## Welcome

For students who intend to transfer to a four-year college or university, starting at North Seattle College offers real advan-tages-strong academic preparation and advising services, small classes, an innovative integrated studies program, broad eLearning options, and a variety of partnerships with four-year schools. While many graduates have continued their studies at universities such as Dartmouth, Penn State, and UC Berkeley, most North students transfer to the University of Washington. In fact, North consistently ranks among the highest of all community colleges in the number of students who are accepted to the University of Washington's main campus. And North graduates fare well. For three of the last five years, a North transfer student has won the top academic award at the University of Washington or Seattle University.
North also provides outstanding career training in more than 50 certificate and degree programs, including those in emerging fields such as nanotechnology, sustainable and conventional energy and control technology, and fraud accounting. North helps students earn GEDs, learn English, enhance basic skills, and pursue new skills or personal interests.
North Seattle College has four Bachelor of Applied Science (B.A.S.) degree programs: International Business, Information Technology Application Development, Early Childhood Education, and Property Management. All of North's B.A.S. programs are designed for working students, using a hybrid format of online learning combined with weekday evening classes. North is planning to offer additional B.A.S. programs in the future, so keep checking the college website.
The college also provides a rich student life. Concerts, plays, intramural sports, fitness programs, an award-winning literary magazine, and a diverse student population add depth to students' experiences. Conveniently located in a quiet residential neighborhood five miles north of downtown, the campus includes environmentally sensitive wetlands that have inspired a collegewide commitment to sustainability.
Come for a visit and learn how North changes lives.


Getting Started at North

$$
\begin{array}{ll}
\text { Admissions } & \text { (206) 934-3663 } \\
\text { Financial Aid } & \text { (206) 934-3688 } \\
\text { Registration } & \text { (206) 934-3663 } \\
\text { TTY } & (206) 934-0079
\end{array}
$$

## 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

Facts at a Glance*
2017-2018 ANNUAL PROFILES
Annual attendance 2017-2018 ..... 15,354
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\%

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


## 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.

## Computer Labs

(206) 934-3630<br>itservices.northseattle.edu/content/open-computer-lab<br>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 <br> 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<br>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-on-one and group tutoring services, including accounting, biology, chemistry, computer science, English, ESL, math, world languages, and more. The center also provides other support services, including multimedia computer labs, study rooms, and student success workshops.

## Page One Writing \& Language Center

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

## The Math/Science Learning Center

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

## Accounting and Business Learning Center

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

## Veterans Services

School Certifying Official: Greggory Tessensohn (206) 934-7309
gregory.tessensohn@seattlecolleges.edu

The Office of Veterans Services at North Seattle College offers a range of assistance to veterans, reservists, active duty personnel, and eligible family members who receive Veterans Affairs education benefits. We also offer certification services for anyone eligible for Chapter 33 Post 9/11 GI Bill®, Chapter 30 Montgomery GI Bill ${ }^{\oplus}$, 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 <br> 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.

# Affiliate Organizations 

## Transportation \& Parking <br> (206) 934-0060 <br> 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 wellequipped 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.


#### Abstract

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

Seepage 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

## 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:

1. Biological sciences, environmental/resources sciences, chemistry, geology, and earth sciences
2. Engineering, computer science, physics, and atmospheric science.
Course requirements and GPAs vary from one transfer university to another. Contact an advisor.

## Associate of Science (A.S.)

The Associate of Science (A.S.) is a direct transfer agreement. However, there are certain major areas of study in which the student may not be able to take all the courses necessary to transfer with junior standing. Please contact an advisor for more information on this degree program.
A.S. degree requirements include satisfactory completion of at least 90 approved credits with a minimum 2.0 cumulative GPA. At least 15 college-level credits must be earned at the Seattle College awarding the degree.

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

## Direct Transfer Agreement

Workforce Instruction Division
(206) 934-3730

Students who complete the A.B. can fulfill many of the general education and business major prerequisites required for many Washington state public four-year college and university business programs.
A.B. degree requirements include satisfactory completion of at least 90 approved credits with a minimum 2.0 cumulative GPA. At least 15 college-level credits must be earned at the Seattle College awarding the degree.

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

## GENERAL EDUCATION COURSES

ENGL\& 101 English Composition I . . . . . . . . . . . . . . . . . . . 5
ENGL\& 102 Composition II . . . . . . . . . . . . . . . . . . . . . . . . 5
COMMUNICATION SKILLS 10
MATH 116 Applied Mathematics . . . . . . . . . . . . . . . . . 5 Following can be substituted: MATH\&141 Precalculus I5
QUALITATIVE/SYMBOLIC REASONING ..... 5
Choose from a minimum of two different prefixes with no more than 10 credits in a discipline area.
VISUAL, LITERARY AND PERFORMING ARTS ..... 15
ECON\& 201 Micro Economics ..... 5
ECON\& 202 Macro Economics .....  5
Non-ECON course ..... 5
INDIVIDUAL, CULTURES AND SOCIETIES ..... 15
MATH\& 148 Business Calculus .....  5
Following can be substituted:
MATH\&151 Calculus I ..... 5
-OR- MATH\&124 Calculus w/Geometry II ..... 5
Physical, Biological, and/or Earth Sciences ..... 10
Note: Must include at least one 5-credit laboratory course
THE NATURAL WORLD ..... 15
ACCT\& 201 Financial Accounting I. ..... 5
ACCT\& 202 Financial Accounting II ..... 5
ACCT\& 203 Managerial Accounting ..... 5
BUS\& 201 Business Law. ..... 5
BUS\& 210 Business Statistics. .....  5
BUSINESS COURSES ..... 25
U.S. CULTURES ..... 5
TOTAL PROGRAM CREDITS ..... 90

## Fine Arts in Art

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

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

The A.F.A. in Art requires General Education courses as follows: ENGL\&101 and one of the following computation courses: MATH\&107 or above, BUS 116, ACCT 110 or above. Students must also complete 10 credits in two of the three distribution areas: 5 from Visual, Literary, and Performing Arts other than ART courses; 5 from Individuals, Cultures, and Societies; and 5 from The Natural World. There are also 45 required ART credits and a minimum of 25 ART electives. Some of the art courses are offered only once a year, so students should consult the annual schedule (e.g., ART 251, Fall; ART 252, Winter; ART 253, Spring; ART 101, Spring; ART 112 and ART 205, 206, 207, Winter and Spring but not Fall). During the final quarter, students must submit a portfolio of work of at least eight pieces for evaluation. The art faculty will provide exact details on portfolio preparation and will review and vote on acceptability toward the degree.
All A.F.A. students in art must have an art advisor to plan their program. The art advisor is Lynne Hull. Some of the art courses are offered only once a year, so students should consult the annual schedule (e.g., ART 251, Fall; ART 252, Winter; ART 253, Spring; ART 101, Spring; ART 112 and ART 205, 206, 207, Winter and Spring but not Fall). All studio art courses must be taken in sequence; however, art history courses may be taken in any order. Substitutions may be made only with the approval of the art faculty and the Arts, Humanities \& Social Sciences dean, and requests for such substitutions must be made on the request for waiver form. Listed below is a possible course sequence for the A.F.A. degree in Art; however, it may be necessary to take courses out of sequence as the quarterly schedule dictates. For more information about program or the annual schedule, contact the Humanities Division at (206) 934-3709.

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

## REQUIRED COURSES

ART 101 Design. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
ART 102 Design. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
ART 111 Drawing. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
ART 112 Drawing. . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
ART 114 Beginning Digital Photography, ART 121 Beginning Printmaking, ART 201 Beginning Painting, or ART 211 Beginning Sculpture .5
ART 2XX Choose two art history courses from the following:ART 251 Art History - Ancient, ART 252 Art History -Medieval, ART 253 Art History - Modern, ART 255Art History - Art of Asia, ART 257 Art History - Art ofthe Global South10
ART 210 Digital \& Graphic Art - Photoshop + Illustrator. ..... 5
ART 251 Art History ..... 5
Following can be substituted:
ART 252 - Art History ..... 5
Art History courses are taught at Seattle Centralor other college.
ART 253 Survey of Western Art: Renaissance - Present. 5Art History courses are taught at Seattle Centralor other college.
ART 290 The Art Business ..... 5
GENERAL EDUCATION COURSES
Individuals, Cultures \& Societies ..... 5
The Natural World ..... 5
Computation Course ..... 5
Select 5 credits from notated courses below: MATH 107 (or above), BUS 116 (or above), ACCT 110 (or above) ..... 5
ENGL\&101 English Composition I ..... 5
ENGL\&102 Composition II ..... 5
ART ELECTIVES GROUP 1: 2-DIMENSIONAL ART
Approved Art electives must be taken in sequence; however,completion of a sequence is not required.
ART 113 Drawing ..... 5
ART 114 Introduction to Digital Photography I ..... 5
ART 115 Introduction to Digital Photography II. ..... 5
ART 121 Introduction to Printmaking ..... 5
ART 122 Introduction to Printmaking - Intermediate ..... 5
ART 123 Continuing Printmaking: Monotypeand Monoprint5
ART 124 Screen Printing ..... 5
ART 201 Painting ..... 5
ART 202 Painting ..... 5
ART 203 Painting ..... 5
ART 204 Mural Art ..... 5
ART 214 Digital \& Graphic Art - Intermediate ..... 5
ART 215 Advanced Digital Art ..... 5
ART 166 Video Art ..... 5
ART 240 Book Arts. ..... 5
GROUP 1-2-DIMENSIONAL ART ..... MINIMUM 5

## ART ELECTIVES GROUP 2: 3-DIMENSIONAL ART <br> Approved Art Electives must be taken in sequence; however, completion of a sequence is not required.

ART 211 Sculpture ..... 5
ART 212 Sculpture ..... 5
ART 213 Sculpture ..... 5
ART 221 Ceramic Art ..... 5
ART 222 Ceramic Art ..... 5
ART 223 Ceramic Art ..... 5
ART 281 Jewelry Design I ..... 5
ART 282 Jewelry Design II. ..... 5
ART 283 Introduction to Alloying and Jewelry Casting. ..... 5
ART 284 Bench Techniques and Practices ..... 5
ART 285 Metal Techniques for Small Scale Sculpture ..... 5
GROUP 2 - 3-DIMENSIONAL ART MINIMUM 5
ELECTIVES BETWEEN GROUP 1 AND GROUP 2 MINIMUM 25
TOTAL PROGRAM CREDITS MINIMUM 90 + PORTFOLIO

## Liberal Arts

## North Seattle College Academic Advising

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

## Associate of Arts (A.A.)

## ELECTIVES

See advisor for list of approved courses.

## AREAS OF KNOWLEDGE DISTRIBUTION REQUIREMENTS

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

## Science

## North Seattle Academic Advising

The Associate of Science Degree: Option 1 is intended for students planning to transfer to a four-year college or university and major in biology, environmental/resource sciences, chemistry, geology, or earth sciences.
Students will complete 90 credits, including many of the laboratory and prerequisite courses for their major prior to transferring. Students are strongly encouraged to meet with an advisor to discuss specific career goals and recommended coursework.
BASIC REQUIREMENTS - MATHEMATICS
Choose five credits from the following courses:MATH 116 Applications of Math: Management,Life, and Social Sciences 5
MATH\& 141 Pre-Calculus I. ..... 5
MATH\& 142 Pre-Calculus II ..... 5
MATH\& 148 Business Calculus ..... 5
MATH\& 151 Calculus I . ..... 5
MATH\& 152 Calculus II ..... 5
MATH 220 Linear Algebra ..... 5
MATH 224 Vector Calculus ..... 5
BASIC REQUIREMENTS - COMPUTER SCIENCE
Choose 5 credits from the following courses:
CSC 110 Introduction to Computer Programming. ..... 5
CSC 111 Computers for Math and Science ..... 5
CSC 142 Computer Programming I. ..... 5
CSC 143 Computer Programming II ..... 5
ENGR 142 Computer Programming. ..... 5
Associate of Science (A.S.)
BASIC REQUIREMENTS - ENGLISH
ENGL\& 101 English Composition I ..... 5
ENGL\& 102 Composition II ..... 5
AREAS OF KNOWLEDGE DISTRIBUTION REQUIREMENTSSee advisor for list of approved courses or use links below.Visual, Literary, and Performing Arts15
Courses in this area include languages, literature,art, music, drama, and communication. Choicesmust include a minimum of two different courseprefixes and no more than 5 credits each of a worldlanguage at the 100 level; a studio/performanceclass may be applied to the distribution requirements.Individual, Cultures, and Societies.
$\qquad$Courses in this area include social sciences, suchas anthropology, psychology, and sociology, aswell as areas of study like history, philosophy, andethnic and gender studies. Choices must includea minimum of two different course prefixes.

## PRE-MAJOR REQUIREMENTS

Course selection should be in compliance with major requirements as indicated by the four-year institution to which the student is planning to transfer. See an advisor or counselor prior to beginning your program of study.
The Natural World40Courses in this area include physical and lifesciences and certain mathematics, computerscience, and social science courses. Choicesmust include a minimum of two different prefixes;9 credits must be in a lab science.

## ELECTIVES

See advisor for list of approved courses.
Elective5

# 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 <br> (877) 214-7004 <br> 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 119 for details about North's programs.

## 3 <br> 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

The BAS in Application Development is a degree designed to prepare students for entry-level positions in software development careers by providing industry-relevant applied education in application development. Instruction focuses on current industry trends including web, cloud, data science and mobile applications, as well as industry practices such as Agile and collaborative development. A strong emphasis on industry-based projects throughout the program will prepare graduates to meet current and future industry needs and emerging software trends.
Any General Education Requirements taken as part of the associate degree can be transferred in to satisfy requirements.

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

## DEGREE REQUIREMENTS

Applicants must have an associate's degree (or equivalent credits) from a regionally accredited institution with a minimum cumulative 2.5 GPA and a 2.5 GPA or higher in all IT courses.

## PREREQUISITES - IT COURSES

Equivalent courses may be substituted
Programming Course10

5 credits of Object-Oriented Programming
strongly recommended
See advising for list of approved courses
Database Development/Programming in SQL. .5
See advising for list of approved courses
Web Programming/Javascript Course . 5
See advising for list of approved courses

## PREREQUISITES - GENERAL EDUCATION

Equivalent courses may be substituted
ENGL\& 101 English Composition I
Quantitative/Symbolic Reasoning . . . . . . . . . . 5
QSR course in Statistics or Calculus recommended

## TECHNICAL SPECIALTY COURSES

AD 300 Component Software . . . . . . . . . . . . . . . . . . 5 Following can be substituted: CSC 143- Computer Programming II . . . . . . . . . . . . 5
AD 315 Discrete Mathematics in Computer Programming5
AD 320 Web Application Development ..... 5
AD 325 Data Structure \& Algorithms ..... 5
AD 340 Mobile Application Development ..... 5
AD 350 Database Technology ..... 5
AD 400 Project Management in Software Development ..... 5
AD 410 Web Application Practicum. ..... 5
AD 420 Cloud Computing - Software As Service ..... 5
AD 430 Mobile Application Practicum ..... 5
AD 440 Cloud Computing Practicum. ..... 5
AD 450 Datascience Development. ..... 5
AD 470 Data Science Practicum ..... 5
AD 490 Internship/Capstone Project AD-BAS ..... 5
RELATED INSTRUCTION
General Education Prerequisites comprise 10 of 60 credits
required. See Advising Center for list of approved courses.
Visual, Literary and Performing Arts ..... 10
Humanitites or
contact the Advising Center for acceptable coursesIndividual, Cultures and Societies10
Social sciences orcontact the Advising Center for acceptable courses10Any physical, biological or earth sciences.
At least one 5 credits lab required orcontact the Advising Center for acceptable courses
Communication . 5
5 credits in a Composition, Writing-intensive, or basicspeaking skills courses
General Education Elective15Credits may be selected to best suit the needsof the baccalaureate program
ELECTIVES50
See Advising Center for list of courses.
Includes any credits taken towards the associate degreeand/or technology prerequisites
TOTAL PROGRAM CREDITS180

# Early Childhood Education 

Workforce Instruction Division<br>(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 Nutrition . . . . . . . . . . . . . 5
ECED\& 160 Curriculum Development . . . . . . . . . . . . . . . . . 5
ECED\& 170 Environments-Young Child . . . . . . . . . . . . . . . . 3
EDUC\& 115 Child Development . . . . . . . . . . . . . . . . . . . . . 5
EDUC\& 130 Guiding Behavior . . . . . . . . . . . . . . . . . . . . . 3
EDUC\& 150 Child Family and Community . . . . . . . . . . . . . 3
TECHNICAL SPECIALTY COURSES
ECE $305 \begin{aligned} & \text { Early Childhood Education Approaches } \\ & \text { and History . . . . . . . . . . . . . . . . . . . . . . . } 3\end{aligned}$
ECE 310 Cognition and General Knowledge . . . . . . . . . 5
ECE 315 Language, Literacy and Communication . . . . . 5
ECE 320 Creative Expression . . . . . . . . . . . . . . . . . . . . 3
ECE 350 Practicum: Interactions . . . . . . . . . . . . . . . . . . 5
ECE 355 Anti-Bias Education. . . . . . . . . . . . . . . . . . . . 3
ECE 405 Partnership and Collaboration in Early Care and Education3
ECE 410 Inclusive Early Childhood Education ..... 4
ECE 415 Children and Media. .....  3
ECE 420 Social and Emotional Foundations ..... 5
ECE 430 Linguistically Diverse Learners. ..... 5
ECE 450 Child Development and Assessment ..... 5
ECE 480 Leadership and Professional Community . . . . 5
ECE 490 Capstone ..... 5
GENERAL EDUCATION
ENGL\& 101 English Composition I ..... 5
ENGL\&101 is counted toward general educationrequirements. Must be eligible for ENGL\& 101through English Placement Exam or completionof ENGL 097/ENGL 098.
ENGL\& 102 Composition II ..... 5
Following can be substituted:ENGL\& 235 Technical Writing5
Visual, Literary and Performing Arts. ..... 15
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).
ELECTIVES CREDITS ..... 60
ADDITIONAL CREDITS
INFO 101 Introduction to Information Resources ..... 2
TOTAL PROGRAM CREDITS ..... 182
International Business
Workforce Instruction Division

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 <br> 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 . ..... 5
Counts towards B.A.S. elective credits.
ACCT\& 202 Principles of Accounting II ..... 5
Counts towards B.A.S. elective credits.
ACCT\& 203 Principles of Accounting III. ..... 5
Counts towards B.A.S. elective credits.BUS\& 201 Business Law.5
Counts towards B.A.S. elective credits.
BUS 210 Business and Economic Statistics ..... 5Following can be substituted:MATH\&146 Intro to Statistics5
Counts towards B.A.S. elective credits.
ENGL\& 101 English Composition I ..... 5
Counts towards B.A.S. General Education credits.Must be eligible for ENGL\&101 through EnglishPlacement Exam or completion of ENGL 097 or ENGL 098.
TECHNICAL SPECIALTY COURSES
CWE 494 International Business Internship Preparation 1
CWE 495 Baccalaureate Internship ..... 9
IBN 301 International Management. ..... 5
IBN 302 International Marketing ..... 5
IBN 303 Ethics and International Business ..... 3
IBN 310 Operations Management ..... 5
IBN 311 International Business Law ..... 3
IBN 320 International Finance ..... 5
IBN 350 International Business Practicum ..... 5
IBN 401 International Project Management ..... 5
IBN 402 Management of Information Systems ..... 5
IBN 410 International Entrepreneurship. ..... 3
IBN 420 Global Business Strategy ..... 5
IBN 490 Research Skills for International Business ..... 2
GENERAL EDUCATION COURSES
CMST 215 International Communication and Relations ..... 5
Following can be substituted:
CMST\&220 Public Speaking ..... 5
ECON\& 201 Micro Economics ..... 5
ECON\& 202 Macro Economics ..... 5
ENGL\& 102 Composition II ..... 5
Following can be substituted:
ENGL\&235 Technical Writing. ..... 5
MATH 116 Applications of Math: Management, Life and Social Sciences ..... 5
Following can be substituted:
MATH\&141 Pre-Calculus ..... 5
MATH\& 148 Business Calculus ..... 5
Following can be substituted:MATH\&151 Calculus I5
Visual, Literary, and Performing Arts ..... 10
Any two World Language courses.See advising for course list.
Individual, Cultures and Societies5
One course. See advising for course list.The Natural World5One of any physical, biological, or earth science5-credit lab class. See advising for course list.
U.S. Cultures ..... 5Following can be substituted: Global Studies (any U.S.or GS designated course) See advising for course list.60

## ELECTIVES

Total required Elective credits includes 25 credits from program prerequisites as listed and notated above, excluding ENGL\&101, and 35 credits as noted below.
Electives ..... 35 as General Education credits. (Commonly fulfilled by accounting/business courses from associate degree.)
TOTAL PROGRAM CREDITS ..... 180
Residential and Commercial Property Management
Workforce Instruction Division (206) 934-6131

The Residential and Commercial Property Management B.A.S. (RCPM B.A.S.) program prepares students for a career in either residential or commercial property management. It is a multidisciplinary curriculum, combining business, accounting, and real estate courses. The RCPM B.A.S. is an extension of a business, accounting, or real estate A.A.S.-T degree, with upper-division courses in property management. Students from several different business, accounting, and real estate programs will be qualified to enter the RCPM program.
Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

## Bachelor of Applied Science (B.A.S.) Associate degree or equivalent

## PREREQUISITES

English 101 fulfills required program general education credits. All other prerequisite courses fulfill required program elective credits.
ACCT\& 201 Principles of Accounting I. ..... 5
ACCT\& 202 Principles of Accounting II ..... 5
ACCT\& 203 Principles of Accounting III ..... 5
BUS 210 Business and Economic Statistics ..... 5
Following can be substituted:
MATH\&146 Intro to Statistics
ENGL\& 101 English Composition I ..... 5
RES 170 Real Estate Law .....  3
Following can be substituted:BUS\&201 Business Law
TECHNICAL SPECIALTY COURSES
CWE 495 Baccalaureate Internship ..... 3
INFO 300 Information Literacy for Undergraduate Research ..... 3
RCPM 301 Principles of Residential Property Management ..... 3
RCPM 302 Stakeholder Relations \& Professional Development ..... 4
RCPM 303 Intro to Development and Construction Management .....  3
RCPM 304 Principles of Commercial Property Management ..... 2

RCPM 310 Specialty and Affordable Housing. . . . . . . . . . 2
$\begin{aligned} \text { RCPM } 311 & \text { Marketing \& Leasing of Residential } \\ & \text { Real Estate . . . . . . . . . . . . . . . . . . . . . . } 2\end{aligned}$
RCPM 313 Marketing and Leasing of Commercial Real Estate3
RCPM 315 Introduction to Negotiations. ..... 2
RCPM 320 Financial Accounting for Property Management ..... 4
RCPM 330 Leadership and Team Building .....  3
RCPM 350 Revenue Management for Property Management .....  2
RCPM 401 Project Management for Property Management ..... 5
RCPM 402 Supervision and Management ..... 4
RCPM 403 Real Estate and Fair Housing Law. ..... 4
RCPM 410 Professional Ethics in Property Management ..... 2
RCPM 420 Sustainable Facilities Management ..... 5
RCPM 494 Practicum Portfolio ..... 4
GENERAL EDUCATION COURSES
CMST\& 220 Public Speaking .....  5
ECON\& 201 Micro Economics ..... 5
ECON\& 202 Macro Economics ..... 5
ENGL\& 101 English Composition I .....  5Must be eligible for ENGL\&101 through EnglishPlacement Exam or completion of ENGL 097/098.
ENGL\& 102 Composition II ..... 5
Following can be substituted:
ENGL\&235 Technical Writing ..... 5
MATH 116 Applications of Math: Management, Life, and Social Sciences ..... 5
Following can be substituted:MATH\&141 Pre-Calculus I5
-OR- MATH\&142 Pre-Calculus II ..... 5
-OR- MATH\&148 Business Calculus ..... 5
-OR- MATH\&151 Calculus I ..... 5
Visual, Literary, and Performing Arts ..... 10
Individual, Cultures, and Societies. ..... 5
The Natural World, ..... 10
Must include at least 5 credits of lab science.
U.S. Cultures ..... 5Following can be substituted: Global StudiesRecommended courses:CMST 205 Multicultural CommunicationsHUM 105 Intercultural Communications
ELECTIVES - REQUIRED ELECTIVES
Total of 60 elective credits can be taken one of two ways:23 credits of required electives +37 credits of100/200-level courses35 credits of required electives +25 credits of100/200-level courses
Select credits from course listed below:
ACCT\& 201 Principles of Accounting 1 ..... 5
ACCT\& 202 Principles of Accounting II ..... 5
ACCT\& 203 Principles of Accounting III ..... 5
BUS\& 201 Business Law. ..... 5
Following can be substituted:RES 170 Real Estate Law3
BUS 210 Business and Economic Statistics ..... 5
Following can be substituted: MATH\&146 Introduction to Statistics ..... 5
ELECTIVES - 100/200-LEVEL COURSESTotal of 60 elective credits can be taken one of two ways:
23 credits of required electives +37 credits of100/200-level courses35 credits of required electives +25 credits of100/200-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 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.

## Basic \& Transitional Studies Division

 (206) 934-4720Basic 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 <br> (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<br>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 <br> 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 |
| GED | 061 | Advanced GED Math |

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.

# 7 <br> 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 <br> 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.

## 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............................... . . 5
ACCT\& 201 Principles of Accounting I. . . . . . . . . . . . . . . . . 5
ACCT\& 202 Principles of Accounting II . . . . . . . . . . . . . . . . 5
ACCT\& 203 Principles of Accounting III. . . . . . . . . . . . . . . . . 5
ACCT 255 Individual Income Tax . . . . . . . . . . . . . . . . . . . 5
ACCT 257 Business Tax Accounting . . . . . . . . . . . . . . . . . . 5
ACCT 260 Peachtree Accounting . . . . . . . . . . . . . . . . . . 5
ACCT 261 Accounting Information Systems . . . . . . . . . . 5
ACCT 267 Not-for-Profit Financial Management . . . . . . . . 5
ACCT 271 Ethics in Accounting . . . . . . . . . . . . . . . . . . . 5
CWE 110 Internship .................................. . . 3

## RELATED INSTRUCTION

BUS 124 Excel for Business . . . . . . . . . . . . . . . . . . . . . 5
BUS 131 Integrated Communications I. . . . . . . . . . . . . . 5
BUS 169 Using Computers in Business . . . . . . . . . . . . 5
Following can be substituted:
IT 101 Software Applications. . . . . . . . . . . . . . . . . . 5
BUS 200 Law and Society . . . . . . . . . . . . . . . . . . . . . . . 5
Following can be substituted:
BUS\& 201 Business Law5
BUS 210 Business and Economic Statistics ..... 5
Prerequisite: MATH 098 or higher

BUS 236 Interpersonal Communications for the Workplace5
U.S. Cultures ..... 5

Following can be substituted: Global Studies course See Advising for list of approved courses.
TOTAL PROGRAM CREDITS

## 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 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 students interested in the Bachelor of Applied Science
(BAS) - International Business degree program here at North Seattle College.

## TECHNICAL SPECIALTY COURSES

ACCT 131 QuickBooks ..... 5
ACCT\& 201 Principles of Accounting I ..... 5
Following can be substituted:
ACCT 110 Intro to Accounting/Bookkeeping I ..... 5
ACCT\& 202 Principles of Accounting II ..... 5
Following can be substituted:
ACCT 120 Intro to Accounting/Bookkeeping II ..... 5
ACCT\& 203 Principles of Accounting III ..... 5
ACCT 255 Individual Income Tax ..... 5
ACCT 257 Business Tax Accounting ..... 5
BUS 124 Excel for Business ..... 5
BUS\& 201 Business Law ..... 5
BUS 210 Business and Economic Statistics ..... 5
BUS 236 Interpersonal Communications for the Workplace ..... 5
ECON\& 201 Micro Economics ..... 5
ECON\& 202 Macro Economics ..... 5
RELATED INSTRUCTION
ENGL\& 101 English Composition I ..... 5
Must be eligible for English 101 through EnglishPlacement Exam or completion of English 097/098.
MATH 116 Applications of Math: Management, Life,
May substitute MATH\&141 or any math class
with MATH\&141 as a prerequisite.
The Natural World ..... 5 ..... 5
To transfer to an applied baccalaureate program,

Must be eligible for English 101 through English
Placement Exam or completion of English 097/098.
and Social Sciences . .....  . . 5earth science is required. .....  . 5

U.S. Cultures

U.S. Cultures
Following can be substituted: Global Studies
Following can be substituted: Global Studies
RELATED INSTRUCTION: ELECTIVE
ACCT 251 Intermediate Accounting I ..... 5
ACCT 252 Intermediate Accounting II. ..... 5
ACCT 256 Taxation of Corporations and Partnerships ..... 5
ACCT 261 Accounting Information Systems ..... 5
ACCT 265 Accounting for Not-for-Profit and Government Entities ..... 5
ACCT 267 Not-for-Profit Financial Management ..... 5
ACCT 270 Cost Accounting ..... 5
ACCT 271 Ethics in Accounting ..... 5
ACCT 272 Fraud Examination ..... 5
ACCT 273 Introduction to Financial Crimes .....  5
ACCT 274 Forensic Accounting ..... 5
ACCT 275 Auditing ..... 5
a lab course in physical, biological, and/or

| BUS\& | 101 |  |
| :---: | :---: | :---: |
| BUS | 12 |  |
| BUS | 114 |  |
| BUS | 118 | Project Management Introduction and Overview |
| S | 119 | Leadership and Management Skills . . . . . . . 3 |
| BUS | 151 | Introduction to Entrepreneurship |
| BUS | 169 | Using Computers in Business |
| BUS | 186 | Sustainable Business |
| BUS | 215 | Introduction to International Trade Business . . 5 |
| BUS | 229 | Project Management Tools Techniques and Control |
| CMST\& 220 |  | Public Speaking |
| TOTAL PROGRAM CREDITS |  |  |
| 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. |  |  |

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 Following can be substituted:
Prior accounting course or Instructor permission

## TECHNICAL SPECIALTY COURSES

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

## Accounting 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
Following 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 PROGRAM 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 <br> 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, Literary, and Performing Arts . . . . . . . . . . . . . . . . . . 5
Recommended courses:
HUM 105 Intercultural Communications. . . . . . . . . . 5
-OR- CMST\&210 Interpersonal Communications . . . . 5
Individual, Cultures, and Societies. . . . . . . . . . . . . . . . . . . . 5
Recommended courses:
PSYC\&100 General Psychology . . . . . . . . . . . . . . . . 5
-OR- SOC\&101 Intro to Sociology . . . . . . . . . . . . . . . . 5
Lab Science . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
Recommended courses:
CHEM\&121 Intro to Chemistry . . . . . . . . . . . . . . . . 5
-OR- BIOL\&160 General Biology w/Lab . . . . . . . . . . . 5
RELATED INSTRUCTION
See Advising for courses that fulfill related instruction/ foundation science requirement.

## 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.
Engineering Graphics and Design Technology Certificate
TECHNICAL SPECIALTY COURSES
TDR 111 Basic CAD Drafting for Construction and Design ..... 5
TDR 112 Intermediate CAD Drafting/Construction and Design ..... 5
TDR 113 Basic Drafting ..... 5
TDR 115 Civil and Site Drafting ..... 5
TDR 124 Materials and Methods of Construction ..... 5
TDR 134 Systems in Buildings ..... 5
TDR 144 Design and Construction Environment ..... 5
TDR 176 Architectural Engineering Drafting ..... 4
RELATED INSTRUCTION
BUS 236 Interpersonal Communications for the Workplace ..... 5
Following can be substituted:Any 100-level approved human relations course.
EET 109 Mathematical Applications forCircuit Analysis.5
-OR- MATH 102 College Algebra ..... 5
ENGL\&101 English Composition I ..... 5
TOTAL PROGRAM CREDITS (Excluding Prequisites) ..... 49
Engineering Graphics and Design Technology Associate of Applied Science (A.A.S.)
Completion of Certificate Requirements: 53 credits
TECHNICAL SPECIALTY COURSES
TDR 100 Basic BIM for Design and Construction ..... 5
TDR 101 Intermediate BIM for Design and Construction ..... 5
TDR 109 Architectural Engineering Lab .....  1
Total of two 2 credits required -may be repeated each quarter.
TDR 160 Applied Mechanics I ..... 5
TDR 269 Construction Estimating ..... 5
RELATED INSTRUCTION
General Education Courses ..... 5
ENGL\& 230 Technical Writing. .....  3
General Education Elective ..... 5
Select from approved General Education categories.
See the Advising Center.
ELECTIVES
IT 101 Software Applications ..... 5
Following can be substituted:
Computer Skills Elective:
BUS 169 Using Computers in Business -OR- CSC 111 Computers for Math \& Science ..... 93

## 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:
$\begin{array}{lll}\text { BUS } & 169 \quad \text { Using Computers in Business . . . . . . . . . . . . } 5 \\ & \text { Following can be substituted: } \\ & \begin{array}{l}\text { Equivalent computer experience }\end{array} \\ \text { ENGL } & 097 \quad \begin{array}{l}\text { English 097: Integrated Reading } \\ \\ \end{array} & \begin{array}{ll}\text { and Writing I. . . . . . . . . . . . . . . . . . . . . . } 10\end{array}\end{array}$ and Writing I. . . . . . . . . . . . . . . . . . . . . . . Following can be substituted: Higher ENGL course -OR- ENGL 098 College Prep Writing IV . . . . . . . . . . . 5
MATH 084 Algebral . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
Following can be substituted: Higher MATH course
-OR- Have taken equivalent or higher MATH course

## TECHNICAL SPECIALTY COURSES

EET 107 Introduction to Aviation Electronics. . . . . . . 4-5
EET 108 Introduction to Fiber Optics . . . . . . . . . . . . . . . 5
EET 109 Mathematical Applications for Circuit Analysis5

Following can be substituted:

MATH\&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 PROGRAM CREDITS 29-30

## 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:
BUS 169 Using Computers in Business ..... 5
Following can be substituted: Equivalent computer experience

ENGL 097 English 097: Integrated Reading and
Writing I ..... 10
Following can be substituted: Higher ENGL course -OR- ENGL 098 College Prep Writing IV . ..... 5
MATH 084 Algebra I ..... 5
Following can be substituted: Higher MATH course -OR- Have taken equivalent or higher MATH course
TECHNICAL SPECIALTY COURSES
EET 105 Introduction to Technology ..... 2
EET 106 Introduction to Soldering ..... 1
EET 107 Introduction to Aviation Electronics. ..... 4-5
EET 108 Introduction to Fiber Optics ..... 5
EET 109 Mathematical Applications for Circuit Analysis. ..... 5
-OR- MATH\&141 Pre-Calculus I. ..... 5
EET 112 Fundamentals of Fluid Power \& Alternative Energy. ..... 5
EET 131 IT Essentials I-A+Certification. ..... 5
EET 137 Introduction to Robotics ..... 5
EET 161 D.C. Principles of Electronics ..... 5
EET 162 A.C. Principles of Electronics ..... 5
EET 163 Solid State Electronics ..... 5
EET 170 Digital Electronics \& PLCs I ..... 5
GENERAL EDUCATION COURSES
BUS 236 Interpersonal Communications for the Workplace ..... 5
Following can be substituted:
HUM 105 Intercultural Communication ..... 5
-OR- ISP 101 The Global Society ..... 5
-OR- ISP 110 Introduction to Global Studies ..... 5
-OR- POLS 112 Contemporary World. ..... 5
-OR- SOC\&101 Introduction to Sociology ..... 5
The above course or listed substitutesmeets the Human Relations requirement.
BUS 236 is the preferred course.
5
ENGL\& 101 English Composition I
3
-OR- ENGL\&230 Technical Writing5
TOTAL PROGRAM CREDITS ..... 61-63

## 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.

## ENGL\& 101 English Composition I . . . . . . . . . . . . . . . . . . 5

Following can be substituted: Previous transcripts showing completion of ENGL 98 or above with minimum GPA of 2.0.
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 Following can be substituted: CWE 102 Job Shadow . 2
TOTAL PROGRAM CREDITS 24

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

## 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 shortterm 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:
BUS 169 Using Computers in Business . . . . . . . . . . . . 5
Following can be substituted:
Equivalent computer experience
ENGL 097 English 097: Integrated Reading and Writing I .10
Following can be substituted: Higher ENGL course -OR- ENGL 098 College Prep Writing IV .5
MATH 084 Algebral . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
Following can be substituted: Higher MATH course -OR- Have taken an equivalent or higher course

## TECHNICAL SPECIALTY 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 Following can be substituted:
EET 161 D.C. Principles of Electronics . . . . . . . . . . . 5

## RELATED INSTRUCTION

BUS 236 Interpersonal Communications for the Workplace5

Following can be substituted:

HUM 105 Intercultural Communication. ..... 5
-OR- ISP 101 The Global Society ..... 5
-OR- ISP 110 Intro to Global Studies. ..... 5
-OR- POLS 112 Contemporary World. ..... 5
-OR- SOC\&101 Introduction to Sociology ..... 5
TOTAL PROGRAM 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.

## PREREQUISITES

ACCT\& 201 Principles of Accounting I. . . . . . . . . . . . . . . . . 5
ACCT\& 202 Principles of Accounting II . . . . . . . . . . . . . . . . 5
ACCT\& 203 Principles of Accounting III. . . . . . . . . . . . . . . . 5
ACCT 255 Individual Income Tax . . . . . . . . . . . . . . . . . . . 5
TECHNICAL SPECIALTY COURSES
ACCT 251 Intermediate Accounting I . . . . . . . . . . . . . . . 5
ACCT 252 Intermediate Accounting II. . . . . . . . . . . . . . . . 5
ACCT 256 Taxation of Corporations and Partnerships . . . 5
ACCT 261 Accounting Information Systems . . . . . . . . . . 5
ACCT 265 Accounting for Not-for-Profit and Government Entities . . . . . . . . . . . . . . . . . . . . 5
ACCT 270 Cost Accounting . . . . . . . . . . . . . . . . . . . . . . . 5
ACCT 271 Ethics in Accounting . . . . . . . . . . . . . . . . . . . . . 5
ACCT 275 Auditing........................................ 5
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 $236 \begin{aligned} & \text { Interpersonal Communications } \\ & \\ & \text { for the Workplace . . . . . . . . . . . . . . . . . . . } 5\end{aligned}$
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 . . . . . . . . . . 3
Following can be substituted:
BUS 154 Exploring Entrepreneurship . . . . . . . . . . . . 5
BUS 152 Entrepreneurship Product/Service/Pricing/ Marketing .5
$\begin{aligned} & \text { BUS } 153 \text { Entrepreneurship Planning Business } \\ & \text { Financials . . . . . . . . . . . . . . . . . . . . . . . . } 5\end{aligned}$
BUS 156 Introduction to E-Business/Commerce . . . . . . 5
-OR- BUS 169 Using Computers in Business. . . . . . . 5
BUS 186 Sustainable Business . . . . . . . . . . . . . . . . . . 5
BUS 236 Interpersonal Communications for the Workplace . . . . . . . . . . . . . . . . . . . . . 5
TOTAL PROGRAM CREDITS 38-40

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

## RELATED INSTRUCTION

BUS 115 Computational Skill Building . . . . . . . . . . . . . 2
BUS 124 Excel for Business . . . . . . . . . . . . . . . . . . . . . 5
BUS 169 Using Computers in Business . . . . . . . . . . . . 5
Following can be substituted:
IT 101 Software Applications. . . . . . . . . . . . . . . . . . 5
BUS 236 Interpersonal Communications for the Workplace .5
CWE 110 Internship . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ENGL\& 230 Technical Writing. . . . . . . . . . . . . . . . . . . . . . . 3
TOTAL PROGRAM CREDITS 63

## 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

BUS 151 Introduction to Entrepreneurship . . . . . . . . . . 3 BUS 152 Entrepreneurship Product/Service/ Pricing/Marketing5

BUS 153 Entrepreneurship Planning Business
Financials .....  5
TOTAL 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 I. . . . . . . . . . . . . . . . . 5
ACCT\& 202 Principles of Accounting II . . . . . . . . . . . . . . . . 5
BUS\& 101 Introduction to Business . . . . . . . . . . . . . . . . 5
BUS 112 Multi-Cultural Issues in the American Workplace .5
Students completing the Communications, Business \& Media certificate may substitute CMST 205 Multicultural Communication .5
BUS 114 Introduction to Marketing ..... 5
Must complete BUS 131 Integrated Communicationsor be eligible for ENGL\&101 through EnglishPlacement Exam or completion of ENGL 097/098.
BUS 169 Using Computers in Business ..... 5
Following can be substituted:
BUS 171 Information Technology II ..... 5
BUS\& 201 Business Law. ..... 5
BUS 210 Business and Economic Statistics ..... 5
BUS 230 Business Communications ..... 5
Must complete BUS 131 Integrated Communicationsor be eligible for ENGL\&101 through EnglishPlacement Exam or completion of ENGL 097/098.
BUS
for the Workplace ..... 5
GENERAL EDUCATION COURSES
Contact the Advising Center for approved list of courses U.S. Cultures ..... 5
General Education Elective ..... 5
ELECTIVESElectives must include a minimum of 15 credits with BUSdesignation (except students with CB\&M certificate)
BUS course ..... 5
ELECTIVES - PATHWAY
Total of 8-10 credits required
ACCT\& 203 Principles of Accounting III. ..... 5
BUS 118 Project Management Introduction and Overview .
BUS 151 Introduction to Entrepreneurship ..... 5
Following can be substituted:
BUS 154 Exploring Entrepreneurship ..... 5
BUS 186 Sustainable Business ..... 5
BUS 205 Human Resource Management ..... 5
BUS 215 Introduction to International Trade Business . .
ECON\& 201 Micro Economics ..... 5
RES 100 Real Estate Fundamentals. ..... 5
ELECTIVES - GENERAL
Total of 20-22 credits required.
Any additional course(s) with a BUS designation:

- Elective BUS courses must be numbered 100or above AND not list above under TechnicalSpecialty courses.
- May include BUS courses list under ElectivesPathway.
Any CMST designated courses in the
Communication, Business and Media (CB\&M)
certificate. Only students completing the CB\&M
certificate may apply CMST courses.
ACCT 131 QuickBooks ..... 5
ACCT\& 203 Principles of Accounting III ..... 5
ACCT 261 Accounting Information Systems ..... 5
ECON\& 201 Micro Economics ..... 5
ECON\& 202 Macro Economics ..... 5
ENVS 160 Principles of Environmental Sustainability ..... 5
RES 100 Real Estate Fundamentals. ..... 5
RES 202 Multifamily Property Management .....  3
Following can be substituted:RES 203 Property Management - Commercial . . . . . . 3
TOTAL PROGRAM CREDITS ..... 90
Note: Students wishing to transfer to an applied baccalaureatedegree 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) degreeis built upon technical skills for job preparation but alsoincludes college-level general education components commonto all the A.A.S.-T degrees. The General Business A.A.S.-Tdegree is designed as a transfer program for those inter-ested in an applied baccalaureate degree and, in particular,for students interested in the B.A.S. - International Businessdegree program here at North Seattle College.
TECHNICAL SPECIALTY COURSES
ACCT\& 201 Principles of Accounting I. ..... 5
ACCT\& 202 Principles of Accounting II ..... 5
BUS\& 101 Introduction to Business ..... 5
BUS 112 Multicultural Issues in the American Workplace ..... 5
Following can be substituted:
CMST 205 Multicultural Communications ..... 5
WITH Academic Exception approval
BUS 114 Introduction to Marketing ..... 5
BUS\& 201 Business Law. ..... 5
BUS 210 Business and Economic Statistics ..... 5
BUS 215 Introduction to International Trade Business .....  5
Following can be substituted:CMST 195 Media Management Operations5
WITH Academic Exception approval
BUS 236 Interpersonal Communicationsfor the Workplace5
ECON\& 201 Micro Economics ..... 5
ECON\& 202 Macro Economics ..... 5
RELATED INSTRUCTION
ENGL\& 101 English Composition I ..... 5
Must be eligible for English 101 through EnglishPlacement Exam or completion of English 097/098.
MATH 116 Applications of Math to Management,Life and Social Sciences5
Following can be substituted: MATH\&141 Precalculus I-OR- Any math class with MATH\&141 as a prerequisiteThe Natural World,5
U.S. Cultures ..... 5
Following can be substituted: Global Studies
ELECTIVES
ACCT\& 203 Principles of Accounting III ..... 5
To transfer to the B.A.S.-International Businessprogram, this class is a required prerequisite.
ACCT 255 Individual Income Tax .....  5
Following can be substituted:
ACCT 267 Financial Management ..... 5
BUS course ..... 5Elective BUS course numbered 100 or aboveand not listed under Technical Specialty Courses.See Advising Center
TOTAL PROGRAM CREDITS ..... 90
Microsoft Office Professional Short-Term Certificate TECHNICAL SPECIALTY COURSES
BUS 123 Word for Business ..... 5
BUS 124 Excel for Business ..... 5
BUS 125 Access for Business ..... 5
BUS 126 PowerPoint for Business .....  2
TOTAL PROGRAM CREDITS ..... 17


## Marketing Certificate

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

## PREREQUISITES

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement. Please consult a college advisor and/or the program coordinator.
ENGL\& 101 English Composition I . . . . . . . . . . . . . . . . . 5
Following can be substituted: Equivalent English course

## TECHNICAL SPECIALTY COURSES

BUS 114 Introduction to Marketing . . . . . . . . . . . . . . . 5
BUS 118 Project Management Introduction and Overview5

Must be eligible for ENGL\&101 through English Placement Test or completion of ENGL 097/098 or completion of ABE 050 with minimum 2.0 GPA.
BUS 226 Advertising \& Sales Promotion. ..... 5
BUS 227 Digital Marketing ..... 5
CWE 101 Portfolio, Job Search, and Interviewing .....  2
CWE 110 Internship .....  3

## 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.

## PREREQUISITES

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 $229 \begin{aligned} & \text { Project Management Tools Techniques } \\ & \text { and Control . . . . . . . . . . . . . . . . . . . . . . . } 5\end{aligned}$
Prerequisite: Must complete BUS 118; Must have completed BUS 236 or an approved equivalent
CWE 110 Internship . . . . . . . . . . . . . . . . . . . . . . . . . 3
Must be taken after BUS 118; May be taken concurrently with BUS 229

## RELATED INSTRUCTION

ENGL\& 230 Technical Writing. . . . . . . . . . . . . . . . . . . . . . 3
Prerequisite: Must be eligible for English 101 via English Placement Exam or completion of ENGL 097/098
TOTAL PROGRAM CREDITS

## 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.

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

GENERAL EDUCATION
ENGL\& 101 English Composition I . . . . . . . . . . . . . . . . . . . 5
U.S. Cultures . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5

Following can be substituted: Global Studies
REQUIRED GENERAL EDUCATION CREDITS 10
GENERAL EDUCATION - COMPUTATION/QUANTITATIVE ELECTIVE
MATH at 100 level or choose from course(s) listed below:
ACCT 110 Introduction to Accounting/Bookkeeping I. . . . 5
REQUIRED C/Q ELECTIVE CREDITS 5
GENERAL EDUCATION - HUMAN RELATIONS ELECTIVE
Choose from one of the following courses:
BUS 236 Interpersonal Communications for the Workplace ..... 5
HUM 105 Intercultural Communication ..... 5
ISP 101 the Global Society. ..... 5
ISP 110 Introduction to Global Studies ..... 5
POLS 112 Contemporary World ..... 5
SOC\& 101 Introduction to Sociology ..... 5
REQUIRED HR ELECTIVE CREDITS ..... 5
REQUIRED COURSES
CCE 240 Multicultural Dialogues in Early Childhood Education .....  3
ECE 219 Practicum-Instructional Interactions ..... 5
ECE 222 Math and Science Methods ..... 5
ECED\& 105 Introduction to Early Childhood Education ..... 5
ECED\& 107 Health, Safety, and Nutrition ..... 5
ECED\& 120 Practicum: Nurturing Relationships .....  2
ECED\& 132 Infants and Toddlers .....  3
ECED\& 139 Administration ..... 3
ECED\& 160 Curriculum Development ..... 5
ECED\& 170 Environments-Young Child .....  3
ECED\& 180 Language and Literacy Development. .....  3
ECED\& 190 Observing and Assessment .....  3
EDUC\& 115 Child Development ..... 5
EDUC\& 130 Guiding Behavior .....  3
EDUC\& 150 Child Family and Community .....  3
EDUC\& 203 Exceptional Child .....  3
ELECTIVE COURSES
Select from the following courses:
CCE 145 Music and Creative Expression ..... 4
Credit range: 3-4; Total required credits: 4
CCE 195 Art for Young Children .....  3
CCE 200 Children and Nature .....  3
CCE 261 Readings in Early Childhood Education .....  6
Credit range: 1-6; Total required credits: 1-
ECED\& 134 Family Child Care .....  3
EDUC\& 136 School-Age Care .....  3
REQUIRED ELECTIVE CREDITS ..... 11
TOTAL PROGRAM CREDITS ..... 90

## 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 . . . . . . . . . . . . . . . . . 5
ECED\& 170 Environments-Young Child . . . . . . . . . . . . . . . 3
Following can be substituted:
ECED\&130 Guiding Behavior. . . . . . . . . . . . . . . . . . 3
ECED\& 180 Language and Literacy Development. . . . . . . . . 3
ECED\& 190 Observing and Assessment . . . . . . . . . . . . . . . 3
EDUC\& 150 Child Family and Community . . . . . . . . . . . . . 3
TECHNICAL SPECIALTY COURSES - INITIAL CERTIFICATE
Completion of the courses listed below equals the State Initial ECE Certificate.
ECED\& 105 Introduction to Early Childhood Education . . . . 5
ECED\& 107 Health, Safety, and Nutrition . . . . . . . . . . . . . . 5
ECED\& 120 Practicum: Nurturing Relationships . . . . . . . . 2
TECHNICAL SPECIALTY INITIAL CERTIFICATE CREDITS 12
TECHNICAL SPECIALTY COURSES - SPECIALIZATION
Completion of EDUC\&115 Child Development and one of the other courses listed below:
ECED\& 132 Infants and Toddlers . . . . . . . . . . . . . . . . . . . 3 Completion 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 3

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
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 - Administration
EDUC\& 115 Child Development . . . . . . . . . . . . . . . . . . . . . 5
EDUC\& 130 Guiding Behavior . . . . . . . . . . . . . . . . . . . . . 3 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 - General
EDUC\& 136 School-Age Care . . . . . . . . . . . . . . . . . . . . . . 3 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 - School-Age Care
TECHNICAL SPECIALTY SPECIALIZATION CREDITS ..... 8
RELATED INSTRUCTION
ENGL\& 101 English Composition I. ..... 5
Following can be substituted:English course higher than ENGL\&101College Level MATH course. . . . . . . . . . . . . .5Quantitative or Computational Mathabove 100 or designated Q/SR
TOTAL PROGRAM CREDITS47

## 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 Nutrition . . . . . . . . . . . . . . 5
ECED\& 120 Practicum: Nurturing Relationships . . . . . . . . 2
TECHNICAL SPECIALTY COURSES - SPECIALIZATION
ECED\& 139 Administration . . . . . . . . . . . . . . . . . . . . . . . . 3
EDUC\& 115 Child Development . . . . . . . . . . . . . . . . . . . . . . 5
TOTAL PROGRAM CREDITS 20

## 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 InitialECE Certificate
ECED\& 105 Introduction to Early Childhood Education . . . . 5
ECED\& 107 Health, Safety, and Nutrition ..... 5
ECED\& 120 Practicum: Nurturing Relationships .....  2
TECHNICAL SPECIALTY COURSES - SPECIALIZATION
ECED\& 134 Family Child Care ..... 3
EDUC\& 115 Child Development ..... 5
TOTAL PROGRAM CREDITS ..... 20

## 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 Nutrition . . . . . . . . . . . . . 5
ECED\& 120 Practicum: Nurturing Relationships . . . . . . . . 2
TECHNICAL SPECIALTY COURSES - SPECIALIZATION
EDUC\& 115 Child Development . . . . . . . . . . . . . . . . . . . . 5
EDUC\& 130 Guiding Behavior . . . . . . . . . . . . . . . . . . . . . 3
TOTAL PROGRAM CREDITS 20

## 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 InitialECE Certificate.
ECED\& 105 Introduction to Early Childhood Education . ..... 5
ECED\& 107 Health, Safety, and Nutrition ..... 5
ECED\& 120 Practicum: Nurturing Relationships .....  2
TECHNICAL SPECIALTY COURSES - SPECIALIZATION
ECED\& 132 Infants and Toddlers ..... 3
EDUC\& 115 Child Development ..... 5
TOTAL PROGRAM CREDITS ..... 20
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 Nutrition . . . . . . . . . . . . . 5
ECED\& 120 Practicum: Nurturing Relationships . . . . . . . . 2
TECHNICAL SPECIALTY COURSES - SPECIALIZATION
EDUC\& 115 Child Development . . . . . . . . . . . . . . . . . . . . . 5
EDUC\& 136 School-Age Care . . . . . . . . . . . . . . . . . . . . . . . 3
TOTAL PROGRAM CREDITS 20

## 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<br>Programs : Day (D) - Evening (E)<br>Biomedical Equipment Technology<br>Electronics Engineering Technology<br>Electronics Technology*<br>Electronics Technology*, Certificate<br>Industrial Power \& Control Technology<br>Industrial Power \& Control Technology, Certificate<br>*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 Applications. .5
-OR- Equivalent computer experience
ENGL 097 English 097: Integrated Reading and Writing I.10
-OR- ENGL 098 College Prep Writing IV ( 5 credits) -OR- Higher ENGL course
MATH 084 Algebra I .5
-OR- Higher MATH course
-OR- Have taken equivalent or higher MATH course
TECHNICAL SPECIALTY COURSES
CSC 142 Computer Programming I . . . . . . . . . . . . . . . . . . 5 Following can be substituted: Any higher CSC course
EET 105 Introduction to Technology . . . . . . . . . . . . . . . 2
EET 161 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 Devices. . . . . . . . . . . . . . . 5
EET 166 Analog Circuits and Devices II . . . . . . . . . . . . . 5
EET 170 Digital Electronics \& PLCs I . . . . . . . . . . . . . . . 5
EET 171 Digital Electronics \& PLCs II ..... 5
EET 251 Microprocessor Fundamentals I ..... 5
EET 252 Microprocessor Fundamentals II ..... 5
EET 285 Electronics Tech Project. ..... 3
PHYS\& 221 Engineering Physics I ..... 5
PHYS\& 222 Engineering Physics II ..... 5
PHYS\& 223 Engineering Physics III ..... 5
RELATED INSTRUCTION
See Advising Center for list of designated courses for aboverequirements.
CMST\& 210 Interpersonal Communication ..... 5
ENGL\& 101 English Composition I ..... 5
While students must test into ENGL 097 to startthe degree, they must complete ENGL\&101 to finish.
ENGL\& 230 Technical Writing. ..... 3
MATH\& 142 Pre-Calculus II ..... 5
MATH\& 151 Calculus I. ..... 5
MATH\& 152 Calculus II ..... 5
Global Studies ..... 5
Following can be substituted: U.S. Cultures creditsHuman Relations Elective5
TECHNICAL ELECTIVES
Total required Technical Electives credits ..... 5
Select five credits from approved list.See Advising Center.Technical Electives5
TOTAL PROGRAM CREDITS ..... 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.

## 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
-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
MATH 084 Algebra I .5
Following can be substituted: Higher MATH course -OR- Have taken equivalent or higher MATH course
US Cultures/Global Studies Elective
Five credits selected from a list of approved U.S. Cultures or Global Studies courses.

## TECHNICAL SPECIALTY COURSES

EET 105 Introduction to Technology . . . . . . . . . . . . . . . . 2
EET 106 Introduction to Soldering . . . . . . . . . . . . . . . . . 1
EET 107 Introduction to Aviation Electronics. . . . . . . 4-5
EET 108 Introduction to Fiber Optics . . . . . . . . . . . . . . . 5
EET 131 IT Essentials I-A+Certification . . . . . . . . . . . 5
EET 132 IT Essentials A+Certification Advanced . . . . . 5 Following can be substituted:
EET 135 Intro to Broadband . . . . . . . . . . . . . . . . . . 5
EET 137 Introduction to Robotics . . . . . . . . . . . . . . . . 5
EET 161 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 Devices . . . . . . . . . . . . . . . 5
EET 170 Digital Electronics \& Plcs I . . . . . . . . . . . . . . . . 5

## GENERAL EDUCATION COURSES

EET 109 Mathematical Applications for Circuit Analysis . . . 5 Following can be substituted: Higher MATH course -OR- MATH 141 re-Calculus I5
ENGL\& 101 English Composition I ..... 5ENGL\& 230 Technical Writing3
-OR- ENGL\&235 Technical Writing ..... 5
GENERAL EDUCATION COURSES - HUMAN RELATIONS ELECTIVES

Choose from one of the following courses:
BUS 236 Interpersonal Communications for the Workplace (the preferred course)5
HUM 105 Intercultural Communication ..... 5
ISP 101 the Global Society. ..... 5
ISP 110 Introduction to Global Studies ..... 5
POLS 112 Contemporary World ..... 5
SOC\& 101 Introduction to Sociology ..... 5
TOTAL PROGRAM CREDITS ..... 65-68

## Electronics Technology <br> 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

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 -OR- Equivalent computer experience
ENGL 097 Integrated Reading and Writing I. . . . . . . . . . 10 Following can be substituted: Higher ENGL course -OR- ENGL 098 College Prep Writing IV5
MATH 084 Algebra I ..... 5Following can be substituted: Higher MATH course-OR- Have taken equivalent or higher MATH course
TECHNICAL SPECIALTY COURSES
EET 105 Introduction to Technology. ..... 2
EET 106 Introduction to Soldering .....  1
EET 107 Introduction to Aviation Electronics. ..... 4-5
EET 108 Introduction to Fiber Optics ..... 5
EET 112 Fundamentals of Fluid Power \& Alternative Energy. ..... 5
EET 114 Applied Physics ..... 5
EET 131 IT Essentials I-A+Certification ..... 5
EET 132 IT Essentials A+ Certification Advanced ..... 5
EET 137 Introduction to Robotics ..... 5
EET 138 Robotic Applications ..... 5
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 Devices ..... 5
EET 170 Digital Electronics \& PIcs I ..... 5
EET 171 Digital Electronics \& PIcs II ..... 5
EET 203 Programmable Logic Controllers. ..... 5
EET 219 Metrology and Measurement Science .....  3
RELATED INSTRUCTION
BUS 112 Multi-Cultural Issues in the American Workplace ..... 5
Following can be substituted: US Cultures course ..... 5
-OR- Global Studies course ..... 5
EET 109 Mathematical Applications for Circuit Analysis . 5Following can be substituted: Higher MATH course-OR- MATH\&141 Pre-Calculus 5
ENGL\& 101 English Composition I ..... 5
While students must test into ENGL 097 to startthe degree, they must complete ENGL\& 101 to finish.
RELATED INSTRUCTION - HUMAN RELATIONS ELECTIVES
Choose from one of the following:
BUS 236 Interpersonal Communications forthe Workplace (the preferred course) . . . . . . . 5
HUM 105 Intercultural Communication ..... 5
ISP 101 the Global Society ..... 5
RELATED INSTRUCTION - TECHNICAL ELECTIVES
Any non-required course(s) from the following departments -EEL, EET, HVC, CSC, CHEM, ENGR or course listed below:See Advising Center for assistance.
BUS 210 Business and Economic Statistics ..... 5
BUS 229 Project Management Tools Techniques and Control ..... 5
IT 111 Internet and Web Authoring Using XHTML ..... 5
Following can be substituted: Higher IT course
MATH 116 Applications of Math to Management,Life, and Social Sciences.5
Following can be substituted: Higher MATH course
TOTAL PROGRAM CREDITS ..... 108-111

## Avionics Technician Short-Term 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 avionics technician in aerospace-related technologies. This program is intended as a supplement for aviation maintenance technicians.
Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.
Many classes have prerequisites. Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior coursework. Coursework earned at other institutions must be unofficially evaluated or approved by a program advisor before registering.

## PREREQUISITES

Successful completion of South Seattle College's AMT 112 Basic Electricity for Aviation
-OR- Approved equivalent
-OR- FAA Airframe license

## TECHNICAL SPECIALTY COURSES

EET 107 Introduction to Aviation Electronics. . . . . . . . . 5
EET 108 Introduction to Fiber Optics . . . . . . . . . . . . . . . 5
EET 137 Introduction to Robotics . . . . . . . . . . . . . . . . 5
Following can be substituted:
EET 170 Digital Electronics \& PLCs I . . . . . . . . . . . . 5
TOTAL PROGRAM CREDITS 15

## 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.5
-OR- Equivalent computer experience
ENGL 097 Integrated Reading and Writing I ..... 10
Following can be substituted: Higher ENGL course-OR- ENGL 098 College Prep Writing IV5
MATH 084 Algebra I ..... 5
Following can be substituted: Higher MATH course -OR- Have taken an equivalent or higher MATH course
TECHNICAL SPECIALTY COURSES
EEL 201 Energy Generation Conversion and Sustainability ..... 5
EEL 202 Industrial Motor Controls and Drives. ..... 5
EEL 203 Programmable Logic Controllers ..... 5
EET 105 Introduction to Technology. .....  2
EET 112 Fundamentals of Fluid Power \& Alternative Energy ..... 5
EET 114 Applied Physics ..... 5
EET 137 Introduction to Robotics ..... 5
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 Devices ..... 5
EET 170 Digital Electronics \& PLCs I ..... 5
RELATED INSTRUCTION
BUS 236 Interpersonal Communications for the Workplace ..... 5
Following can be substituted:HUM 105 Intercultural Communication5
-OR- ISP 101 The Global Society ..... 5
-OR- ISP 110 Introduction to Global Studies ..... 5
-OR- POLS 112 Contemporary World. ..... 5
-OR- SOC\&101 Introduction to Sociology ..... 5
EET 109 Mathematical Applications for Circuit Analysis ..... 5
Following can be substituted: Higher MATH course
5
MATH\&141 Precalculus
ENGL\&101 English Composition I ..... 5
ENGL\&230 Technical Writing. ..... 3
Following can be substituted: ENGL\& 235 Technical Writing ..... 571-73

## Engineering Graphics \& Design Technology

## Business, Engineering \& Information Technologies Division

This program prepares students for the growing number of entry-level jobs in engineering, construction, and architectural firms. Our laboratory is equipped with industry-standard Computer-Aided Design (CAD) and Building Information Modeling (BIM) systems to provide state-of-the-art graphics training. Coursework includes instruction and hands-on training in: computer and conventional drafting, construction materials and processes, basic engineering mechanics, and architectural cost estimating.
Engineering Graphics \& Design TechnologyAssociate of Applied Science Degree (A.A.S.)
TECHNICAL SPECIALTY COURSES
TDR 100 Basic BIM for Design and Construction ..... 5
TDR 101 Intermediate BIM for Design andConstruction5
TDR 102 Advanced BIM for Design and Construction ..... 5
TDR 109 Architectural Engineering Lab ..... 5
1 Credits - Total of 5 credits requiredRepeated each quarter until total of 5 creditsis achieved
TDR 111 Basic CAD Drafting for Constructionand Design5
TDR 112 Intermediate CAD Drafting/Construction and Design ..... 5
TDR 113 Basic Drafting ..... 5
TDR 124 Materials and Methods of Construction ..... 5
TDR 134 Systems in Buildings ..... 5
TDR 144 Design and Construction Environment ..... 5
TDR 160 Applied Mechanics I ..... 5
TDR 161 Applied Mechanics II ..... 5
TDR 269 Construction Estimating ..... 5
RELATED INSTRUCTION
BUS 169 Using Computers in Business ..... 5
Following can be substituted:
CSC 111 - Computers for Math and Science ..... 5
BUS 236 Interpersonal Communications for the Workplace ..... 5
EET 109 Mathematical Applications for Circuit Analysis ..... 5
Following can be substituted:
MATH\& 141 - Pre-Calculus I. ..... 5
ENGL\& 101 English Composition I ..... 5
ENGL\& 235 Technical Writing ..... 5
U.S. Cultures 5
Following can be substituted:
Global Studies course ..... 5
TOTAL PROGRAM CREDITS ..... 95
Engineering Graphics \& Design Technology Certificate PREREQUISITESPlacement into ENGL 097 / ENGL 098 or higher,Placement into MATH 084 or higherCompletion of BUS 169 or IT 101.
TECHNICAL SPECIALTY COURSES
TDR 111 Basic CAD Drafting for Construction and Design ..... 5
TDR 112 Intermediate CAD Drafting/Construction and Design ..... 5
TDR 113 Basic Drafting ..... 5
TDR 124 Materials and Methods of Construction ..... 5
TDR 134 Systems in Buildings ..... 5
TDR 144 Design and Construction Environment ..... 5
TDR 176 Advanced AutoCAD for Arch \& EngineeringDrafting4

## RELATED INSTRUCTION

BUS 236 Interpersonal Communications for the Workplace ..... 5
EET 109 Mathematical Applications for Circuit Analysis .....  5
Following can be substituted ..... 5
-OR- higher level math course
ENGL\& 101 English Composition I ..... 5
TOTAL PROGRAM CREDITS ..... 49

## 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.
TDR 200 Introduction to SolidWorks. . . . . . . . . . . . . . . . 5
TDR 201 Introduction to CATIA. . . . . . . . . . . . . . . . . . . . 5
TDR 202 Intermediate CATIA . . . . . . . . . . . . . . . . . . . . . 5
TOTAL PROGRAM 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.

## TECHNICAL SPECIALTY COURSES

TDR 100 Basic BIM for Design and Construction . . . . . . 5
TDR 101 Intermediate BIM for Design and Construction .5

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

## 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 PROGRAM 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).
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 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 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. ..... 5
ART 111 Drawing ..... 5
ART 210 Digital Art. ..... 5
ART 2XX Art History ..... 5
Choose from ART 251, 252, 253, 255, or 257)
ART 290 The Art Business ..... 5
ART XXX Approved 2-D Elective ..... 5
ART XXX Approved 3-D Elective ..... 5
GENERAL EDUCATION COURSES
Computation Course credits ..... 5
Choose from MATH 107 (or above),
BUS 116 (or other applicable business course)
-OR- ACCT 110 (or above).
ENGL\&101 English Composition I
TOTAL PROGRAM CREDITS 45 MINIMUM + PORTFOLIO

## Health Care

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. The students will assess and manage a wide range of emergency situations including trauma, medical, cardiac, geriatric, pediatric, behavioral, etc. The students will learn and apply effective and appropriate communication skills and the principles of medical ethics, including professionalism and confidentiality, in interacting with patients, physicians, staff, and other healthcare professionals.

## 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.
- 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, a OIA and GSA screen.
- Provide copies of required immunizations:

1. Hepatitis B series or positive titer
2. A two-step tuberculin skin test or alternative health documentation
3. MMR vaccination or titer
4. Flu vaccination
5. Varicella vaccination or titer

If other immunizations are needed, they will be identified by the EDT program coordinator.

- 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

EDT 101 Emergency Department Technician | Fundamentals . . . . . . . . . . . . . . . . . . . . 4 |
| ---: | :--- |

EDT 102 Emergency Department Tech Phlebotomy
$\qquad$
EDT 103 Emergency Department Technician Lab Skills . . 4
EDT 104 Emergency Department Tech Advanced Phlebotomy . . . . . . . . . . . . . . . . . . . . . . . . . 3
EDT 105 Emergency Department Technician Skills II 4
EDT 106 Emergency Department Technician Practicum .3

## TOTAL PROGRAM CREDITS <br> 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.

## PREREQUISITES

- 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 PROGRAM CREDITS

## Healthcare Technology Management / BioMedical Equipment Technology Associate of Applied Science (A.A.S.)

The Healthcare Technology Management/BioMedical Technology (HTM/BMET) degree program provides opportunities for students interested in the operation, maintenance and repair of medical equipment and related IT systems. Knowledge of medical equipment technology increases the marketable skills and areas of knowledge for students that are studying in the field of electronics, and opens up more employment possibilities in the fields of health care and medical device manufacturing.
Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

## PREREQUISITES

For placement testing, contact Testing Center, (206) 527-3674. To begin program, students must test into the English and Math courses listed below:
ENGL 098 Integrated Reading and Writing II . . . . . . . . . . . 10 Following can be substituted: Higher ENGL course
MATH 084 Algebra I
Following can be substituted: Higher MATH course -OR- Have taken equivalent or higher MATH course

## TECHNICAL SPECIALTY COURSES

AMA 117 Medical Terminology . . . . . . . . . . . . . . . . . . . . 5
CHEM\&110 Chemical Concepts W-Lab . . . . . . . . . . . . . . . . 5 Following can be substituted: CHEM\& 121 - Intro to Chemistry . . . . . . . . . . . . . . . 5
EET 105 Introduction to Technology . . . . . . . . . . . . . . . . 2
EET 106 Introduction to Soldering . . . . . . . . . . . . . . . . . 1
EET 112 Fundamentals of Fluid Power \& Alternative Energy5
EET 114 Applied Physics ..... 5
EET 131 IT Essentials I-A+Certification ..... 5
EET 132 IT Essentials A+ Certification Advanced ..... 5
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 Devices. ..... 5
EET 170 Digital Electronics \& PIcs I. ..... 5
EET 286 Biomedical Equipment I. ..... 5
EET 287 Biomedical Equipment II ..... 5
EET 297 Biomedical Technician Externship. ..... 4
CWE 101 Portfolio Job Search Int, is a prerequisitefor EET 297

## RELATED INSTRUCTION

BUS $112 \begin{aligned} & \text { Multicultural Issues in the American } \\ & \\ & \text { Workplace . . . . . . . . . . . . . . . . . . . . . . . } 5\end{aligned}$
Following can be substituted:
Global Studies or U.S. Cultures designated course . . 5
BUS 118 Project Management Introduction and Overview
EET 109 Mathematical Applications for Circuit Analysis . . 5 Following can be substituted: Higher MATH course -OR- MATH\&141 Pre-Calculus . . . . . . . . . . . . . . . . . 5
ENGL\& 101 English Composition I . . . . . . . . . . . . . . . . . . . . 5
Human Relations course . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
Preferred class is BUS 236 - Interpersonal
Communication . . . . . . . . . . . . . . . . . . . . . . . . . . 5
-OR- choose from one of the following 5-credit courses
ISP 101 - the Global Society
ISP 105 - Intercultural Communication
POLS 112 - Contemporary World
SOC\& 101 - Intro to Sociology
TOTAL PROGRAM CREDITS
97

## Industrial Automation and Electronic Controls

Math/Science Division

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

## PREREQUISITES

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.
BUS 169 Using Computers in Business . . . . . . . . . . . . 5 Following can be substituted: Equivalent computer experience
ENGL 098 Integrated Reading and Writing II . . . . . . . . . 10 Following can be substituted: Higher ENGL course -OR- Successful completion of ABE 050
MATH 084 Algebra I . 5 Following can be substituted: Successful completion of ABE 031 or equivalent course

## TECHNICAL SPECIALTY COURSES

EET 106 Introduction to Soldering . . . . . . . . . . . . . . . . . 1
EET $112 \begin{aligned} & \text { Fundamentals of Fluid Power } \\ & \\ & \\ & \end{aligned}$ \& Alternative Energy . . . . . . . . . . . . . . . . 5 Following can be substituted: Shoreline Community College course: MFGT 247 Motive Maintenance
EET 131 IT Essentials I - A+ Certification ..... 5
EET 137 Introduction to Robotics ..... 5
EET 138 Industrial Robotics ..... 5
Following can be substituted: Shoreline CommunityCollege course: MFGT 280 Robot Certification
EET 160 Introduction to Electricity and Electronics ..... 5
EET 161 D.C. Principles of Electronics ..... 5
EET 201 Energy Generation, Conversion, and Sustainability. ..... 5
EET 202 Industrial Motor Controls and Drives. ..... 5
EET 203 Programmable Logic Controllers. ..... 5
RELATED INSTRUCTIONBUS 236 Interpersonal Communicationsfor the Workplace5
Following can be substituted: Shoreline CommunityCollege courses: BUS 104 Human Relations in Business
-OR- BUS 105 Essentials of Human Relations . . . . . . 2
-OR- Approved Human Relations elective ..... 5
Total credits can be from 2 to 5 based on courseoption selected.
109 Mathematical Applicationsfor Circuit Analysis5
Following can be substituted:
MATH\&141 Pre-Calculus I ..... 5
-OR- Higher level MATH course
ENGL\&101 English Composition I ..... 5
Following can be substituted:
ENGL\&235 Technical Writing5
-OR- 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:
BUS 169 Using Computers in Business . . . . . . . . . . . . 5
Following can be substituted:
equivalent computer experience
ENGL 097 Integrated Reading and Writing I . . . . . . . . . . . 10
-OR- ENGL 098 College Prep Writing IV . . . . . . . . . . . 5
-OR- Higher ENGL course
MATH 084 Algebra I5
-OR- Higher MATH course
-OR- Have taken an equivalent or higher MATH course

## TECHNICAL SPECIALTY COURSES

$\begin{array}{cc}\text { EEL } 201 \text { Energy Generation, Conversion and } \\ & \text { Sustainability . . . . . . . . . . . . . . . . . . . . . } 5\end{array}$
EEL 202 Industrial Motor Controls and Drives. . . . . . . . . 5
EEL 203 Programmable Logic Controllers. . . . . . . . . . . . 5
EET 105 Introduction to Technology . . . . . . . . . . . . . . . . 2
EET 106 Introduction to Soldering . . . . . . . . . . . . . . . . . 1
EET 108 Introduction to Fiber Optics . . . . . . . . . . . . . . . 5
EET 112 Fundamentals of Fluid Power
\& Alternative Energy . . . . . . . . . . . . . . . . . . . 5
EET 114 Applied Physics . . . . . . . . . . . . . . . . . . . . . . . 5
EET 131 IT Essentials I-A+Certification . . . . . . . . . . . 5
EET 132 IT Essentials A+Certification Advanced . . . . . 5
EET 137 Introduction to Robotics . . . . . . . . . . . . . . . . . 5
EET 138 Industrial Robotics . . . . . . . . . . . . . . . . . . . . . 5
EET 161 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 Devices. . . . . . . . . . . . . . . 5
EET 170 Digital Electronics \& PLCs I . . . . . . . . . . . . . . . 5
EET 219 Metrology and Measurement Science . . . . . . . 3

## RELATED INSTRUCTION

BUS 112 Multicultural Issues in the American Workplace . . 5 Following can be substituted: Global Studies or U.S. Cultures designated course . . 5 See Advising Center for approved list.
BUS 236 Interpersonal Communications for the Workplace .5

## Following can be substituted:

HUM 105, ISP 101 , ISP 110, POLS 112, SOC\&101
EET 109 Mathematical Applications for Circuit Analysis . . 5 Following can be substituted: higher MATH course -OR- MATH 141 Pre-Calculus5
ENGL\&101 English Composition I ..... 5
While students must test into ENGL 097 to start the degree, they must complete ENGL\& 101 to finish.
IT 122 Network OS 1-Windows Client OS . . . . . . . . 10 Following can be substituted: Higher IT course
TOTAL PROGRAM CREDITS

## 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 131 IT Essentials I-A+Certification . . . . . . . . . . . 5
EET 137 Introduction to Robotics . . . . . . . . . . . . . . . . 5
EET 161 D.C. Principles of Electronics . . . . . . . . . . . . . 5
TECHNICAL SPECIALTY CREDITS 15
MICROSOFT TRACK
IT 122 Network OS 1 - Windows Client OS . . . . . . . . . 5
IT 124 Network OS 2 -Windows Server. . . . . . . . . . . . . . 5
UNIX TRACK
IT 135 Introduction to UNIX . . . . . . . . . . . . . . . . . . . 5
IT 138 UNIX for Network Administration . . . . . . . . . . 5
CISCO TRACK
IT 142 Network Management-CISCO I . . . . . . . . . . . 5
IT 144 Network Management-CISCO II. . . . . . . . . . . 5
IT 146 Network Management-CISCO III . . . . . . . . . . 5
RELATED INSTRUCTION
BUS 118 Project Management Introduction and Overview . 5
BUS 236 Interpersonal Communications for the Workplace5

TOTAL PROGRAM CREDITS 35-40

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

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.

## PREREQUISITES

Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.
For placement testing, contact Testing Center, (206) 527-3674.
To begin program, students must test into the English and Math courses listed below:

BUS 169 Using Computers in Business . . . . . . . . . . . . 5
ENGL\& 101 English Composition I . . . . . . . . . . . . . . . . . . 5
IT 101 Software Applications . . . . . . . . . . . . . . . . . . 5
MATH 084 Algebra I . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
MATH 097 Elementary Algebra. . . . . . . . . . . . . . . . . . . . 5

## TECHNICAL SPECIALTY COURSES

EET 131 IT Essentials I-A+Certification . . . . . . . . . . . 5
EET 132 IT Essentials A+ Certification Advanced . . . . . 5
EET 137 Introduction to Robotics . . . . . . . . . . . . . . . . 5
EET 161 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 Devices. . . . . . . . . . . . . . 5
IT 122 Network OS 1 - Windows Client OS . . . . . . . . . 5
IT 124 Network OS 2 - Windows Server . . . . . . . . . . . . . . . 5
IT 135 Introduction to UNIX . . . . . . . . . . . . . . . . . . . 5
IT 138 UNIX for Network Administration . . . . . . . . . . 5
IT 142 Network Management-CISCO I . . . . . . . . . . . 5
IT 144 Network Management-CISCO II. . . . . . . . . . . 5
IT 146 Network Management-CISCO III . . . . . . . . . . 5
RELATED INSTRUCTION - GENERAL EDUCATION
BUS $236 \begin{aligned} & \text { Interpersonal Communications for } \\ & \\ & \\ & \text { the Workplace . . . . . . . . . . . . . . . . . . . . . } 5\end{aligned}$
EET 109 Mathematical Applications for Circuit Analysis . . 5
ENGL\& 101 English Composition I . . . . . . . . . . . . . . . . . . 5
U.S. Cultures . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5

Following can be substituted: Global Studies . . . . . . 5
TOTAL PROGRAM CREDITS 90

## IT for Health Care <br> 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

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 Algebra ..... 5
TECHNICAL SPECIALTY COURSES
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 .....  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 Essentials I - A+ Certification ..... 5
IT 101 Software Applications ..... 5
Following can be substituted:
BUS 169 Using Computers in Business ..... 5
IT 102 Introduction to Programming ..... 5
RELATED INSTRUCTION
BUS 210 Business and Economic Statistics ..... 5
Following can be substituted
MATH\&146 Introduction to Statistics ..... 5
BUS 236 Interpersonal Communications for the Workplace ..... 5
ENGL\&101 English Composition I ..... 5
U.S. Cultures ..... 5
Following can be substituted: Global Studies ..... 5
TOTAL RELATED INSTRUCTION CREDITS ..... 20
ELECTIVESChoose one of the options groups below:
ELECTIVES - OPTION 1
AMA 170 AP/Terminology/Pathology 1 - Introduction ..... 2
AMA 171 AP/Terminology/Pathology 2 -Skin/Senses1
AMA 172 AP/Terminology/Pathology 3 - Digestive System ..... 1
AMA 173 AP/Terminology/Pathology 4 - Male/Urinary System ..... 1
AMA 174 AP/Terminology/Pathology 5 - Female Reproductive. .....  1
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 .....  1
AMA 178 AP/Terminology/Pathology 9 - Cardiovascular System ..... 1
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
ELECTIVES - OPTION 2
AHI 100 Introduction to Medical Vocabulary .....  3
BIOL\& 241 Human Anatomy and Physiology 1 ..... 5
BIOL\& 242 Human Anatomy and Physiology 2 ..... 5
ELECTIVES - 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 ELECTIVES CREDITS ..... 13
TOTAL PROGRAM CREDITS ..... 92

## Linux Network and Security Certificate

This program prepares students for careers in system administration, network administration, and information security. Students will gain experience managing and securing the Linux operation system. Students will also learn how Linux-based tools apply to network administration and security testing.

## PREREQUISITES

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 . . . . . . . . . . . . . . . . . . . . 5
IT 138 UNIX for Network Administration . . . . . . . . . . . 5
IT 150 IT Systems Security + . . . . . . . . . . . . . . . . . . . 5
IT 157 Ethical Hacking. . . . . . . . . . . . . . . . . . . . . . . . 5

## 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

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

EET 131 IT Essentials I-A+Certification . . . . . . . . . . . 5 Following can be substituted: CompTIA A-+ Certification for EET 131 \& EET 132

## TECHNICAL SPECIALTY COURSES

Other courses may be substituted for courses below with permission of program coordinator. See Advising for list of approved courses.

| IT | 102 | Introduction |  |
| :---: | :---: | :---: | :---: |
| IT | 122 | Network OS 1 |  |
| IT | 126 | Network OS 3 | 5 |
| IT | 135 | Introduction to |  |
|  | Follow | wing can be sub |  |
|  | IT 13 | UNIX for Netw |  |
|  | -OR-I | 140 Network |  |
| IT | 142 | Network Man |  |
| IT | 144 | Network Man |  |
| IT | 146 | Network Man |  |
| TOTAL PROGRAM CREDITS 40 |  |  |  |

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

This 2-year Associate of Applied Science degree program is focused on UNIX/Linux, Microsoft, and Cisco operating system configuration, management, and security. The curriculum includes information security concepts and best-practices, and industry certification (CompTIA, Microsoft, Cisco, etc.) preparation.
NOTE: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

## PREREQUISITES

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

## TECHNICAL SPECIALTY COURSES

EET 131 IT Essentials I-A+Certification . . . . . . . . . . . 5

EET 132 IT Essentials A+Certification Advanced . . . . . 5
IT 102 Introduction to Programming . . . . . . . . . . . . . 5
IT 122 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 135 Introduction to Linux ..... 5
IT 138 Linux for Network Administration ..... 5
IT 142 Network Management-CISCO I ..... 5
IT
144 Network Management - CISCO II ..... 5
IT 146 Network Management - CISCO III ..... 5
IT 150 IT Systems Security + ..... 5
GENERAL EDUCATION COURSES
BUS 236 Interpersonal Communications for the Workplace ..... 5
EET 109 Mathematical Applications for Circuit Analysis ..... 5
ENGL\& 101 English Composition I ..... 5
U.S. Cultures ..... 5
Following can be substituted: Global Studies course
Contact the division office for a list of approved courses.
ELECTIVES
Technical Electives ..... 10
TOTAL PROGRAM CREDITS ..... 90

## Programming and IT Network Support <br> 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 131 IT Essentials I-A+Certification . . . . . . . . . . . 5
ENGL\& 101 English Composition I . . . . . . . . . . . . . . . . . . . 5 Placement into ENGL\&101
MATH 098 Intermediate Algebra .5

## TECHNICAL SPECIALTY COURSES

CSC 110 Introduction to Computer Programming. . . . . . 5
CSC 111 Computers for Math and Science . . . . . . . . . . 5 Following can be substituted: BUS 169 Using Computers in Business I . . . . . . . . . 5
CSC 142 Computer Programming I. . . . . . . . . . . . . . . . . 5
IT 102 Introduction to Programming . . . . . . . . . . . . . . 5
Following can be substituted:
CSC 143 Computer Programming II . . . . . . . . . . . . . 5
-OR- IT 146 Network Management CISCO III . . . . . . . 5
Technical Elective course - can select one of the three courses listed above:
111 Internet and Web Authoring Using XHTML ..... 5
120 Network Essentials - Comptia Network + ..... 5
125 Using Structured Query Language and SQL Server ..... 5

## RELATED INSTRUCTION

ENGL\& 101 English Composition I . . . . . . . . . . . . . . . . . . . 5
HUM 105 Intercultural Communication ............... . . 5
Following can be substituted:
SOC 101 Intro to Sociology . . . . . . . . . . . . . . . . . . . . 5
MATH\& 141 Precalculus I . . . . . . . . . . . . . . . . . . . . . . . . 5
Higher-level MATH course can be substituted
MATH\& 146 Introduction to Statistics . . . . . . . . . . . . . . . . . 5
U.S. Cultures . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5

Global Studies course can be substituted
Select course from list of approved courses. See Advising for assistance.
Natural World - Lab Science
Select course from list of approved Natural World Lab Science courses. See Advising for assistance.

## TECHNICAL ELECTIVES

Select one of the following 20 -credit elective tracks:

- CISCO
- Linux Networking \& Security
- Windows


## TECHNICAL ELECTIVES - CISCO

IT 142 Network Management - CISCO I. . . . . . . . . . . . 5
IT 144 Network Management - CISCO II . . . . . . . . . . . 5
IT 146 Network Management - CISCO III. . . . . . . . . . . 5
Technical Specialty Elective . . . . . . . . . . . . . . . . . . . . . . . . 5
TECHNICAL ELECTIVES - WINDOWS
IT 122 Network OS 1 - Windows Client OS . . . . . . . . 5
IT 124 Network OS 2-Windows Server ........... . 5
IT 126 Network OS 3-Windows Network Infrastructure5
IT 128 Network OS 4 - Windows Active Directory . . . . 5
TECHNICAL ELECTIVES - LINUX NETWORKING \& SECURITY
IT 138 UNIX for Network Administration ..... 5
IT 150 IT Systems Security + . . . . . . . . . . . . . . . . . . . 5
IT 157 Ethical Hacking. ..... 5
Technical Specialty Elective ..... 5
TOTAL PROGRAM CREDITS ..... 91

## Web Application Technologies Certificate

Web Technologies includes four 100-level courses enabling students to build and support simple web-based applications. Students completing this certificate will qualify for positions in web application support, quality assurance, usability testing, and help desk.
This certificate is the first in a series of stackable certificates leading to more advanced application development degrees at the associate and the baccalaureate levels.

## TECHNICAL SPECIALTY COURSES

IT 102 Introduction to Programming . . . . . . . . . . . . . 5
IT 111 Internet and Web Authoring Using XHTML . . . . 5
IT 120 Network Essentials - Comptia Network + . . . . 5
IT 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 Internship . . . . . . . . . . . . . . . . . . . . . . . . . . 3
IBN 203 International Trade: Export . . . . . . . . . . . . . . . 3
IBN 205 International Trade: Import . . . . . . . . . . . . . . . 3
IBN 225 Global Logistics . . . . . . . . . . . . . . . . . . . . . . . 3
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.


#### Abstract

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 <br> REQUIRED COURSES - JEWELRY DESIGN

ART 281 Jewelry Design I. . . . . . . . . . . . . . . . . . . . . . . . 5
ART 282 Jewelry Design II. . . . . . . . . . . . . . . . . . . . . . . 5
ART 283 Introduction to Alloying and Jewelry Casting. . . 5
ART 284 Bench Techniques and Practices . . . . . . . . . . 5
ART 285 Metal Techniques for Small Scale Sculpture . . 5
REQUIRED COURSES - ART
ART 101 Design. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
ART 111 Drawing...................................... 5
ART 210 Digital \& Graphic Art - Photoshop + Illustrator . 5
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 $\qquad$ Met by 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
Following can be substituted: Equivalent computer experience
ENGL 098 Integrated Reading and Writing II ..... 10 Following can be substituted: Higher-level ENGL course or Successful completion of ABE 050 ..... 5
Following can be substituted: Higher-level MATH class
-OR- Successful completion of ABE 031 or equivalent
TECHNICAL SPECIALTY COURSES
EET 106 Introduction to Soldering .....  1
EET 112 Fundamentals of Fluid Power
\& Alternative Energy ..... 5
Following can be substituted:
Shoreline Community College course:MFGT 247 Motive Maintenance.5
EET 131 IT Essentials I-A+Certification. ..... 5
EET 137 Introduction to Robotics ..... 5
EET 138 Industrial Robotics ..... 5
Following can be substituted:
Shoreline Community College course:MFGT 280 Robot Certification .5
EET 160 Introduction to Electricity and Electronics ..... 5
EET 161 D.C. Principles of Electronics ..... 5
EET 201 Energy Generation, Conversion, andSustainability . 5
EET 202 Industrial Motor Controls and Drives. ..... 5
EET 203 Programmable Logic Controllers. ..... 5
EET 291 Electronics Externship. ..... 4
Following can be substituted:
Shoreline Community College course:MFGT 196 Advanced Manufacturing InternshipNorth Seattle College courses:
Choose two of the following courses:5
-OR- EET 170 Digital Electronics \& PLCs I ..... 5
-OR- EET 162 A.C. Principals of Electronics . ..... 5
-OR- EET 114 Applied Physics ..... 5
The internship/externship requirement (EET 291
or MFGT 196) is the preferred selection for thisdegree. Total credits can be from 4 to 10 basedon course option selected.
MFGT 105 Basic Manufacturing ..... 20
Can be taken at Shoreline Community College.
MFGT 244 Preventive Maintenance .....  3
Can be taken at Shoreline Community College.
MFGT 245 10-Hour OSHA .....  1
Can be taken at Shoreline Community College.MFGT 246 Mechanical Maintenance.5Can be taken at Shoreline Community College.

## RELATED INSTRUCTION

BUS 112 Multicultural Issues in the American $\begin{aligned} & \text { Workplace . . . . . . . . . . . . . . . . . . . . . } 5\end{aligned}$
Following can be substituted:
Shoreline Community College course:
MCS 105 Intro to Multiculturalism Studies
-OR- Approved U.S. Cultures/Global Studies elective
BUS 236 Interpersonal Communications for the Workplace .5
Following can be substituted:
Shoreline Community College course:
BUS 104 Human Relations in Business
OR- BUS 105 Essentials of Human Relations
OR- Approved Human Relations elective
Total credits can be from 2 to 5 based on course option selected.
EET 109 Mathematical Applications for Circuit Analysis . 5 Following can be substituted: Higher-level MATH class
-OR- MATH\&141 Pre-Calculus . . . . . . . . . . . . . . . . . 5
ENGL\&101 English Composition I . . . . . . . . . . . . . . . . . . . 5
Following can be substituted:
ENGL\&235 Technical Writing. . . . . . . . . . . . . . . . . . 5
-OR- Shoreline Community College course: BTWERT
215 Composition, Business Communications. . . . . . 5

## Medical Assisting

## Health \& Human Services 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 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 fall or spring quarters.
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 \$50 application fee, and an immunization registry that is online.
To complete the program, a 2.4 grade or higher is required in all Medical Assisting (CMA) courses and a 2.0 GPA or higher is required in all other courses.

## Medical Assisting Certificate

## PREREQUISITES



## TECHNICAL SPECIALTY COURSES

CMA 101 Introduction to Medical Assisting . . . . . . . . . . 5
CMA 102 Fundamentals of Administrative Medical Assisting .4
CMA 103 Fundamentals of Clinical Medical Assisting. . . 8
CMA 104 Billing and Coding Procedures . . . . . . . . . . . . 5
CMA 105 Phlebotomy and Laboratory Procedures . . . . . 8
CMA 106 Administrative and Clinical Practice/Review Lab. . 7
CMA 107 Medication Administration \& Pharmacology. . . 8
CMA 108 Medical Assisting Practicum (Externship) . . . 12
TOTAL PROGRAM CREDITS 57

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

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.-T 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.
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 $\$ 50$ application fee, and an immunization registry that is online.
Prerequisites: Many classes have prerequisites. Prerequisitesare those classes that prove eligibility for entry-level classesby testing or by having satisfied prior coursework. Course-work earned at other institutions must be unofficially evaluatedor 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 2.4 GPA or higher is required in all CMA courses and prerequisites, and a 2.0 GPA or higher is required in all general education courses.

## PREREQUISITES

AMA 117 Medical Terminology . . . . . . . . . . . . . . . . . . . . 5
TECHNICAL SPECIALTY COURSES
CMA 101 Introduction to Medical Assisting . . . . . . . . . . 5
CMA 102 Fundamentals of Administrative Medical
$\qquad$
CMA 103 Fundamentals of Clinical Medical Assisting. . . 8
CMA 104 Billing and Coding Procedures . . . . . . . . . . . . 5
CMA 105 Phlebotomy and Laboratory Procedures . . . . . 8
CMA 106 Administrative and Clinical Practice/Review Lab. . 7
CMA 107 Medication Administration \& Pharmacology. . . 8
CMA 108 Medical Assisting Practicum (Externship) . . . 12
TOTAL TECHNICAL SPECIALTY CREDITS 57
GENERAL EDUCATION/RELATED INSTRUCTION
Human Relations. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
Choose one of the following: BUS 236 preferred, HUM 105,SOC\&101or other HR designated course. HUM 105 is required for transfer to BAS in Allied Health at Seattle Central.
US Cultures/Global Studies Elective
Five credits selected from a list of approved
U.S. Cultures or Global Studies courses.
Qualitative and Symbolic Reasoning .5
Five credits selected from a list of approved Qualitative and Symbolic Reasoning courses.
Math\& 146 is recommended and is required for transfer to BAS in Allied Health at Seattle Central and must be taken within 5 years of applying.
Communication $\qquad$
Five credits selected from a list of approved Communications courses. English 101 required for transfer to BAS in Allied Health at Seattle Central.
Natural World .5
Five credits selected from a list of approved Natural World courses. Nutrition or Chemistry recommended. Biology or Chemistry are required for the BAS in Allied Health at Seattle Central. Check their course requirements if transferring.

Electives. .5
Any electives to total 90 needed credits for a degree. (Prerequisites may count as electives.) The BAS in Allied Health at Seattle Central has required courses that should be used as electives. ENGL\& 102, Humanities (VLPA) course*, Natural Science (NW) course, Social science (ICS) courses. Check their course requirements if transferring.
DEGREE TOTAL CREDITS 90

Note: No more than 15 credits of studio/performance VLPA credits will count toward the BASdegree.

## 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.
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.
Applicant should have oral English skills sufficient to communicate accurately with others in the medical field.
AHE 103 Math for Health Careers ..... 3
BUS 169 Using Computers in Business ..... 5
Following can be substituted:
IT 101 Software Applications. .....  5
ENGL\&101 English Composition I .....  5
Following can be substituted: .....  3
-OR- AHE 100 Critical Thinking andCommunications for Healthcare5
TECHNICAL 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 ..... 2
AMA 103 Ethical Concepts .....  1
AMA 104 Office Emergencies .....  2
AMA 106 Patient History-Documentation and Physical Exam .....  1
AMA 112 Credentials and Employment .....  1
AMA 114 Basic Psychology Principles. ..... 1
AMA 115 HIV/AIDS. ..... 1
AMA 120 Front Office Basics ..... 4
AMA 121 Patient Scheduling .....  1
AMA 122 Medical Records and Correspondence .....  1
AMA 123 Daily Financial Management .....  1

AMA 125 Introduction to Medical Insurance and Coding . . 5
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 $174 \begin{aligned} & \text { AP/Terminology/Pathology } 5 \text { - Female } \\ & \\ & \\ & \text { Reproductive . . . . . . . . . . . . . . . . . . . . . . } 1\end{aligned}$
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 $\qquad$
AMA 178 AP/Terminology/Pathology 9-Cardiovascular System $\qquad$
AMA 179 AP/Terminology/Pathology 10-Respiratory System1
AMA 180 AP/Terminology/Pathology 11-Blood/ Lymph System .....  1
AMA 181 AP/Terminology/Pathology 12-Specialties... 1
AMA 226 Medical Insurance Coding 1 ..... 1
AMA 227 Medical Insurance Billing ..... 2
AMA 230 Medical Office Management ..... 3
AMA 246 Patient Prioritizing and Instruction .....  1
RELATED INSTRUCTION

BUS 236 Interpersonal Communications for the Workplace5A non-modular (not self-study) course requiredfor the program.

TOTAL PROGRAM CREDITS 41
If an internship is desired, CWE 110 Internship can be taken through the college. See program director.

## Parent Education

## Workforce Instruction Division

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

## Pharmacy Technician

## Health \& Human Services Division

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

## Pharmacy Technician Certificate

## PREREQUISITES

- College transcript showing successful completion of ENGL 098 with final placement into ENGL\& 101 or placement into ENGL\& 101 within last two years of application date
- College transcript showing successful completion of MATH 097 Elementary Algebra or equivalent or placement into MATH 098 Intermediate Algebra within one year of application date
- Higher level ENGL or MATH classes must be taken within the last five years of application date.
- High School Diploma or GED
- Must be 18 years of age
- Additional Information/Requirements:
- National Background Check
- Immunizations are required to be placed into externship
- HIV/AIDS education minimum of 4 hours per WA State Pharmacy Quality Assurance Commission requirements
- Active WA State Pharmacy Assistant License/Registration

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

## TECHNICAL SPECIALTY COURSES

AMA 117 Medical Terminology . . . . . . . . . . . . . . . . . . . 5
PHA 115 Orientation to Pharmacy Practice . . . . . . . . . . . 3
PHA 120 Pharmacy Calculations . . . . . . . . . . . . . . . . . . 3
PHA 130 Over the Counter Drugs . . . . . . . . . . . . . . . . . . . 2
PHA 140 Sterile Products and Aseptic Technique I. . . . . 3
PHA 141 Sterile Products and Aseptic Technique II . . . . 3
PHA 146 Communications in Pharmacy Practice . . . . . . 2
PHA 150 Pharmacologyl............................. . . . 3
PHA 151 Pharmacology II . . . . . . . . . . . . . . . . . . . . . . 2
PHA 160 Pharmacy Technology I . . . . . . . . . . . . . . . . . . 3
PHA 161 Pharmacy Technology II . . . . . . . . . . . . . . . . . . 3
PHA 170 Pharmacy Records Management . . . . . . . . . . 5
PHA 180 Healthcare Systems, Insurance and Billing . . . 2
PHA 185 Pharmacy Law and Ethics . . . . . . . . . . . . . . . 3
PHA 190 Pharmacy Technician Externship. . . . . . . . . . . 13
PHA 191 Job Skills and National Exam Preparation . . . . 1
TOTAL PROGRAM CREDITS 49
TOTAL PROGRAM CREDITS (Excluding Prequisites) 56
Note: ** PHA 190: The Pharmacy Technician externship is usually split over a two-quarter time frame. A minimum of 13 credits, approximately 432 externship hours, must be completed satisfactorily for certification.

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

The Pharmacy Technician Associate of Applied Science degree provides a more liberalized education than the certificate. Many employers view the degree as a sign of increased competence and readiness for career or salary advancement. The program is approved by the Washington State Board of Pharmacy to train students to work in various pharmacy settings. Students learn basic pharmacy skills (reading prescriptions, order entry, IV medication prep, etc.). The program is accredited by the American Society of Health-System Pharmacists (ASHP).

## 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.

- College transcript showing successful completion of ENGL 097/098 with final placement into ENGL\&101or COMPASS placement into ENGL\& 101within la st two years of application date.
- College classes must be taken within the last five years of application date.
- High School Diploma or GED.
- Must be 18 years of age
- Additional Information/Requirements:
- National Background Check
- Immunizations are required to be placed into externship
- Active WA State Pharmacy Assistant License/Registration

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 2.0 grade or higher is required in all courses.

## TECHNICAL SPECIALTY COURSES

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

## GENERAL EDUCATION/RELATED INSTRUCTION

BUS 236 Interpersonal Communications in the Workplace5
Communication Elective. ..... 5From an approved list of coursesComputation Elective5
From an approved list of courses5From an approved list of coursesGeneral Electives16
Sixteen credits of 100 -level and above college courses
U.S. Culture or Global Studies Elective ..... 5
From an approved list of U.S. Culture/Global Studies elective coursesTOTAL PROGRAM CREDITS (Excluding Prequisites)90

## 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 PROGRAM CREDITS 12

## Real Estate

## Business, Engineering \& Information Technologies 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

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 100 Real Estate Fundamentals.
Recommend taken concurrently with
RES 125 Applications for Real Estate Math
RES 101 Technology for Real Estate ..... 5
Following can be substituted:
BUS 169 Using Computers in Business ..... 5
RES 106 Real Estate Fraud .....  1
RES 140 Real Estate Sales and Practice .....  3
RES 170 Real Estate Law .....  3
RES 217 Real Estate Development andSustainability3
TECHNICAL SPECIALTY COURSES
RES 110 Introduction to Commercial Real Estate .....  3
RES 125 Applications of Real Estate Math .....  2
RES 141 Land Use Principles and Practice .....  3
RES 175 Introduction to Title .....  3
RES 202 Multifamily Property Management .....  3
RES 203 Property Management - Commercial .....  3
RES 260 Real Estate Finance - Commercial . ..... 5
RES 290 Commercial Sales and Leasing .....  3
RES 290 Fulfills WA DOL requirement for first real estatelicense renewal.
RES 295 Commercial Real Estate Investment Analysis ..... 2
TOTAL PROGRAM 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 100 Real Estate Fundamentals. . . . . . . . . . . . . . . . 5
RES 101 Technology for Real Estate. . . . . . . . . . . . . . . . 5
Following can be substituted:
BUS 169 Using Computers in Business . . . . . . . . . . 5
RES 106 Real Estate Fraud . . . . . . . . . . . . . . . . . . . . . . 1
RES 130 Green Real Estate. . . . . . . . . . . . . . . . . . . . . . 3
RES 140 Real Estate Sales and Practice . . . . . . . . . . . 3
RES 170 Real Estate Law . . . . . . . . . . . . . . . . . . . . . . 3
TECHNICAL SPECIALTY COURSES
RES 125 Applications of Real Estate Math . . . . . . . . . . 2 Students may challenge RES 125 by passing the RES 125 test.
RES 150 Residential Sales and Leasing Documentation1.5
RES 164 Real Estate Finance Residential ..... 5
RES 210 Residential Property Investments ..... 3
Following can be substituted: RES 230 BusinessPractices of Brokerage Management
RES 235 Sales and Marketing. ..... 3
TECHNICAL SPECIALTY ELECTIVESChoose from any two of the following:
RES 142 Inspecting the Condition of Real Estate ..... 3
RES 175 Introduction to Title ..... 3
RES 180 Basic Appraisal Principles ..... 3
RES 190 Real Estate Escrow I ..... 3
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 130 Green Real Estate. . . . . . . . . . . . . . . . . . . . . . 3
RES 131 Green Building Materials . . . . . . . . . . . . . . . . 2
RES 132 Marketing, Education and Ethics in Sustainable Development 3

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 PROGRAM CREDITS

## 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 Fundamentals. ..... 5
(DOL pre-licensing educational requirement)
RES 101 Technology for Real Estate. ..... 5
Following can be substituted:RES 106 Real Estate Fraud 1
RES 130 Green Real Estate. ..... 3
Following can be substituted:
RES 217 Real Estate Development \& Sustainability . 3
RES 140 Real Estate Sales and Practice ..... 3
(DOL pre-licensing educational requirement)
RES 170 Real Estate Law3
(DOL continuing education clock hours)
TOTAL PROGRAM CREDITS18-21
For up to date information on Real Estate certificates, degreesand courses, visit northseattle.edu/real-estate.
Real Estate Associate of Applied Science (A.A.S.-T) Transfer Degree

The Real Estate associate in applied science (AAS-T) degree is built upon the technical skills and essential education for advanced real estate job preparation, but also includes college-level general education component common to all the AAS-T degrees. The Real Estate AAS-T Degree is designed as a transfer program for those interested in an applied baccalaureate degree in the Community College system and, in particular, for students interested in the BAS - International Business degree or the BAS - Property Management degree here at North Seattle College or programs offered at Evergreen State College or Western Governor's University.
Our program gives students a broad base of knowledge and training in the real estate field. Graduates will be prepared to enter the real estate field or start their own business in real estate sales, real estate finance, real estate investment, property management, title insurance, or escrow. As the students' progress toward their degree, they will also acquire the certificates offered in the program.
Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

## TECHNICAL SPECIALTY COURSES

ACCT\& 201 Principles of Accounting I. . . . . . . . . . . . . . . . . 5
ACCT\& 202 Principles of Accounting II . . . . . . . . . . . . . . . . 5
ACCT\& 203 Principles of Accounting III. . . . . . . . . . . . . . . . 5
BUS\& 201 Business Law. . . . . . . . . . . . . . . . . . . . . . . 5
RES 100 Real Estate Fundamentals. . . . . . . . . . . . . . . 5
DOL Pre-licensing educational requirement
RES 106 Real Estate Fraud. . . . . . . . . . . . . . . . . . . . . 1
RES 125 Applications of Real Estate Math . . . . . . . . . . 2
RES 130 Green Real Estate. . . . . . . . . . . . . . . . . . . . . 3
Following can be substituted:
RES 217 - Real Estate Development and Sustainability.
RES 140 Real Estate Sales and Practice ..... 3
DOL Pre-licensing educational requirement
RES 164 Real Estate Finance Residential ..... 5
Following can be substituted:
RES 260 - Real Estate Finance - Commercial ..... 5
RES 170 Real Estate Law ..... 3
DOL Continuing Education clock hours
RES 177 Real Estate Taxes. ..... 1.5
RES 197 Real Estate Taxes, Tittle, \& Escrow .....  3
RES 202 Multi-Family Property Management .....  3
Following can be substituted:RES 203 - Property Management - Commercials3
RES 220 Real Estate Economics ..... 3
RES 235 Sales and Marketing .....  3
Technical Electives ..... 5
See Advising for a list of approved and recommendedclasses
RELATED INSTRUCTION
ECON\& 201 Micro Economics ..... 5
ECON\& 202 Macro Economics ..... 5
ENGL\& 101 English Composition I ..... 5
Must be eligible for English 101 through English
Placement Exam or completion of English 097/098.
MATH 116 Applications of Math: Mngmnt, Life andSoc Sci5
Following can be substituted:MATH\& 141 - Precalculus I5
-OR-
any MATH class with MATH\&141 as a prerequisite
Natural World, the5
To transfer to an applied baccalaureate programa lab course in physical, biological, and/orearth science is required.
U.S. Cultures ..... 5
Following can be substituted: Global Studies ..... 5
Recommended courses
HUM 105 - Intercultural Communications ..... 5
CMST 205 - Multicultural Communications . ..... 5)
TOTAL PROGRAM CREDITS ..... 91
For up to date information on Real Estate certificates, degreesand 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.

## TECHNICAL SPECIALTY COURSES

RES 100 Real Estate Fundamentals. . . . . . . . . . . . . . . 5
RES 101 Technology for Real Estate. . . . . . . . . . . . . . . . 5
Following can be substituted:
BUS 169 Using Computers in Business I . . . . . . . . . 5
RES $120 \begin{aligned} & \text { Real Estate Principles of Maintenance } \\ & \text { and Repair . . . . . . . . . . . . . . . . . . . . . . } 1.5\end{aligned}$
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
Following can be substituted: 260 Real Estate Finance - Commercial . . . . . . . . . . 2
RES 202 Multifamily Property Management . . . . . . . . . 3
RES 203 Property Management - Commercial . . . . . . . 3
RES 204 Community Association Management. . . . . . . 3
TOTAL PROGRAM CREDITS
26.5

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

## Watch Technology Institute

## Workforce Instruction Division

The Watch Technology Institute (WTI) teaches watch making, watch repair, theory, and practical applications. Rolex Watch USA Inc. partnered with North to create a state-of-the-art facility for North's long-established watchmaking program, the only one on the West Coast. Faculty members have industry experience and are industry-certified trainers. After the successful completion of the program, students will qualify to take the American Watchmakers-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 TECHNICAL SPECIALTY COURSES

HIN 111 Introduction to Watch Technology . . . . . . . . . . 6
HIN 112 Watch Technology I: Tools, Equipment \& Measurement . .6
HIN 113 Watch Technology I: Practicum . . . . . . . . . . . 10
HIN 121 Watch Technology II: Professional Knowledge . 6
HIN 122 Watch Technology II: the Watchmakers Lathe. . 6


131 WIN $\begin{aligned} & \text { Watch Technology III: Winding and Setting } \\ & \\ & \text { Mechanism . . . . . . . . . . . . . . . . . . . . . . . } 6\end{aligned}$
HIN 132 Watch Technology III: Watch Gear Trains . . . . . 6
HIN 133 Watch Technology III: Practicum . . . . . . . . . . 10
HIN 141 Watch Technology IV: Escapements . . . . . . . . 4
142 Watch Technology IV: External Parts ........ . . . 4
HiN 143 Wach reg 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 . . . . . . . . . . . . . . . . 10
HIN 221 Watch Technology VI: Precision Timing 2 . . . . . 6
HIN 222 Watch Technology VI: Automatic Watches . . . . 6
HIN 223 Watch Technology VI: Practicum . . . . . . . . . . 10
231 Watch Technology VII: Advanced Precision Timing6

232 Watch Technology VII. Chronographs.

HIN 241 Watch Technology VIII: After-Sales Service. . . . 4
HIN 242 Watch Technology VIII: Review of Courses . . . . 4
243 Watch Technology Vir Practicum

## Watch Technology Institute <br> Associate of Applied Science (A.A.S.) <br> TECHNICAL SPECIALTY COURSES

HIN 111 Introduction to Watch Technology . . . . . . . . . . 6
HIN 112 Watch Technology I: Tools, Equipment \& Measurement6HIN 121 Watch Technology II: Professional Knowledge . 6
6HIN 123 Watch Technology II: PracticumMechanism6HIN 133 Watch Technology III: Practicum10
HIN 142 Watch Technology IV: External Part .4HiN 143 Warch Technology IV: Practicum.6HIN 212 Watch Tech V: Introduction to ElectronicWatches6
Watch Tech V: Practicum6
HIN 222 Watch Ti.
10HIN 231 Watch Technology VII: Advanced PrecisionTiming6
HIN 232 Watch Technology Vi: Chronograph10HIN 242 Watch Technology VIII: Review of Courses . . . . 4
HIN 243 Watch Technology VIII: Practicum ..... 8

## GENERAL EDUCATION COURSES

BUS $236 \begin{aligned} & \text { Interpersonal Communications for } \\ & \text { the Workplace . . . . . . . . . . . . . . . . . . . . } 5\end{aligned}$
Following can be substituted:
Other Approved Human Relations Course
ENGL\&101 English Composition I . . . . . . . . . . . . . . . . . . . 5
MATH\&107 Math in Society . . . . . . . . . . . . . . . . . . . . . . . 5
U.S. Cultures . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5

Following can be substituted: Global Studies courses
Select from approved list. See Advising Center.
GENERAL EDUCATION CREDITS 20
TOTAL PROGRAM CREDITS 184

## 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 chosen fields.

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

