 through English Placement or completion of ENGL 097/098.	
BUS	140	Customer Relations	5
BUS	169	Using Computers in Business	5
CWE	110	Internship	3
TOTAL	CREDI	TS	21

#### **Entrepreneur Foundation Short-Term Certificate**

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 a 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 coursework.

Coursework earned at other institutions must be unofficially evaluated or approved by a program advisor before registering. See catalog for more information.

#### **REQUIRED COURSES**

CHOLO		NED COCKCEC	
Introduction to Entrepreneurship	151	151 Introduction to Entrepreneurshi	3
Entrepreneurship Product/Service/	152	152 Entrepreneurship Product/Serv	•
Pricing/Marketing		Pricing/Marketing	5
Entrepreneurship Planning Business	153	153 Entrepreneurship Planning Bus	s
Financials		Financials	5
AM CREDITS	PROGR	PROGRAM CREDITS	13

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

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 learn ways of solving problems that commonly arise in settings from small businesses to the corporate arena.

#### **TECHNICAL SPECIALTY COURSES**

ACCT&	201	Principles of Accounting I5
ACCT&	202	Principles of Accounting II 5
BUS&	101	Introduction to Business 5
BUS	112	Multi-Cultural Issues in the American
		Workplace
	Stude	ents completing the Communications,
	Busin	ess & Media certificate may substitute
	CMST	205 Multicultural Communication5
BUS	114	Introduction to Marketing5
	Must	complete BUS 131 Integrated Communications
	or be	eligible for ENGL&101 through English
	Place	ment Exam or completion of ENGL 097/098.
BUS	169	Using Computers in Business 5
	Follow	ving can be substituted:
	BUS 1	L71 Information Technology II5
BUS&	201	Business Law5
BUS	210	Business and Economic Statistics 5
BUS	230	Business Communications 5
	Must	complete BUS 131 Integrated Communications
		eligible for ENGL&101 through English
	Place	ment Exam or completion of ENGL 097/098.
BUS	236	Interpersonal Communications
		for the Workplace
GENER.	AL ED	UCATION COURSES
Contact	t the A	dvising Center for approved list of courses

FLECTIVES	
General Education Elective	 5
U.S. Cultures	 5
Contact the Advising Center for approved list of courses	

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

#### **ELECTIVES - PATHWAY**

Total of 8-10 credits required				
ACCT&	203	Principles of Accounting III5		
BUS	118	Project Management Introduction and Overview . 5		
BUS	151	Introduction to Entrepreneurship 5		
	Follov	ving can be substituted:		
	BUS 2	154 Exploring Entrepreneurship 5		
BUS	186	Sustainable Business5		
BUS	205	Human Resource Management 5		
BUS	215	Introduction to International Trade Business 5		
ECON&	201	Micro Economics		
RES	100	Real Estate Fundamentals5		

## **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.

	certific	cate may apply CMST courses.
ACCT	131	QuickBooks
ACCT&	203	Principles of Accounting III5
ACCT	261	Accounting Information Systems5
ECON&	201	Micro Economics
ECON&	202	Macro Economics
<b>ENVS</b>	160	Principles of Environmental Sustainability 5
RES	100	Real Estate Fundamentals5
RES	202	Multifamily Property Management3
	Follow	ring can be substituted:
	RES 2	03 Property Management - Commercial 3

Note: Students wishing to transfer to an applied baccalaureate degree should consider the General Business A.A.S.-T program.

## General Business Associate of Applied Science — T (A.A.S.-T)

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

#### **TECHNICAL SPECIALTY COURSES**

TOTAL PROGRAM CREDITS

ACCT&	201	Principles of Accounting I5
ACCT&	202	Principles of Accounting II 5
BUS&	101	Introduction to Business 5
BUS	112	Multicultural Issues in the American
		Workplace
	Follov	ving can be substituted:
	CMST	7 205 Multicultural Communications5
	WITH	Academic Exception approval
BUS	114	Introduction to Marketing5
BUS&	201	Business Law5
BUS	210	Business and Economic Statistics 5
BUS	215	Introduction to International Trade Business 5
	Follov	ving can be substituted:
	CMST	195 Media Management Operations5
	WITH	Academic Exception approval
BUS	236	Interpersonal Communications
		for the Workplace
ECON&	201	Micro Economics
ECON&	202	Macro Economics 5

RELAT	ED INS	TRUCTION	
ENGL8	k 101	English Composition I	5
		be eligible for English 101 through English	
		ment Exam or completion of English 097/098.	
MATH	116	Applications of Math to Management,	
		Life and Social Sciences	5
	Follo	ving can be substituted: MATH&141 Precalculus	l
		Any math class with MATH&141 as a prerequisite	
The Na	atural V	Vorld,	5
U.S. C		5	5
	Follo	ving can be substituted: Global Studies	
ELECT	IVES		
ACCT8	203	Principles of Accounting III	5
	To tra	insfer to the B.A.SInternational Business	
		am, this class is a required prerequisite.	
ACCT		Individual Income Tax	5
		ving can be substituted:	
		267 Financial Management	
BUS co			5
		ive BUS course numbered 100 or above	
		not listed under Technical Specialty Courses.	
		Advising Center	_
TOTAL	PROG	RAM CREDITS 90	)
Micro	soft O	ffice Professional Short-Term Certificate	
		SPECIALTY COURSES	
BUS		Word for Business	-
RHS	174	Excel for Rusiness	١.

BUS	123	Word for Business5
BUS	124	Excel for Business5
BUS	125	Access for Business
BUS	126	PowerPoint for Business
TOTAL PROGRAM CREDITS		

#### **Marketing Certificate**

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

#### **PREREQUISITES**

90

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.

#### **TECHNICAL SPECIALTY COURSES**

BUS	114	Introduction to Marketing5
BUS	118	Project Management Introduction
		and Overview
	Must	be eligible for ENGL&101 through English
	Place	ment Test or completion of ENGL 097/098
	or co	mpletion of ABE 050 with minimum 2.0 GPA.
BUS	226	Advertising & Sales Promotion5
BUS	227	Digital Marketing5
CWE	101	Portfolio, Job Search, and Interviewing 2
CWE	110	Internship3

**Early Childhood Education** 

#### **Project Management Short-Term Certificate**

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, and budget, and to produce deliverables for management reporting.

#### **PREREOUISITES**

Individual courses may have prerequisites.

#### **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
	Prerequisite: Must complete BUS 118; Must have
	completed BUS 236 or an approved equivalent
CWE	110 Internship
	Must be taken after BUS 118; May be taken
	concurrently with BUS 229
RELAT	ED INSTRUCTION
ENGL&	230 Technical Writing
	Prerequisite: Must be eligible for English 101 via Eng-
	lish Placement Exam or completion of ENGL 097/098
TOTAL	PROGRAM CREDITS 19

# **Early Childhood Education**

#### **Workforce Instruction Division**

Whether you're a novice or a seasoned preschool teacher, the Early Childhood Education program at North Seattle College will provide you with valuable training and insight into how children learn. The program is designed for students who already work full time, so classes are offered in the late afternoons and evenings. NSC's Early Childhood Education program is built upon the Washington State Stackable Certificates, allowing students to complete certificates while working toward the A.A.S. degree.

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 GPA or higher is required in all Early Childhood Education and General Education/related instruction courses.

Associ	ate of	Applied Science (A.A.S.)	
GENER	AL EDU	JCATION	
ENGL&	101	English Composition I	.5
	Itures		
	Follow	ing can be substituted: Global Studies	
REQUIR	ED GE	NERAL EDUCATION CREDITS 1	LO
GENER/	AL EDU	CATION - COMPUTATION/QUANTITATIVE ELECTIVE	Æ
MATH a	t 100 I	evel or choose from course(s) listed below:	
ACCT	110	Introduction to Accounting/Bookkeeping I	.5
REQUIR	ED C/	Q ELECTIVE CREDITS	5
GENER	AL EDU	JCATION - HUMAN RELATIONS ELECTIVE	
Choose	from c	one of the following courses:	
BUS		Interpersonal Communications for	
		the Workplace	
HUM		Intercultural Communication	
ISP		the Global Society	
ISP		Introduction to Global Studies	
POLS SOC&	112 101	Contemporary World	
		Introduction to Sociology	
-		ELECTIVE CREDITS	5
REQUIR			
CCE	240	Multicultural Dialogues in Early Childhood	_
FOF	219	Education	
ECE ECE	219	Math and Science Methods	
ECED&		Introduction to Early Childhood Education	
ECED&		Health, Safety, and Nutrition	
ECED&		Practicum: Nurturing Relationships	
ECED&		Infants and Toddlers	
ECED&	139	Administration	.3
ECED&	160	Curriculum Development	
ECED&		Environments-Young Child	
ECED&		Language and Literacy Development	
ECED&		Observing and Assessment	
EDUC&		Child Development	
EDUC& EDUC&		Guiding Behavior	
EDUC&		Exceptional Child	
ELECTIV			
		e following courses:	
CCE	145	Music and Creative Expression	4
-	0	Credit range: 3-4; Total required credits: 4	
CCE	195	Art for Young Children	.3
CCE	200	Children and Nature	
CCE	261	Readings in Early Childhood Education	.6
		Credit range: 1-6; Total required credits: 1-6	
ECED&		Family Child Care	
EDUC&		School-Age Care	
			1
TOTAL F	ROGR	AM CREDITS 9	n

#### State Early Childhood Education Certificate

This program is part of the Washington State Career State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school or equivalent, 20 hours of basic STARS/MERIT training or 2 college credits in basics of child care course. and at least two 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
ECED& 170	Environments-Young Child
Follov	wing can be substituted:
ECED	%130 Guiding Behavior3
ECED& 180	Language and Literacy Development 3
ECED& 190	Observing and Assessment
EDUC& 150	Child Family and Community
TECHNICAL O	SDECIALTY COLIDGES INITIAL CEDITICATE

#### **TECHNICAL SPECIALTY COURSES - INITIAL CERTIFICATE**

FOFDS 10F Introduction to Forly Childhood Education

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

TECHNICAL S	PECIALTY INITIAL CERTIFICATE CREDITS	12
ECED& 120	Practicum: Nurturing Relationships	2
ECED& 107	Health, Safety, and Nutrition	5
ECEDØ 100	introduction to Early Childrigod Educatio	115

#### **TECHNICAL SPECIALTY COURSES - SPECIALIZATION**

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

ECED&	132 Infants and Toddlers
	Completion of this course, EDUC&115 Child
	Development (5 credits), and the State Initial ECE
	Certificate courses (12 credits) equals the State
	Short ECE Certificate - Infant/Toddler Care
ECED&	134 Family Child Care

134 Fairilly Cilliu Cale
Completion of this course, EDUC& 115 Child
Development (5 credits) , and the State Initial ECE
Certificate courses (12 credits) equals the State
Short ECE Certificate - Family Child Care

ECED&	139	Administration
	Comp	letion of this course, EDUC& 115 Child
	Develo	opment (5 credits), and the State Initial ECE
	Certifi	cate courses (12 credits) equals the State
	Short	FCF Certificate - Administration

.3

EDUC&	115	Child Development	.5
EDUC&	130	Guiding Behavior	.3
	Comp	letion of this course, EDUC& 115 Child	
	Develo	opment (5 credits), and the State Initial ECE	
	Cortifi	eate courses (12 gradite) equals the State	

Certificate courses (12 credits) equals the State Short ECE Certificate - General

EDUC& 136 School-Age Care	3
TECHNICAL SPECIALTY SPECIALIZATION CREDITS	8
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

## **State Initial Early Childhood Education Certificate**

The Initial Early Childhood Education Certificate is a point of entry or a continuation of professional development based on Level 1 on the Washington State Career State Career Lattice (meets minimum child care licensing standards or registered apprentice in high school or equivalent, 20 hours of basic STARS/MERIT training OR 2 college credits in basics of child care course, and at least two 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 ECE state credential and associate 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

## **State Short Early Childhood Education Certificate -**Administration

This program is part of the Washington State Career State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school or equivalent, 20 hours of basic STARS/MERIT training OR 2 college credits in basics of child care course, and at least two 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 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 Nutrition5	
ECED& 120	Practicum: Nurturing Relationships2	
TECHNICAL S	SPECIALTY COURSES - SPECIALIZATION	
ECED& 139	Administration	
EDUO 9 44E	Obild Development	

TOTAL PROGRAM CREDITS 20

# State Short Early Childhood Education Certificate — Family Child Care

This program is part of the Washington State Career State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school or equivalent, 20 hours of basic STARS/MERIT training OR 2 college credits in basics of child care course, and at least two 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 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 S	SPECIALTY COURSES - SPECIALIZATION	
ECED& 134	Family Child Care	3
EDUC& 115	Child Development	5
TOTAL PROGE	RAM CREDITS 2	0

# State Short Early Childhood Education Certificate - General

This program is part of the Washington State Career State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school or equivalent, 20 hours of basic STARS/MERIT training OR 2 college credits in basics of child care course, and at least two 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 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 Nutrition5
ECED& 120	Practicum: Nurturing Relationships2
TECHNICAL S	SPECIALTY COURSES - SPECIALIZATION
EDUC& 115	Child Development
EDUC& 130	Guiding Behavior
TOTAL PROGR	RAM CREDITS 20

## State Short Early Childhood Education Certificate — Infant Toddler Care

This program is part of the Washington State Career State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school or equivalent, 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, and at least two 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 S	SPECIALTY COURSES - SPECIALIZATION	
ECED& 132	Infants and Toddlers	3
EDUC& 115	Child Development	5
TOTAL PROGE	RAM CREDITS 20	0

# State Short Early Childhood Education Certificate — School-Age Care

This program is part of the Washington State Career State Career Lattice for Early Childhood Education (meets minimum child care licensing standards or registered apprentice in high school or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, and at least two 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 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 Nutrition5		
ECED& 120	Practicum: Nurturing Relationships 2		
TECHNICAL SPECIALTY COURSES - SPECIALIZATION			
EDUC& 115	Child Development		
EDUC& 136	School-Age Care		

TOTAL PROGRAM CREDITS

#### **Electronics**

#### **Workforce Instruction 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 approach, the use of sophisticated test equipment unique to each discipline, and a solid base of pertinent information. These programs provide high-skill learning opportunities, including professional certification and Associate of Applied Science degree options.

To accommodate students in as many segments of the industry as possible, day (D) and evening (E) programs are offered in the following areas:

#### **Electronics Certificate and A.A.S Programs**

Programs: Day (D) - Evening (E)
Biomedical Equipment Technology
Electronics Engineering Technology
Electronics Technology\*
Electronics Technology\*, Certificate
Industrial Power & Control Technology
Industrial Power & Control Technology, Certificate
\*Students interested in Electronics Technology should contact
the program advisor at (206) 528-4588, or the Advising Center
at (206) 934-3658 before enrolling. Courses and programs
are transferable to certain four-year institutions.

TOTAL CREDITS: (SEE INDIVIDUAL PROGRAMS)

# Electronics Engineering Technology Associate of Applied Science — Transfer (A.A.S.-T)

This two-year program prepares students for advanced technical training and transfer into B.S. degree programs in electronics engineering technology at select institutions, such as Western Washington University and Central Washington University.

The program focuses on teaching practical engineering applications and skills, and it 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 Applications5			
	-OR- Equivalent computer experience			

ENGL	097	English 097: Integrated Reading		
		and Writing I	10	)
		NGL 098 College Prep Writing IV (5 credit	ts)	
	-OR- H	igher ENGL course		
MATH	084	Algebra I	5	5
		igher MATH course		
	-OR- H	ave taken equivalent or higher MATH cou	rse	
TECHNI	CAL S	PECIALTY COURSES		
CSC 14	12 Co	mputer Programming I	5	5
		ring can be substituted: Any higher CSC c		
EET	105	Introduction to Technology		2
EET	161	D.C. Principles of Electronics		
EET	162	A.C. Principles of Electronics		
EET	163	Solid State Electronics		
EET	165	Analog Circuits and Devices		
EET	166	Analog Circuits and Devices II	5	5
EET	170	Digital Electronics & PLCs I		
EET	171	Digital Electronics & PLCs II		
EET	251	Microprocessor Fundamentals I		
EET	252	Microprocessor Fundamentals II		
EET	285	Electronics Tech Project		
PHYS&	221	Engineering Physics I		
PHYS&	222	Engineering Physics II		
PHYS&	223	Engineering Physics III		
RELATE	D INS	TRUCTION		
See Adv	vising	Center for list of designated courses for	above	
require	_			
CMST&	210	Interpersonal Communication	-	5
ENGL&		English Composition I		
LINGLO		students must test into ENGL 097 to sta		•
		egree, they must complete ENGL&101 to		
ENGL&		Technical Writing		3
MATH&		Pre-Calculus II		
MATH&		Calculus I		
MATH&		Calculus II		
		5		
		ring can be substituted: U.S. Cultures cre		•
Human		ons Elective		5
TECHNI	CAL E	LECTIVES		
Total re	quired	Technical Electives credits	5	5
		t five credits from approved list.		
		dvising Center.		
Technic		tives	5	5
			110-112	_

## **Electronics Technology Certificate**

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.

#### 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: 169 Using Computers in Business . . . . . . . . . . . . 5 -OR- 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 Following can be substituted: Higher MATH course -OR- Have taken equivalent or higher MATH course **TECHNICAL SPECIALTY COURSES EET** 105 **EET** 107 Introduction to Aviation Electronics......5 FFT **EET EET** 132 IT Essentials A+ Certification Advanced . . . . . 5 **EET** Following can be substituted: EET 135 Intro to Broadband ......5 **EET EET** 162 A.C. Principles of Electronics . . . . . . . . . . . . . 5 **EET EET** 163 Solid State Electronics . . . . . . . . . . . . . . . . . . 5 **EET** 165 Analog Circuits and Devices......5 **EET GENERAL EDUCATION COURSES** EET 109 Mathematical Applications for Circuit Analysis . . . 5 Following can be substituted: Higher MATH course Following can be substituted: -OR- ENGL&235 Technical Writing ......5 **GENERAL EDUCATION COURSES - HUMAN RELATIONS ELECTIVES** Choose from one of the following courses: 236 Interpersonal Communications for the Workplace (the preferred course) . . . . . . . 5 HUM 105 Intercultural Communication . . . . . . . . . . . . 5 **ISP ISP** 110 Introduction to Global Studies . . . . . . . . . . . . . . . . . 5 POLS 112 Contemporary World . . . . . . . . . . . . . . . . . 5 SOC& 101 Introduction to Sociology......5 **TOTAL PROGRAM CREDITS** 65-68

**PREREOUISITES** 

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

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**

		_quivalent computer expendince
ENGL	097	
		ving can be substituted: Higher ENGL course
	-OR- E	ENGL 098 College Prep Writing IV 5
MATH	084	0
	Follo	wing can be substituted: Higher MATH course
	-OR- I	Have taken equivalent or higher MATH course
TECHI	NICAL S	SPECIALTY COURSES
EET	105	Introduction to Technology
EET	106	Introduction to Soldering
EET	107	Introduction to Aviation Electronics5
EET	108	Introduction to Fiber Optics 5
EET	112	Fundamentals of Fluid Power &
		Alternative Energy5
EET	114	Applied Physics5
EET	131	IT Essentials I - A+ Certification 5
EET	132	IT Essentials A+ Certification Advanced5
EET	135	Introduction to Broadband 5
EET	137	Introduction to Robotics
EET	138	Robotic Applications
EET	161	D.C. Principles of Electronics 5
EET	162	A.C. Principles of Electronics 5
EET	163	Solid State Electronics
EET	165	Analog Circuits and Devices5
EET	170	Digital Electronics & Plcs I5
EET	171	Digital Electronics & Plcs II5
EET	219	Metrology and Measurement Science 3
RELAT	TED INS	STRUCTION
EET	109	Mathematical Applications for Circuit Analysis 5

DEI AT	ED ING	STRUCTION - HUMAN RELATIONS ELECTIVES
		one of the following:
BUS	236	Interpersonal Communications for
БОЗ	230	the Workplace (the preferred course) 5
HUM	105	Intercultural Communication
ISP	103	
ISP	110	the Global Society
POLS		
	112	Contemporary World
SOC&	101	Introduction to Sociology5
REQUI	KED H	UMAN RELATIONS ELECTIVE CREDITS 5
RELAT	ED INS	STRUCTION – TECHNICAL ELECTIVES
	ET, HVC	ired course(s) from the following departments – C, TDR, CSC, CHEM, ENGR, NANO or course
See Ac	dvising	Center for assistance.
BUS	210	Business and Economic Statistics 5
BUS	229	Project Management Tools Techniques and Control
IT	111	Internet and Web Authoring Using XHTML 5
		ving can be substituted: Higher IT course
MATH	116	Applications of Math to Management,
		Life, and Social Sciences
Followi	ng can	be substituted: higher MATH course
		ECHNICAL ELECTIVES CREDITS 8-10
		RAM CREDITS 108-111
TOTAL	rnoui	ANIVI CREDITS 106-111
Avion	ics Te	chnician Short-Term Certificate
This ce	ertifica	te is designed to provide students with the basic
knowle	edge, s	kills, and abilities to meet minimum requirements
for em	ployme	ent as an entry-level avionics technician in
aerosp	ace-re	lated technologies. This program is intended
as a si	upplen	nent for aviation maintenance technicians.
Note:	Advanc	eed placement testing, work experience, and
		edits may result in course waivers, credit
		advanced placement.
		s have prerequisites. Prerequisites are those
		prove eligibility for entry-level classes by testing
		satisfied prior coursework. Coursework earned
		tutions must be unofficially evaluated or
approv	ed by	a program advisor before registering.
PRERE	QUISI	TES
Succes	ssful c	ompletion of South Seattle College's AMT 112 -
		city for Aviation
		d equivalent
		ame license
		SPECIALTY COURSES
EET	107	
EET	108	•
EET	137	
		wing can be substituted:
	EET 1	L70 Digital Electronics & PLCs I 5
TOTAL	PROG	RAM CREDITS 15

## Sustainable and Conventional Energy & **Control Technology Certificate**

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, A.C. and D.C. 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
	-OR- Equivalent computer experience
ENGL	097 Integrated Reading and Writing I10
	Following can be substituted: Higher ENGL course
	-OR- ENGL 098 College Prep Writing IV 5
MATH	084 Algebra I
	Following can be substituted: Higher MATH course
	-OR- Have taken an equivalent or higher MATH course

201 Energy Generation Conversion and

#### **TECHNICAL SPECIALTY COURSES**

LLL	201	Energy deficiation conversion and
		Sustainability5
EEL	202	Industrial Motor Controls and Drives 5
EEL	203	Programmable Logic Controllers5
EET	105	Introduction to Technology
EET	112	Fundamentals of Fluid Power & Alternative
		Energy5
EET	114	Applied Physics5
EET	137	Introduction to Robotics
EET	161	D.C. Principles of Electronics 5
EET	162	A.C. Principles of Electronics 5
EET	163	Solid State Electronics
EET	165	Analog Circuits and Devices5
EET	170	Digital Electronics & PLCs I 5

#### **RELATED INSTRUCTION BUS** 236 Interpersonal Communications for Following can be substituted: HUM 105 Intercultural Communication. . . . . . . . . 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 MATH&141 ENGL&101 ENGL&230 Following can be substituted: ENGL& 235 Technical Writing ......5 **TOTAL PROGRAM CREDITS** 71-73

# **Engineering Graphics & Design Technology**

**Workforce Instruction Division** 

# Advanced Design for Manufacturing Short-Term Certificate

This program has been designed for the student who 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 30-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 coursework. Coursework earned at other institutions must be unofficially evaluated or approved by a program advisor before registering.

#### **TECHNICAL SPECIALTY COURSES**

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

IDR	200	Introduction to SolidWorks	5
TDR	201	Introduction to CATIA	5
TDR	202	Intermediate CATIA	5
TOTAL	PROGE	RAM CREDITS	15

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

Building Information Modeling (BIM) 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 computergenerated models that unify architecture, engineering, construction, and sustainability. BIM management offers many solutions to fulfilling the challenge of sustainability and transition to a new medium.

#### 

TOTAL PROGRAM CREDITS

# Computer Aided Design (CAD) for Design and Construction Short-Term Certificate

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. Coursework 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 Drafting for Construction	
		and Design	5
TDR	176	Advanced AutoCAD for Architecture	
		& Engineering Drafting	4
TOTAL	PROGF	RAM CREDITS	14

#### **Fine Arts in Art**

Arts, Humanities and Social Services Division

#### Certificate

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

Candidates for the Certificate in Fine Arts: Art must complete 85 credits in college transfer-level courses (numbered 100 and above) with a 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).

B.A. or B.F.A. should consult NSC 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

The Certificate in Fine Arts in 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

met by course content in various art courses, communication by ART 251,252,253, and human relations by ART 290. Students must take a 5- credit computation course from one of the following: MATH&107 or above, BUS 116, or ACCT 110 or above, and ENGL&101, English Composition I.

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			
ART	111	Drawing			
ART	210	Digital Art			
ART	2XX	Art History			
	Choo	se from ART 251	, 252, 253, 255, or 257)		
ART	290	The Art Busines	s		
ART	XXX	Approved 2-D Ele	ective		
ART	XXX	Approved 3-D Ele	ective 5		
GENE	RAL ED	UCATION COURS	ES		
Compi	utation	Course credits			
Choose from MATH 107 (or above),					
BUS 116 (or other applicable business course),					
	-OR- ACCT 110 (or above).				
	ENGL	.&101 English Co	mposition I		
TOTAL	PROGE	RAM CREDITS	45 MINIMUM + PORTFOLIO		

#### **Health Care**

## **Clinical Lab Assisting Certificate**

An option of the Medical Assisting program, this program is intended to prepare the student for clinical laboratory entry-level positions, such as phlebotomist or clinical lab assistant. Students study basic anatomy and physiology, medical terminology and pathology, lab safety, regulations/ legal requirements, specimen collection and preparation, phlebotomy, various "CLIA-waived" tests, and seven hours of HIV/AIDS. Students perform phlebotomy and lab testing procedures in the classroom. This is an open-entry/openexit, self-paced, variable-length program.

Students will have additional expenses other than the fees charged by the college. A separate list is available from the Medical Assisting program coordinator.

#### **PREREQUISITES**

Note: Courses must be taken within the last 10 years or the COMPASS test is required. Contact Testing Center.

General: A high school diploma or GED or 18 years of age. Certain tech-prep agreements can be accepted (see MA program advisor).

Applicant should have oral English skills sufficient to communicate accurately with others in the medical field.

AHE	103	Math for Health Careers
BUS	169	Using Computers in Business 5
	Follov	wing can be substituted:
	IT 10	1 Software Applications
ENGL&	101	English Composition I
		wing can be substituted:
		.&230 Technical Writing
		AHE 100 Critical Thinking and
	Comr	munications for Health Care
TECHN	IICAL S	SPECIALTY COURSES
AHM	140	Phlebotomy 2
AHM	141	Lab Equipment and Measurements
AHM	142	Non-Blood Specimen Collection
AMA	100	Introduction to Health Care 5
AMA	101	Intercultural Communication
		in Patient Care
AMA	102	Medical Law and Ethics
AMA	103	Ethical Concepts1
AMA	104	Office Emergencies
AMA	105	Asepsis and Infection Control
AMA	106	Patient History – Documentation and
4844	407	Physical Exam
AMA	107	Vital Signs and Measurements
AMA	110	Introduction to Lab Safety
AMA	112	Credentials and Employment
AMA	114	Basic Psychology Principles
AMA AMA	115 120	HIV/AIDS1
AIVIA	120	Front Office Basics

AMA	121	Patient Scheduling
AMA	122	Medical Records and Correspondence 1
AMA	125	Introduction to Medical Insurance
		and Coding
AMA	170	AP/Terminology/Pathology 1 – Introduction 2
AMA	171	AP/Terminology/Pathology 2 –
		Skin/Senses
AMA	172	AP/Terminology/Pathology 3 –
		Digestive System
AMA	173	AP/Terminology/Pathology 4 –
		Male/Urinary System
AMA	174	AP/Terminology/Pathology 5 –
		Female Reproductive
AMA	175	AP/Terminology/Pathology 6 –
		Nervous System
AMA	176	AP/Terminology/Pathology 7 –
		Endocrine System
AMA	177	AP/Terminology/Pathology 8 –
		Musculoskeletal Sys1
AMA	178	AP/Terminology/Pathology 9 –
		Cardiovascular System
AMA	179	AP/Terminology/Pathology 10 –
		Respiratory System1
AMA	180	AP/Terminology/Pathology 11 –
		Blood/Lymph System
AMA	181	AP/Terminology/Pathology 12 –
	0=0	Specialties1
AMA	252	Phlebotomy
AMA	253	Hematology
AMA	254	Urinalysis1
AMA	255	Basic Microbiology
AMA	256	Specialty Lab Tests and Chemistry
RELA	TED INS	STRUCTION
BUS	236	Interpersonal Communications
		for the Workplace
		236 is a nonmodular (not self-study)
	cours	se but is required for the program.

**TOTAL CREDITS** 

If an internship is desired, CWE 110 Internship can be taken through the college. See program director.

## **Emergency Department Technician Short-Term Certificate**

This certificate program provides the student with a general understanding of emergency department operations and prepares them for employment as an Emergency Department Technician (EDT) in an emergency department and urgent care setting. This program will cover several different courses focusing on administrative and clinical procedures.

Note: To gain employment in this field, you typically must 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.

#### **PREREQUISITES**

Be currently licensed by the Washington State Department of Health as a nursing assistant.

Additional requirements upon acceptance into program:

- Show proof of being at least 18 years of age at the beginning of the course enrollment (proof required).
- 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 background check.
- Provide copies of required immunizations: 1. Hepatitis B series or positive titer. 2. A current tuberculin skin test or alternative health documentation.

#### **TECHNICAL SPECIALTY COURSES**

EDT	101	Emergency Department Technician
		Fundamentals
EDT	102	Emergency Department Technician
		Procedures and Diagnostics Testing 5
EDT	103	Emergency Department Technician Lab Skills I. 4
EDT	104	Emergency Department Technician Lab Skills II 5
EDT	105	Emergency Department Technician Practicum 2
TOTAL	PROGE	RAM CREDITS 20

## **Emergency Medical Technician Short-Term Certificate**

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.

#### **PREREOUISITES**

46

- Attend a mandatory information session (see calendar); pass the advanced first-aid entrance exam with 70 percent 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**

Corequisite: Completion of AHE 192 taken concurrently with AHE 190

AHE 190	Emergency Medical Technician	12
AHE 192	Basic Life Support for Health Care Providers	1
TOTAL PRO	OGRAM CREDITS	13

## Health Care Technology Management Associate of Applied Science (A.A.S.)

North Seattle College offers a unique opportunity to enter the field of Health Care Technology Management, part of Allied Health Sciences. Health Care Technology Management is appropriate for students interested in the operation, maintenance, and repair of medical equipment (a program formerly titled Biomedical Equipment Technology). It increases the marketable skills and areas of knowledge for students studying electronics and thus offers more employment possibilities in the health and medical repair fields.

#### **PREREQUISITES**

BUS

For placement testing, contact Testing Center, (206) 527-3674. To begin program, students must test into the English and Math courses listed below:

Following can be substituted:

169 Using Computers in Business . . . . . . . . . . . 5

	G
	Equivalent computer experience
<b>ENGL</b>	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
	Following can be substituted: Higher MATH course
	-OR- Have taken equivalent or higher MATH course
<b>TECHN</b>	ICAL SPECIALTY COURSES
AHI	100 Introduction to Medical Vocabulary3
	Following can be substituted:
	Online module AMA 170 or AMA 117 for AHI 100 . 1-4

	Follow	ring can be substituted:
	Online	e module AMA 170 or AMA 117 for AHI 100 . 1-4
BIOL	128	Survey of Human Anatomy and Physiology 5
	Follow	ving can be substituted:
	Online	e modules AMA 172, AMA 175, AMA 177,
	AMA 1	L78, AMA 179, AMA 119 inclusive
CHEM&	121	Intro to Chemistry5
	Follow	ring can be substituted:
	CHEM	l&110 Chemical Concepts w/Lab5
EET	105	Introduction to Technology2
EET	106	Introduction to Soldering
EET	112	Fundamentals of Fluid Power & Alternative Energy 5
EET	114	Applied Physics5
EET	131	IT Essentials I - A+ Certification 5
EET	132	IT Essentials A+ Certification Advanced5
EET	137	Introduction to Robotics 5
EET	138	Industrial Robotics
EET	161	D.C. Principles of Electronics 5
EET	162	A.C. Principles of Electronics 5
EET	163	Solid State Electronics 5
EET	165	Analog Circuits and Devices5
EET	170	Digital Electronics & PLCs I 5
EET	286	Biomedical Equipment I5
EET	287	Biomedical Equipment II
EET	297	Biomedical Technician Externship 4
	CWE	101 Portfolio Joh Sparch Internehin

is a prerequisite for EET 297.

#### **RELATED INSTRUCTION**

		Workplace	5
	Follo	wing can be substituted:	
		al Studies or U.S. Cultures designated cou	rse5
		Advising Center for approved list.	
BUS		Interpersonal Communications	
		for the Workplace	5
	This	course has acceptable substitutes.	
		Advising Center for approved list.	
EET	109	Mathematical Applications for Circuit Analy	/sis 5
	Follo	wing can be substituted: Higher MATH cou	rse
	-OR- I	MATH&141 Pre-Calculus	5
ENGL&	101	English Composition I	5
	While	e students must test into ENGL 097 to sta	rt
	the d	legree, they must complete ENGL& 101 to	finish.
IT	120	Network Essentials – Comptia Network +	5
	AND	one other higher IT course for a total of 10	credits
TOTAL	PROGE	RAM CREDITS 1	13-116
Any stu	ıdent v	wishing to transfer to the BSBMET program	າ at
DeVry I	Univer	sity should take the following math and ph	ysics
course	s in pl	ace of courses listed above:	
MATH8	142 P	Precalculus I	
MATH8	ر 151 ر	Calculus I	

112 Multicultural Issues in the American

# Industrial Automation and Electronic Controls

Math/Science Division

MATH&152 Calculus II

PHYS&221 Engineering Physics I PHYS&222 Engineering Physics II

PHYS&223 Engineering Physics IIII

The Industrial Automation and Electronic Controls Certificate prepares students for immediate employment or 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.

#### Certificate

#### **PREREOUISITES**

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
<b>ENGL</b>	098 Integrated Reading and Writing II
	Following can be substituted: Higher ENGL course
	-OR- Successful completion of ABE 050
MATH	084 Algebra I
	Following can be substituted:

Successful completion of ABE 031 or equivalent course

TECHN	ICAL S	SPECIALTY COURSES	
EET	106	Introduction to Soldering	
EET	112		
		& Alternative Energy	
		ving can be substituted: Shoreline Community	
		ge course: MFGT 247 Motive Maintenance	
EET	131		
EET	137	Introduction to Robotics5	
EET	138	Industrial Robotics	
		ving can be substituted: Shoreline Community	
ССТ		ge course: MFGT 280 Robot Certification	
EET	160	Introduction to Electricity and Electronics 5	
EET EET	161 201	D.C. Principles of Electronics	
EEI	201	Energy Generation, Conversion, and Sustainability5	
EET	202	Industrial Motor Controls and Drives5	
EET	202	Programmable Logic Controllers5	
		TRUCTION	
BUS	236	Interpersonal Communications	
	Follow	for the Workplace	
		ge courses: BUS 104 Human Relations in Business	
	-OR- BUS 105 Essentials of Human Relations 2		
	-OR- Approved Human Relations elective		
		credits can be from 2 to 5 based on course	
		n selected.	
EET	109	Mathematical Applications	
		for Circuit Analysis	
	Follow	ving can be substituted:	
	MATH	I&141 Pre-Calculus I5	
	-OR- H	Higher level MATH course	
ENGL&	101	English Composition I 5	
	Follow	ving can be substituted:	
		&235 Technical Writing5	
		Shoreline Community College course: BTWERT	
	215 (	Composition, Business Communications	

## **Industrial Power and Control**

#### Workforce Instruction 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, A.C. and D.C. 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."

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

#### **PREREQUISITES**

For placement testing, contact Testing Center, (206) 527-3674. To begin program, students must test into the English and Math courses listed below:

Math o	courses	s listed below:
BUS	169	Using Computers in Business 5
	Follow	ving can be substituted:
equiva	lent co	mputer experience
ENGL	097	
		ENGL 098 College Prep Writing IV 5
		Higher ENGL course
MATH		Algebra I
		Higher MATH course
		Have taken an equivalent or higher MATH course
TECHN	IICAL S	SPECIALTY COURSES
EEL	201	Energy Generation, Conversion and
		Sustainability
EEL	202	Industrial Motor Controls and Drives 5
EEL	203	Programmable Logic Controllers5
EET	105	Introduction to Technology
EET	106	Introduction to Soldering
EET	108	Introduction to Fiber Optics
EET	112	Fundamentals of Fluid Power
		& Alternative Energy
EET	114	Applied Physics
EET	131	IT Essentials I - A+ Certification
EET	132	IT Essentials A+ Certification Advanced 5
EET	137	Introduction to Robotics
EET	138	Industrial Robotics
EET	161	D.C. Principles of Electronics
EET EET	162 163	A.C. Principles of Electronics
EET	165	Solid State Electronics
EET	170	Analog Circuits and Devices
EET	219	Metrology and Measurement Science
		STRUCTION
BUS	112	Multicultural Issues in the American Workplace 5
		wing can be substituted:
		al Studies or U.S. Cultures designated course 5 Advising Center for approved list.
BUS	236	•
ВОЗ	230	for the Workplace
	Follow	ving can be substituted:
		105, ISP 101 , ISP 110, POLS 112, SOC&101
EET		Mathematical Applications for Circuit Analysis 5
LLI		wathernatical Applications for Circuit Analysis

Following can be substituted: higher MATH course

While students must test into ENGL 097 to start

Following can be substituted: Higher IT course

ENGL&101

TOTAL PROGRAM CREDITS

ΙT

the degree, they must complete ENGL& 101 to finish.

## **Information Technology**

**Workforce Instruction Division** 

#### Cisco Certified Network Associate Short-Term Certificate

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 Internet OS (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) 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 Management - CISCO I	5
IT	144	Network Management - CISCO II	5
IT	146	Network Management - CISCO III	5
TOTAL PROGRAM CREDITS 15			

## IT-Controlled Electronic Systems Certificate

This certificate is intended for students who already have an associates or bachelor's degree, or substantial professional experience, in an IT-related field.

The certificate prepares students for employment as electronic systems application or facilities engineers, security and field technicians, systems and sales consultants, and 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 EET EET	131 137 161	IT Essentials I - A+ Certification
TECHN	NICAL S	SPECIALTY CREDITS 15
MICRO	0S0FT	TRACK
IT IT	122 124	Network OS 1 - Windows Client OS 5 Network OS 2 - Windows Server
UNIX .	TRACK	
IT IT	135 138	Introduction to UNIX
CISCO	TRAC	K
IT IT IT	142 144 146	Network Management - CISCO I
RELAT	ED INS	STRUCTION
BUS BUS	118 236	Project Management Introduction and Overview .5 Interpersonal Communications for the Workplace

# IT-Controlled Electronic Systems Associate of Applied Science Degree (A.A.S.)

TOTAL PROGRAM CREDITS

The IT Controlled Electronic Systems Associate of Applied Science degree is a two-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. Coursework in electronics and computer networking is emphasized, along with building the interpersonal skills necessary to work with customers and co-workers.

35-40

#### 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 ΙT 101 MATH 084 MATH 097 Elementary Algebra......5 **TECHNICAL SPECIALTY COURSES** 131 IT Essentials I - A+ Certification . . . . . . . . . . . . . . . 5 FFT 132 IT Essentials A+ Certification Advanced . . . . . 5 **EET EET EET** 161 **EET** 162 **EET** 163 165 Analog Circuits and Devices......5 **EET** ΙT 122 Network OS 1 - Windows Client OS . . . . . . . . . 5 IT 124 IT IT 138 UNIX for Network Administration .......5 IT 142 Network Management - CISCO I . . . . . . . . . . . . 5 IT Network Management - CISCO II. . . . . . . . . . . 5 144 IT 146 Network Management - CISCO III . . . . . . . . . . 5 **RELATED INSTRUCTION - GENERAL EDUCATION** BUS 236 Interpersonal Communications for Mathematical Applications for Circuit Analysis . . 5 **EET** Following can be substituted: Global Studies . . . . . . 5 TOTAL PROGRAM CREDITS 90

Advanced placement testing, work experience, and transfer

## IT for Health Care Associate of Applied Science – Transfer (A.A.S.-T)

The A.A.S.-T degree in IT for Health Care gives a well-rounded curriculum that will enable graduates to work in the medical field in hospitals, home health, and ambulatory care facilities. It is critical in the transition to the digital health care field of the future that a workforce capable of using health communications and information technology is in place. The IT for Health Care curriculum is designed to meet this emerging demand and aims to equip students and workers with the skills needed to enter and advance in health care careers. LPNs, pharmacy techs, or medical assistants may emphasize their Allied Health Associate of Applied Science with IT Health Care curriculum to obtain this degree.

#### **PREREQUISITES**

**PREREOUISITES** 

Prerequisites must be completed within 10 years of date of application. The COMPASS placement test for math must be taken if those prerequisites are older than 10 years.

BUS	106	Keyboarding/Skill Building	3
MATH	098	Intermediate Algebra5	5

LCIII	WOAL .	DE LUIALI I COUNSES	
AHE	232	Introduction to Clinical Software	5
AHE	233	Introduction to Health Informatics	5
AHE	234	HIPAA and Network Security	5
AHM	118	Intro to Patient History Medical Records	
		and Documents	1
AMA	102	Medical Law and Ethics	2
AMA	103	Ethical Concepts	1
AMA	121	Patient Scheduling	1
AMA	125	Introduction to Medical Insurance	
		and Coding	5
AMA	226	Medical Insurance Coding 1	
AMA	227	Medical Insurance Billing	2
BUS	118	Project Management Introduction	
		and Overview	5
BUS	125	Access for Business	5
BUS	229	Project Management Tools, Techniques,	
		and Control	5
CWE	101	Portfolio, Job Search, and Interviewing	2
CWE	110	Internship	3
EET	131		
IT	101	Software Applications	5
	Follo	wing can be substituted:	
	BUS	169 Using Computers in Business	5
IT	102	Introduction to Programming	5
RELAT	ED INS	STRUCTION	
BUS	210	Business and Economic Statistics	5
	Follo	wing can be substituted:	
		1&146 Introduction to Statistics	5
BUS	236	Interpersonal Communications	
		for the Workplace	5
ENGL8	£101	English Composition I	
		wing can be substituted: Global Studies	
ΤΩΤΔΙ		ED INSTRUCTION CREDITS	20
IJIAL	I LECTI	ED MOMOONION ONEDITO	20

TECHNICAL SPECIALTY COLLEGE

#### **ELECTIVES**

Choose one of the options groups below:

IVES -	OPTION 1
170	AP/Terminology/Pathology 1 – Introduction
171	AP/Terminology/Pathology 2 – Skin/Senses
172	AP/Terminology/Pathology 3 –
	Digestive System
173	AP/Terminology/Pathology 4 –
	Male/Urinary System
174	AP/Terminology/Pathology 5 –
	Female Reproductive
175	AP/Terminology/Pathology 6 –
	Nervous System
176	AP/Terminology/Pathology 7 –
	Endocrine System1
177	AP/Terminology/Pathology 8 –
	Musculoskeletal Sys1
178	AP/Terminology/Pathology 9 –
	Cardiovascular System
	170 171 172 173 174 175 176

AMA	179	AP/Terminology/Pathology 10 –	
		Respiratory System	.1
AMA	180	AP/Terminology/Pathology 11 –	
		Blood/Lymph System	.1
AMA	181	AP/Terminology/Pathology 12 – Specialties $$ .	.1
ELECTI	VES -	OPTION 2	
AHI	100	Introduction to Medical Vocabulary	.3
BIOL&	241		
BIOL&	242	Human Anatomy and Physiology 2	.5
ELECTI	VES -	OPTION 3	
ACCT&	201	Principles of Accounting I	.5
AHI	100	Introduction to Medical Vocabulary	.3
EET	132	IT Essentials A+ Certification Advanced	.5
TOTAL E	ELECTI	VES CREDITS	13
TOTAL F	PROGR	AM CREDITS	92
Linux I	Netwo	rk and Security Certificate	
This pro	ogram	prepares students for careers in system	
adminis	stratio	n, network administration, and information	
-		ents will gain experience managing and	
	_	inux operation system. Students will also	
		ux-based tools apply to network administratio	'n
and sec	curity t	esting.	
PRERE	QUISIT	ES	

Coursework 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 UNIX
IT	138	UNIX for Network Administration5
IT	150	IT Systems Security +
IT	157	Ethical Hacking

# Network Administration Microsoft Windows Completion Certificate

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**

		2. 10::/1: · · · · · · · · · · · · · · · · · · ·	
IT	122	Network OS 1 Windows Client OS	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			

## **Network and Server Administration Specialist Certificate**

The Information Technology program offers both a certificate and an Associate of Applied Science – Transfer (A.A.S.-T) degree in Information Technology. 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**

#### **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	Network OS 1 Windows Client OS5			
IT	126	Network OS 3 Windows Network Infrastructure 5			
IT	135	Introduction to UNIX			
	Follow	ving can be substituted:			
	IT 13	8 UNIX for Network Administration 5			
	-OR- I	T 140 Network Management - UNIX5			
IT	142	Network Management - CISCO I 5			
IT	144	Network Management - CISCO II5			
IT	146	Network Management - CISCO III 5			
TOTAL	TOTAL PROGRAM CREDITS 40				

## Network and Server Administration Specialist Associate of Applied Science (A.A.S.)

The Information Technology program offers both a certificate and an Associate of Applied Science – Transfer (A.A.S.-T) degree in Information Technology. 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.

This two-year program concentrates on UNIX/Linux, Microsoft, and Cisco operating system configuration, management, and security. Information security concepts and best practices are woven into individual courses. Specific courses concentrating on information security topics are also offered. Many individual courses or combinations of courses are designed to also prepare students for passing industry certifications sponsored by CompTIA, Microsoft, and Cisco. The version of Microsoft Windows offered will depend upon the current commercial release. This is a full-time program, but students may elect to take it on a part-time basis. There is a related certificate program.

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**

English placement into ENGL&101 Math placement into MATH 084 or higher MATH course

### **TECHNICAL SPECIALTY COURSES**

IECHN	ICAL S	PECIALI Y COURSES
EET	131	IT Essentials I - A+ Certification
	Follov	ving can be substituted:
	Comp	TIA A-+ Certification for EET 131 & EET 132
	and to	wo 5-credit technical courses
EET	132	IT Essentials A+ Certification Advanced5
	Follov	ving can be substituted:
	Comp	TIA A-+ Certification for EET 131 & EET 132
	and to	wo 5-credit technical courses
IT	101	Software Applications
		ving can be substituted:
		169 Using Computers in Business 5
IT		Introduction to Programming
		ving can be substituted:
	CSC 2	$110$ Intro to Computer Programming $\dots \dots 5$
IT	122	Network OS 1 Windows Client OS5
IT	124	Network OS 2 Windows Server5
IT	126	Network OS 3 Windows Network Infrastructure 5
IT	135	Introduction to UNIX
IT	138	UNIX for Network Administration
IT	142	Network Management – CISCO I
IT	144	Network Management – CISCO II
IT	146	Network Management – CISCO III
IT	220	Desktop Management and Virtualization5
<b>GENER</b>	AL ED	UCATION COURSES
BUS	236	Interpersonal Communications for
		the Workplace
EET	109	Mathematical Applications for Circuit
		Analysis5
ENGL&	101	English Composition I
U.S. Cu	ıltures	
	Follov	ving can be substituted: Global Studies course
	Conta	ct the division office for a list of approved courses.
ELECTI	VES	

TOTAL PROGRAM CREDITS

Contact the division office for a list of approved courses.

## Programming and IT Network Support Associate of Applied Science - T (A.A.S.-T)

Take the first step to become an IT professional. Graduates of the Programming and IT Network Support degree are dually prepared for both the workplace and for transfer into the Application Development Bachelor of Applied Science (B.A.S.) degree program. Learn beginning programming, networking, and troubleshooting skills so you can get an entry-level IT job as you pursue your B.A.S. degree.

#### **PREREQUISITES**

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

EET ENGL8		IT Essentials I - A+ Certification
	Place	ement into ENGL&101
MATH	098	Intermediate Algebra
TECHN	IICAL S	SPECIALTY COURSES
CSC	110	Introduction to Computer Programming5
CSC	111	Computers for Math and Science 5
	Follov	wing can be substituted:
	BUS:	169 Using Computers in Business I 5
CSC	142	Computer Programming I5
IT	102	Introduction to Programming 5
		wing can be substituted:
		143 Computer Programming II 5
		T 146 Network Management CISCO III 5
		nical Elective course - can select one of the
		courses listed above:
IT 	111	
IT 	120	
IT	125	Using Structured Query Language and
	405	SQL Server
IT	135	Introduction to UNIX
		STRUCTION
		English Composition I
HUM	105	Intercultural Communication 5
		wing can be substituted:
		101 Intro to Sociology
MATH8		Precalculus I
	_	er-level MATH course can be substituted
MATH8		
U.S. C		5
		al Studies course can be substituted
		ct course from list of approved courses.
Moturo		Advising for assistance. I - Lab Science
ivatula		et course from list of approved Natural World
		Science courses. See Advising for assistance.
	Lab C	bolotice courses, oce Auvising for assistance.

#### **TECHNICAL ELECTIVES**

Select one of the following 20-credit elective tracks:

CISCO

90

- Linux Networking & Security
- Windows

**TECHNICAL ELECTIVES - CISCO** 

IT

IT	144	Network Management – CISCO II 5				
IT	146	Network Management – CISCO III5				
Techn	Technical Specialty Elective5					
TECHI	TECHNICAL ELECTIVES – WINDOWS					
IT	122	Network OS 1 – Windows Client OS 5				
IT	124	Network OS 2 – Windows Server				
IT	126	Network OS 3 – Windows Network				
		Infrastructure				
IT	128	Network OS 4 – Windows Active Directory 5				
TECHI	TECHNICAL ELECTIVES - LINUX NETWORKING & SECURITY					
IT	138	UNIX for Network Administration				
IT	150	IT Systems Security +				
IT	157	Ethical Hacking5				
Techn	ical Spe	ecialty Elective5				
TOTAL	. PROGF	RAM CREDITS 91				
Wak	A   : -	ution Toshuolonias Contificuta				
web	Applic	ation Technologies Certificate				
Web Technologies includes four 100-level courses enabling						
students to build and support simple web-based applications.						
Stude	nts con	pleting this certificate will qualify for positions in				

142 Network Management – CISCO I. . . . . . . . .

s. 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**

ΙT	102	Introduction to Programming	5
ΙT	111	Internet and Web Authoring Using XHTML.	5
ΙT	120	Network Essentials – Comptia Network + .	5
ΙT	125	Using Structured Query Language	
		and SQL Server	5
TOTAL PROGRAM CREDITS 20			

## **International Trade**

#### **Workforce Instruction Division**

The International Trade Certificate leads to entry-level positions requiring knowledge of international business, including logistics, supply chain management, freight forwarding, port and trade operations, and distribution networks. Career professionals and those interested in moving into the international field from other industries focus on current real-world, real-time events and developments in international trade.

## **Internships**

#### **Workforce Instruction Division**

Internships provide students with opportunities to earn college credit while gaining practical, "hands-on" work experience in their field of study. The Internship program consists of Coop Work Experience classes CWE 101, 102, 110 and 495. For more information regarding the Internship program at North, please contact the Internship Office directly.

### Certificate

#### REQUIRED COURSES

BUS	215	Introduction to International Trade Business 5
BUS	245	Intro to International Trade Global Marketing 5
CWE	101	Portfolio, Job Search, and Interviewing 2
CWE	110	Internship3
IBN	203	International Trade: Export
IBN	205	International Trade: Import3
IBN	225	Global Logistics
TOTAL PROGRAM CREDITS 24		

## **Jewelry Design**

#### Arts, Humanities, and Social Sciences Division

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

Candidates for the Certificate in Jewelry Design must complete 50 credits in the college transfer-level courses (numbered 100 and above) with a GPA of 2.5 or better. The required Jewelry classes (25 credits) must be taken 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 NSC 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 offered only 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, and 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.

## **Certificate in Jewelry Design**

### **REOUIRED COURSES - JEWELRY DESIGN**

IVE QUI	INED O	OUNDED - JEWEEN 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		
REQUI	RED C	OURSES - ART			
ART	101	Design	5		
ART	111	Drawing	5		
ART	210	Digital & Graphic Art - Photoshop + Illustrator	1.5		
GENERAL EDUCATION COURSES					
Total required Communication and Human Relations credits .5					
	Met by ART 251 (or ART 252 253, 255, 257) above.				
Total required computation course credits 5					
	Met b	y ART 290 Art Business			
TOTAL PROGRAM CREDITS 50					

## **Mechatronics**

**Workforce Instruction Division** 

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

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 electromechanical 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**

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

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 ving can be substituted:
ENICI		alent computer experience
ENGL	098	Integrated Reading and Writing II
		ring can be substituted: Higher-level ENGL course
		ccessful completion of ABE 050
MATH (		Algebra I
		ving can be substituted: Higher-level MATH class
	-OR- S	successful completion of ABE 031 or equivalent
TECHN	ICAL S	PECIALTY COURSES
EET	106	Introduction to Soldering
EET	112	Fundamentals of Fluid Power
		& Alternative Energy
	Follow	ving can be substituted:
	Shore	line Community College course:
	MFGT	247 Motive Maintenance5
EET	131	IT Essentials I – A+ Certification5
EET	137	Introduction to Robotics
EET	138	Industrial Robotics
	Follow	ving can be substituted:
	Shore	line Community College course:
	MFGT	280 Robot Certification
EET	160	Introduction to Electricity and Electronics 5
EET	161	D.C. Principles of Electronics
EET	201	Energy Generation, Conversion, and
		Sustainability5
EET	202	Industrial Motor Controls and Drives 5
EET	203	Programmable Logic Controllers5
EET	291	Electronics Externship
		ving can be substituted:
		line Community College course:
		196 Advanced Manufacturing Internship
	-OR-	
		Seattle College courses:
		se two of the following courses:
		08 Intro to Fiber Optics
		ET 170 Digital Electronics & PLCs I
		ET 162 A.C. Principals of Electronics
		ET 114 Applied Physics
		eternship/externship requirement (EET 291
		GT 196) is the preferred selection for this
		e. Total credits can be from 4 to 10 based
MFGT		urse option selected.
MIFGI	105	Basic Manufacturing
MECT		
MFGT	244 Can b	Preventive Maintenance
MFGT	245	e taken at Shoreline Community College. 10-Hour OSHA
MEGI		e taken at Shoreline Community College.
MFGT	246	Mechanical Maintenance
WII GT		e taken at Shoreline Community College.
	oun b	e taken at onorenne community conege.

RELATE	ED INS	TRUCTION			
BUS	112	Multicultural Issues in the American			
		Workplace	5		
	Follow	ving can be substituted:			
	Shore	eline Community College course:			
	MCS:	105 Intro to Multiculturalism Studies			
	-OR- A	approved U.S. Cultures/Global Studies elective			
BUS	236	Interpersonal Communications			
		for the Workplace	5		
	Follow	ving 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 to 5 based on course				
	option	n selected.			
EET	109	Mathematical Applications for Circuit Analysis.	5		
	Following can be substituted: Higher-level MATH class				
	-OR- N	MATH&141 Pre-Calculus	5		
ENGL&:	101	English Composition I	5		
	Follow	ving can be substituted:			
	<b>ENGL</b>	&235 Technical Writing	5		
	-OR-S	Shoreline Community College course: BTWERT			
	215 (	Composition, Business Communications	5		

## **Medical Assisting**

#### **Workforce Instruction Division**

The Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org), upon the recommendation of the Medical Assisting Education Review Board (MAERB). Graduates of this program are eligible to sit for the national CMA exam and are also eligible for the Washington State Medical Assistant Certified Credential.

The Medical Assisting options are all open-entry/open-exit, self-paced, variable-length. Each program option combines traditional instruction with computer- and text-assisted and individualized learning appropriate to student needs. Students must practice hands-on procedures, take exams, and complete competency checkoffs in the classroom with an instructor. Instructors, classrooms, and equipment are available during scheduled hours. Students are encouraged to establish a regular schedule each quarter to foster successful completion of as much work as possible at the college where instructional assistance is available.

In addition to the various fees charged by the college, students will have additional expenses, such as lab fees, scrubs and accessories, physical examination costs, and program costs, including background checks, a \$35 application fee, and an immunization registry that is online.

To complete the program, a 3.0 grade or higher is required in all Medical Assisting (AMA) courses and a 2.0 GPA or higher is required in all other courses.

## **Medical Assisting Certificate**

#### **PREREQUISITES**

**AMA** 

AMA

AMA

AMA

234

235

236

AHE	103	Math for Health Careers
BUS	169	Using Computers in Business 5
	Equiv	alent course can be substituted
ENGL&	101	English Composition I
	Equiv	alent course can be substituted
TECHN	IICAL S	SPECIALTY COURSES
AMA	100	Introduction to Healthcare 5
AMA	101	Intercultural Communication in Patient Care 3
AMA	102	Medical Law and Ethics
AMA	117	Medical Terminology
AMA	118	Disease and Pathology for Medical Assistants 5
AMA	119	Anatomy and Physiology for Medical Assistants . 5
AMA	120	Front Office Basics
AMA	125	Introduction to Medical Insurance and Coding5
AMA	140	Patient Care
AMA	230	Medical Office Management3
AMA	231	Pharmacology3
AMA	232	Sterile Procedures
AMA	233	Diagnostic Procedures

Prerequisite courses must be taken within the last 10 years.

 NUTR& 101
 Nutrition
 ...
 .5

 PSYC& 100
 General Psychology
 ...
 .5

 TOTAL PROGRAM CREDITS
 85

Laboratory Skills.....4

## Medical Assisting Associate of Applied Science (A.A.S.)

The Associate of Applied Science Degree in Medical Assisting provides a more liberalized education than the certificate program, and many employers view the A.A.S. degree as a sign of increased competency and readiness for career or salary advancement. The Medical Assisting program is a competency-based curriculum that uses a combination of online learning, hybrid, and face-to-face classes. Currently, students may enter the program any quarter. Students must practice the competency skills hands-on procedures in the classroom with an instructor during designated times.

North Seattle College's Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs on recommendation of the Curriculum Review Board of the American Association of Medical Assistants' Endowment (CRB-AAMAE). CAAHEP, 1361 Park Street, Clearwater, FL 33756, (727) 210-2350. Graduates of this program are eligible to sit for the Certified Medical Assistant (CMA) exam following graduation and are also eligible for the Washington State Medical Assistant – Certified License upon completion of the entire Medical Assisting program, including the externship. The CMA credential is obtained through a national exam given by the AAMA.

Medical assistants enjoy an exciting, challenging career that is essential to patient care. Medical assistants are multiskilled health professionals specifically educated to work in ambulatory settings performing administrative and clinical duties. The practice of medical assisting directly influences the public's health and well-being, and it requires mastery of a complex body of knowledge and specialized skills requiring both formal education and practical experience that serve as standards for entry into the profession. The North Seattle College program requires self-motivation, time-management skills, critical thinking, attention to detail, the ability to read and comprehend college-level texts in English, and the ability to write accurately and communicate in English. It also requires psychomotor skills and sufficient vision, hearing, and manual dexterity to perform procedures.

In addition to the various fees charged by the college, students will have additional expenses, such as lab fees, scrubs and accessories, physical examination costs, and program costs, including background checks, a \$35 application fee, and an immunization registry that is online.

Prerequisites: Many classes have prerequisites. Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior coursework. Coursework earned at other institutions must be unofficially evaluated or approved by a program advisor before registering.

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

To complete the program, a 3.0 GPA or higher is required in all Medical Assisting (AMA) courses, and a 2.0 GPA or higher is required in all other courses.

## **PREREQUISITES**

Prerequisite courses must be taken within the last 10 years.				
AHE	103	Math for Health Careers		
BUS	169	Using Computers in Business 5		
	Equiv	alent course can be substituted		
ENGL&		English Composition I		
	Equiv	alent course can be substituted		
TECHN	IICAL S	SPECIALTY COURSES		
AMA	100	Introduction to Healthcare		
AMA	101	Intercultural Communication in Patient Care 3		
AMA	102	Medical Law and Ethics		
AMA	117	Medical Terminology		
AMA	118	Disease and Pathology for Medical Assistants . 5		
AMA	119	Anatomy and Physiology for Medical Assistants . 5		
AMA	120	Front Office Basics		
AMA	125	Introduction to Medical Insurance and Coding5		
AMA	140	Patient Care		
AMA	230	Medical Office Management3		
AMA	231	Pharmacology3		
AMA	232	Sterile Procedures		
AMA	233	Diagnostic Procedures4		
AMA	234	Phlebotomy for the Medical Assistant3		
AMA	235	Laboratory Skills4		
AMA	236	Credentials & Employment2		
AMA	250	Medication Administration5		

AMA	290	Externship & CMA Review	.9
	Certif	fication in American Heart Association	
	Basic	Life Support for Health Care Provider	
	is red	quired prior to enrolling in AMA 290 Externship.	
NUTR	§ 101	Nutrition	.5
PSYC8	ž 100	General Psychology	.5
TECHN	NICAL S	SPECIALTY CREDITS	85
RELAT	ED INS	STRUCTION	
ENIOL	101	Frantish Osmonskian I	_
		English Composition I	
		English Composition I	
U.S. C	ultures		.5
U.S. C Humai	ultures n Relat	·	.5 .5
U.S. C Humai	ultures n Relat e Level	ions Elective	.5 .5 .5

### Medical Office Administration Certificate

An option of the Medical Assisting program, this program is intended to prepare the student for work in the administrative, clerical, and management areas of an ambulatory care setting. It covers anatomy and physiology, terminology, pathology, safety, communication, professionalism, and job search skills to enhance understanding in the clinic/office. No hands-on patient care tasks or procedures are included. This is an open-entry/open-exit, self-paced, variable-length program.

Students will have additional expenses other than the fees charged by the college. A separate list is available from the Medical Assisting program coordinator.

#### **PREREQUISITES**

**AMA** 

Note: Courses must be taken within the last 10 years, or the COMPASS test is required. Contact Testing Center.

General: A high school diploma or GED or 18 years of age. Certain tech-prep agreements can be accepted (see MA program advisor).

Applicant should have oral English skills sufficient to communicate accurately with others in the medical field.

AHE	103	
BUS	169	Using Computers in Business 5
	Follow	ving can be substituted:
	IT 10	1 Software Applications
ENGL&	101	English Composition I
	Follov	ving can be substituted:
	ENGL	& 230 Technical Writing
	-OR- A	AHE 100 Critical Thinking and
	Comr	nunications for Healthcare5
TECHN	ICAL S	SPECIALTY COURSES
AHM	124	Introduction to Medical Transcription 1
AMA	100	Introduction to Health Care 5
AMA	101	Intercultural Communication in Patient Care 3
AMA	102	Medical Law and Ethics
AMA	103	Ethical Concepts
AMA	104	Office Emergencies
AMA	106	Patient History-Documentation and
		Physical Exam1

AMA	114	Basic Psychology Principles			
AMA	115	HIV/AIDS1			
AMA	120	Front Office Basics			
AMA	121	Patient Scheduling			
AMA	122	Medical Records and Correspondence 1			
AMA	123	Daily Financial Management			
AMA	125	Introduction to Medical Insurance and Coding5			
AMA	170	AP/Terminology/Pathology 1 - Introduction 2			
AMA	171	AP/Terminology/Pathology 2 - Skin/Senses 1			
AMA	172	AP/Terminology/Pathology 3 - Digestive System 1			
AMA	173	AP/Terminology/Pathology 4 - Male/			
		Urinary System1			
AMA	174	AP/Terminology/Pathology 5 - Female			
		Reproductive			
AMA	175	AP/Terminology/Pathology 6 - Nervous System 1			
AMA	176	AP/Terminology/Pathology 7 - Endocrine System .1			
AMA	177	AP/Terminology/Pathology 8 - Musculoskeletal			
		System			
AMA	178	AP/Terminology/Pathology 9 - Cardiovascular			
		System			
AMA	179	AP/Terminology/Pathology 10 - Respiratory			
		System			
AMA	180	AP/Terminology/Pathology 11 - Blood/			
		Lymph System			
AMA	181	AP/Terminology/Pathology 12 - Specialties 1			
AMA	226	Medical Insurance Coding 1			
AMA	227	Medical Insurance Billing			
AMA	230	Medical Office Management			
AMA	246	Patient Prioritizing and Instruction			
RELAT	ED INS	TRUCTION			
BUS	236	Interpersonal Communications for			
		the Workplace			
	A nor	n-modular (not self-study) course required			
	for th	e program.			
TOTAL	PROGE	RAM CREDITS 41			
If an in	iternsh	ip is desired, CWE 110 Internship can be taken			
throug	through the college. See program director.				

## **Parent Education**

#### **Workforce Instruction Division**

North Seattle offers parent education programs each quarter with classes held on- and off-campus and online. Parents who enroll in the "Parent Education Child Study Laboratory" participate once a week with their child in a parent-operated cooperative preschool, pre-3, toddler, or infant education program. The student's child is enrolled from one to four days a week, depending on the child's age. Enrolled parents also attend parenting classes and learn decision-making and group management skills as officers or committee members in the cooperative. The program gives parents the opportunity to study child development and behavior; learn new ways to interact with children; share ideas and experiences with other adults; and share in their child's early development and group experiences.

## **Pharmacy Technician**

#### **Workforce Instruction Division**

Pharmacy technicians support pharmacists, who are legally responsible for all prescription orders and drug dispensing. The program emphasizes the knowledge, skills, and varied responsibilities of the pharmacy technician. Students completing program requirements earn a certificate and are eligible to take the national certification exam and to 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, outpatient 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.

## **Pharmacy Technician Certificate**

#### **PREREQUISITES**

- Eligibility for MATH 098 or equivalent
- Eligibility for ENGL&101
- High school diploma or GED, or international equivalent or higher
- Must be a minimum of 18 years of age (copy of photo ID required).
- Prerequisite courses must have been completed within the last five years of application date. Documentation that prerequisites have been met is required.
- Applicants should have oral English skills sufficient to communicate accurately with others.
- Contact the Testing Center for test schedules, or go to northseattle.edu/testing.

#### **TECHNICAL SPECIALTY COURSES**

AHI	100	Introduction to Medical Vocabulary3
PHA	112	Pharmacy Law
PHA	115	Orientation to Pharmacy Practice
PHA	116	HIV/AIDS and HIPAA
PHA	120	Pharmacy Calculations
PHA	130	Over-the-Counter Drugs
PHA	140	Sterile Products and Aseptic Technique I 3
PHA	141	Sterile Products and Aseptic Technique II 3
PHA	145	Pharmacy Ethics1
PHA	146	Communications in Pharmacy Practice 2
PHA	150	Pharmacology I
PHA	151	Pharmacology II
PHA	160	Pharmacy Technology I
PHA	161	Pharmacy Technology II
PHA	170	Pharmacy Records Management 5
PHA	190	Pharmacy Technician Externship
PHA	191	Job Skills and National Exam Preparation 1
TOTAL	PROGF	RAM CREDITS 49

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

Pharmacy technicians support pharmacists, who are legally responsible for all prescription orders and drug dispensing. The program emphasizes the knowledge, skills, and varied responsibilities of the pharmacy technician. Students completing program requirements earn a certificate and are eligible to take the national certification exam and to 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, outpatient 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** 

Total Required Credits: 5

TOTAL PROGRAM CREDITS

CMST – Any approved college-level Communication course

#### **TECHNICAL SPECIALTY COURSES**

ABD	T20	Study Abroad			
AHI	100	Introduction to Medical Vocabulary	3		
PHA	112	Pharmacy Law	2		
PHA	115	Orientation to Pharmacy Practice	3		
PHA	116	HIV/AIDS and HIPAA 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		
ELECT	IVES				
Any co	llege e	lectives			
TOTAL	ELECT	IVES	16		
GENER	RAL ED	UCATION COURSES			
MATH -	– Any a	pproved college-level Computation or Q course	5		
US/GS	S – Any	approved U.S. Cultures or Global Studies			
		course	5		
LIVING	WORL	D – Any approved Living World or other			
		approved course	5		
BUS	236	Interpersonal Communications			
		for the Workplace	5		
TOTAL	GENEF	RAL EDUCATION CREDITS	20		

## **Phlebotomist**

#### Phlebotomist Short-Term Certificate

This is an I-BEST (Integrated Basic Education and Skills Training) Phlebotomy program. I-BEST 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
AHE	119	Introduction to Phlebotomy II	7
TOTAL	PROGF	RAM CREDITS	12

## **Real Estate**

#### **Workforce Instruction Division**

North Seattle College's Real Estate program prepares students for work in Residential and Commercial Real Estate Sales and Brokerage, Appraising, Property Management, Green Real Estate, Escrow, Finance, and Investment.

The North Seattle Real Estate Program provides the skills and educational clock hours necessary to satisfy Washington State Department of Licensing and Department of Financial Institutions' requirements, and industry and continuing education requirements. Students learn from industry experts in settings emphasizing experiential learning.

North Seattle College offers classes leading to certification in the following Real Estate designations:

- Commercial Real Estate and Investment
- Escrow
- Green Real Estate
- Loan Officer
- Loan Processor
- Real Estate Appraisal Trainee
- Property Management
- Sales

90

For up-to-date information on Real Estate certificates, degrees, and courses, visit www.northseattle.edu/real-estate.

## **Advanced Commercial Real Estate Certificate**

This certificate program builds on our core Real Estate Certificate (2758) by specializing in commercial property management and investment and providing advanced education in key management skills, including land use, title, and property management. Offers options to emphasize in multifamily or commercial property management. Additional coursework in finance, sales and leasing, and investment analysis. Courses also apply toward the Real Estate A.A.S. degree and other real estate certificates. They 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.

#### **PREREQUISITES**

Real Estate Certificate classes listed below.

Classes may be taken concurrently. Exceptions may be awarded for active real estate experience or with program coordinator permission.

RES		Real Estate Fundamentals5
	Recor	nmend taken concurrently with
	RES 1	.25 Applications for Real Estate Math
RES		Technology for Real Estate 5
		ving can be substituted:
	BUS 1	L69 Using Computers in Business 5
RES	106	
RES	140	Real Estate Sales and Practice
RES	170	Real Estate Law
RES	217	
		Sustainability
TECHN	ICAL S	PECIALTY COURSES
RES	110	Introduction to Commercial Real Estate 3
RES	125	Applications of Real Estate Math 2
RES	141	Land Use Principles and Practice
RES	175	Introduction to Title3
RES	202	Multifamily Property Management
RES	203	Property Management – Commercial 3
RES	260	Real Estate Finance – Commercial 5
RES	290	Commercial Sales and Leasing
RES	290	Fulfills WA DOL requirement for first real estate
		license renewal.
RES	295	Commercial Real Estate Investment Analysis .2
TOTAL I	PROGR	AM CREDITS 26

#### **Advanced Residential Real Estate Certificate**

This certificate program builds on our core Real Estate Certificate (275B) by specializing in residential sales and providing advanced education in key management skills including document preparation, sales and marketing, real estate math, and finance. Offers options to emphasize in inspection, title, appraisal, or escrow. Finally offers investment or brokerage management track. Courses also apply toward the Real Estate A.A.S. degree and other real estate certificates. They 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.

#### **PREREQUISITES**

Real Estate Certificate classes listed below.

Classes may be taken concurrently. Exceptions may be awarded for active real estate experience or with program coordinator permission.

RES RES	100 101	Real Estate Fundamentals Technology for Real Estate	
	Follo	wing can be substituted:	
		169 Using Computers in Business	5
RES	106	_	
RES	130		
RES	140	Real Estate Sales and Practice	3
RES	170	Real Estate Law	3
TECHN	IICAL S	SPECIALTY COURSES	
RES	125	Applications of Real Estate Math	2
	Stud	ents may challenge RES 125 by passi	ng
	the F	RES 125 test.	
RES	150	Residential Sales and Leasing	
		Documentation	1.5
RES	164	Real Estate Finance Residential	5
RES		Residential Property Investments	
	Following can be substituted: RES 230 Business		
	Pract	ices of Brokerage Management	
RES	235	Sales and Marketing	3
TECHN	IICAL S	SPECIALTY ELECTIVES	
Choos	e from	any two of the following:	
RES	142	Inspecting the Condition of Real Est	ate 3
RES	175	Introduction to Title	3
RES	180	Basic Appraisal Principles	3
RES	190	Real Estate Escrow I	3
TOTAL	TOTAL PROGRAM CREDITS 25.5-27.5		

State of Washington, Department of Licensing, requires successful completion of RES 100 before taking the state real estate sales license exam. Also, DOL requires completion of RES 140 or RES 290 before the first license renewal.

For up-to-date information on Real Estate certificates, degrees, and courses, visit northseattle.edu/real-estate.

#### **Green Real Estate Short-Term Certificate**

This certificate program provides a strong background and prepares students to specialize in green and sustainable real estate while working as brokers, builders, developers, home inspectors, architects, appraisers, and government staff.

#### **TECHNICAL SPECIALTY COURSES**

RES RES RES	130 131 132	Green Real Estate
		Sustainable Development
RES	133	Energy Efficient Design and Development 2
RES	134	Smart Locations Integrated Communities
		Sustainability 1.5
RES	135	Healthy Buildings and Indoor Air Quality 2
RES	217	Real Estate Development and Sustainability 3
TOTAL	PROGE	RAM CREDITS 16.5

#### **Real Estate Certificate**

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 A.A.S. 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 Fundamentals5
	(DOL pre-licensing educational requirement)
RES	101 Technology for Real Estate5
	Following can be substituted:
	BUS 169 Using Computers in Business I
RES	106 Real Estate Fraud
RES	130 Green Real Estate3
	Following can be substituted:
	RES 217 Real Estate Development & Sustainability .3
RES	140 Real Estate Sales and Practice3
	(DOL pre-licensing educational requirement)
RES	170 Real Estate Law
	(DOL continuing education clock hours)
TOTAL	PROGRAM CREDITS 18-21

For up to date information on Real Estate certificates, degrees and courses, visit northseattle.edu/real-estate.

## Real Estate Associate of Applied Science (A.A.S.)

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 A.A.S. 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**

100 Pool Estato Fundamentale

RES	100	Real Estate Fundamentals5
RES	101	Technology for Real Estate5
RES	106	Real Estate Fraud
	Follo	wing can be substituted:
	RES:	160 Ethics for Loan Originators
RES	110	Introduction to Commercial Real Estate 3
RES	125	Applications of Real Estate Math 2
		wing can be substituted:
	MATH	H&107 Math in Society5
		MATH 116 Applications of Math
	to Ma	anagement, Life and Social Science 5
	Stude	ents may challenge RES 125 by passing the
		125 test and receive 2 credits.
RES	130	Green Real Estate
RES	140	Real Estate Sales and Practice
		wing can be substituted:
		290 Commercial Sales and Leasing 3
RES	141	Land Use Principles and Practice
RES	142	Inspecting the Condition of Real Estate 3
RES	150	
RES	165	Real Estate Loan Originator
		wing can be substituted:
		166 Real Estate Loan Processing4
DE0		RES 260 Real Estate Finance - Commercial 2
RES	170	Real Estate Law
RES	175	Introduction to Title
RES	177	Real Estate Taxes
RES	180	Basic Appraisal Principles
RES	190	Real Estate Escrow I
RES	201	Principles of Real Estate Management 3
		wing can be substituted:
		202 Multifamily Property Management
		RES 203 Community Association Management 3
RES	210	Residential Property Investments3
RES	217	Real Estate Development and Sustainability 3
RES	220	Real Estate Economics
RES	235	Sales and Marketing
		STRUCTION
Global	Studie	es or U.S. Cultures elective: 5 credits

Global Studies or U.S. Cultures elective: 5 credits
Select elective credits from approved list. See Advising Center.

ACCT	215	Accounting for Small Business Owners 3
BUS	140	Customer Relations
BUS	236	Interpersonal Communications for
		the Workplace

Choose credits from any nonrequired courses with RES prefix or from the following:

CWE	101	Portfolio, Job Search, and Interv	iewing 2
CWE	110	Internship	3
ELECTIVES CREDITS		13	
TOTAL PROGRAM CREDITS		91-96	

For up to date information on Real Estate certificates, degrees and courses, visit northseattle.edu/real-estate.

#### Real Estate Escrow Certificate

**ELECTIVES** 

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 A.A.S. 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 Fundamentals5		
RES	106	Real Estate Fraud		
	Follow	ring can be substituted:		
	RES 1	.60 Ethics for Loan Originators		
RES	150	Residential Sales and Leasing		
		Documentation1.5		
RES	170	Real Estate Law		
RES	175	Introduction to Title3		
RES	190	Real Estate Escrow I		
EL ECTI	EL ECTIVES			

Total required RES Electives credits: 6

Choose credits from any course(s) with RES prefix, CWE 101 or CWE 110.

Visual, Literary and Performing Arts	5
TOTAL PROGRAM CREDITS	22.5

For up to date information on Real Estate certificates, degrees and courses, visit northseattle.edu/real-estate.

## Real Estate Property Management Certificate

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 A.A.S. 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.

	TECHNICAE OF ECIAEL 1 COOKSES			
	RES	100	Real Estate Fundamentals	5
	RES	101	Technology for Real Estate	5
		Follow	ving can be substituted:	
		BUS :	169 Using Computers in Business I 5	5
	RES	120	Real Estate Principles of Maintenance	
			and Repair	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 six 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
		Follow	ving can be substituted:	
		260 F	Real Estate Finance – Commercial	2
	RES	202	Multifamily Property Management	3
	RES	203	Property Management – Commercial 3	3

TECHNICAL SPECIALTY COLIDSES

Note: Most employers require property managers to be licensed real estate sales associates in the state of Washington and to be able to quickly learn and use industry-specific software.

Community Association Management . . . . . . . . . 3

For up-to-date information on Real Estate certificates, degrees, and courses, visit northseattle.edu/real-estate.

## **Watch Technology Institute**

#### Workforce Instruction Division

TOTAL PROGRAM CREDITS

RES

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-Clockmakers 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.

Watch Technology Institute Certificate			
TECHI	NICAL S	SPECIALTY COURSES	
HIN	111	Introduction to Watch Technology 6	
HIN	112	Watch Technology I: Tools, Equipment	
		& Measurement	
HIN	113	Watch Technology I: Practicum	
HIN	121	Watch Technology II: Professional Knowledge .6	
HIN	122	Watch Technology II: the Watchmakers Lathe6	
HIN	123	Watch Technology II: Practicum	
HIN	131	Watch Technology III: Winding and Setting	
	101	Mechanism	
HIN	132	Watch Technology III: Watch Gear Trains 6	
HIN	133	Watch Technology III: Practicum	
HIN	141	Watch Technology IV: Escapements	
HIN	142	Watch Technology IV: External Parts 4	
HIN	143	Watch Technology IV: Practicum	
HIN	211	Watch Tech V: Introduction to Precision Timing 6	
HIN	212	Watch Tech V: Introduction to Electronic	
	2.12	Watches6	
HIN	213	Watch Tech V: Practicum	
HIN	221	Watch Technology VI: Precision Timing 2 6	
HIN	222	Watch Technology VI: Automatic Watches 6	
HIN	223	Watch Technology VI: Practicum	
HIN	231	Watch Technology VII: Advanced Precision	
11111	201	Timing	
HIN	232	Watch Technology VII: Chronographs 6	
HIN	233	Watch Technology VII: Practicum	
HIN	241	Watch Technology VIII: After-Sales Service 4	
HIN	242	Watch Technology VIII: Review of Courses 4	
HIN	243	Watch Technology VIII: Practicum	
		RAM CREDITS: 164	
TOTAL	. rnoui	VAINI CREDITS. 104	
Watc	h Tech	nology Institute	
		f Applied Science (A.A.S.)	
TECHI	NICAL S	SPECIALTY COURSES	
HIN	111	Introduction to Watch Technology 6	
HIN	112	Watch Technology I: Tools, Equipment	
		& Measurement	
HIN	113	Watch Technology I: Practicum	
HIN	121	Watch Technology II: Professional Knowledge .6	
HIN	122	Watch Technology II: the Watchmakers Lathe6	
HIN	123	Watch Technology II: Practicum	
HIN	131	Watch Technology III: Winding and Setting	
		Mechanism	
HIN	132	Watch Technology III: Watch Gear Trains 6	
HIN	133	Watch Technology III: Practicum	
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	

HIN	213	Watch Tech V: Practicum	0
HIN	221	Watch Technology VI: Precision Timing 2	6
HIN	222	Watch Technology VI: Automatic Watches	6
HIN	223	Watch Technology VI: Practicum	0
HIN	231	Watch Technology VII: Advanced Precision	
		Timing	
HIN	232	Watch Technology VII: Chronographs	
HIN	233	Watch Technology VII: Practicum	0
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
GENER	AL ED	UCATION COURSES	
BUS	236	Interpersonal Communications for	
		the Workplace	5
	Follov	ving can be substituted:	
	Other	Approved Human Relations Course	
ENGL&	101	English Composition I	5
MATH&	107	Math in Society	5
U.S. Cu	ultures		5
	Follov	ving can be substituted: Global Studies courses	
	Selec	t from approved list. See Advising Center.	
GENER	AL EDI	JCATION CREDITS 2	0
TOTAL	PROGF	RAM CREDITS 18	4

## **Work Experience/Cooperative Education**

### **Workforce Instruction Division**

Cooperative Education offers on-the-job learning for college credit. Business, industry and government work with the college to allow students to gain practical job experience coordinated with the student's major field of study.

This program enriches the educational experience by giving relevance to classroom theory and provides students with the opportunity to explore occupational directions within their

Students will receive college credit for employment relating to their major courses of study. For more information, contact the Advising Center.