



## NORTH SEATTLE COLLEGE

*One of the Seattle Colleges*

### Welcome

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

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

North Seattle College has three Bachelor of Applied Science (B.A.S.) degree programs in International Business, Information Technology: Application Development, and Early Childhood Education. 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 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 which have inspired a college-wide commitment to sustainability.

Come for a visit and learn how North changes lives.

### Vision

North Seattle College is a progressive educational resource, actively engaged with its community and known for innovation and responsiveness.



### Getting Started at North

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

### Mission

North Seattle College is committed to changing lives through education. We achieve our mission by offering comprehensive educational opportunities, creating a highly supportive learning environment, and engaging in effective and enduring partnerships.

### Core Themes

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

# Academic & Student Support Services

NORTH

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Student Services



## Facts at a Glance\*

### 2015–2016 ANNUAL PROFILES

Annual attendance 2015–2016 15,535

### Special Enrollments

Distance Education	4,189
Running Start	394
International Students	1,452
Worker Retraining	394

### FALL 2016 PROFILES

#### Students \*\*

Median age	30
Ethnic diversity	44%
Male/Female	39%/61%
With bachelor or higher degrees	31%
Employed	57%
full-time	31%
With dependents	29%
single parents	6%
Full-time/Part-time attendance	29%/71%

#### Programs

Academic Transfer	40%
Workforce Education	45%
Basic Skills	9%
Pre-college and Others	6%

#### 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](mailto:advisornorth@seattlecolleges.edu)  
[northseattle.edu/advising](http://northseattle.edu/advising)

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

## Career Services and Internships

### Career Services

(206) 934-6074 ■ [CareerServices@seattlecolleges.edu](mailto:CareerServices@seattlecolleges.edu)  
[northseattle.edu/career-services](http://northseattle.edu/career-services)

Career Services provides students with full-time and part-time job listings, job search training, labor market information, and assistance 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 Affiliate 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.

### Internships

(206) 934-3734  
[northseattle.edu/services/internships/](http://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 two-credit course designed to assist students in developing and applying for internships. Once an internship is secured, CWE 110 provides three credits for the internship.

## Class Schedule Quarterly

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

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

## Computer Labs

(206) 934-3630

[itservices.northseattle.edu/content/open-computer-lab](http://itservices.northseattle.edu/content/open-computer-lab)

Students at North have access to 70 computers in the Library and 50 more in the open computer lab in IB3303. In addition, all students with a North Seattle College NetID account can access the North wireless network from many areas on campus.

## Counseling

(206) 934-3676

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

Counseling offers North students individual appointments, classes, workshops, and online self-help to identify career interests and select programs of study and majors. Counseling can help students improve concentration, study skills, test taking, lower stress and crisis management and to find referral resources.

## Disability Services

(206) 934-3697 ■ Fax (206) 934-3958

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

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

The Disability Services office provides accommodations so qualified students with disabilities have an equal opportunity to participate at North. Accommodations include, but are not limited to, sign language interpreters, adaptive equipment and software, testing modifications, note taking, and books in alternative format. Students are encouraged to contact Disability Services as soon as possible in order to avoid delays in accommodations. This office also offers 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 non-traditional 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](mailto:international@seattlecolleges.edu)

FAX (206) 934-3794

[ip.northseattle.edu](http://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 non-resident 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 27 for more information.*

## Library Services, Student Media Center, and Teaching & Learning Center

(206) 934-3607

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

Library Services offers a wide range of books, eBooks, journals, magazines, DVDs, videos, CDs, digital cameras, and digital voice recorders for checkout or use in the library or classroom. Computer workstations provide access to the online library catalog, the Internet, databases, magazines, eJournals, journals, newspapers, encyclopedias, and more. Students have access to the collections of all Seattle Colleges and a national library collection database. Librarians can help students take full advantage of library resources. The librarians also offer for-credit classes in information literacy.

The Student Media Center (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.

North's Teaching and Learning Center (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.

## Opportunity Center for Employment & Education

(206) 934-6199

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

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

The Opportunity Center for Employment & Education (OCE&E) brings together multiple state agencies, community-based organizations and community colleges to help customers achieve self-sufficiency through education and employment.

The Center offers an enhanced experience 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 resources, and numerous other employment, education, and social services organizations—all conveniently located in one building at North Seattle College.

## Testing Center

(206) 934-3674

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

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

## Student Learning Center

(206) 934-4752

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

HSSR building next to the Grove Café

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

### *Important Areas in the Student Learning Center*

#### 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 (MSLC)

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

(206) 934-7309

<https://northseattle.edu/office-veterans-services>

The Office of Veterans Services at North Seattle College offers a range of assistance to veterans, reservists, active duty personnel, and eligible family members who receive Veterans Affairs education benefits.

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

We also offer certification services for anyone eligible for: Chapter 33 Post 9/11 GI Bill; Chapter 30 Montgomery GI Bill; Chapter 31 Vocational Rehabilitation; Chapter 35 Aid for Eligible Family Members and Chapter 1606/1607 Selective Reservists.

*See page 33 for financial aid information.*

## Gender Equity Center

(206) 934-3696

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

The Gender Equity Center connects current and prospective students to resources, referral, and information such as housing assistance, health care, childcare, 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 to clubs such as the Feminist Alliance, the LGBTQ Club, and Sexes and Scholars Book Club.

# Student Life

## WorkForce Education Programs

(206) 934-3787

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

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

### WorkFirst

(206) 934-3769

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

## Opportunity Grant (OG)

Opportunity Grant 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, IBEST Phlebotomy, IBEST Early Childhood Education, accounting, or HVAC (heating and cooling systems). 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.

## Basic Food Employment and Training

The Basic Food Employment & Training (BFET) program is available to individuals who receive basic food assistance from DSHS, meet program eligibility guidelines, and are not receiving TANF cash assistance. Students who participate in BFET are eligible to receive tuition assistance and other support services. Students can pursue a career training certificate or degree, English as a Second Language (ESL) classes, or a high school completion or high school equivalency certificate.

## Worker Retraining

Worker Retraining provides tuition assistance for students who are eligible for Unemployment Insurance (UI) benefits; have exhausted unemployment benefits within the past 48 months; veterans who has 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 within the past 48 months or self-employed, but are now unemployed due to economic changes in your community.

## Art Gallery

(206) 934-4557

[northseattle.edu/programs/art](http://northseattle.edu/programs/art)

The art gallery is a professional art gallery featuring artwork by regional artists working in a range of media. The gallery hangs six different exhibitions annually, including a student show in spring. It is located next to the bookstore in IB1430.

**11 am–3 pm, Mon–Fri**

**5–8 pm, Wed and Thurs evenings**

## Bookstore

(206) 934-4678

[northsc.bncollege.com/](http://northsc.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%. 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.

**Hours: 8 am–6 pm, Mon & Tues; 8 am–4:30 pm, Wed–Fri**

## Childcare Center

(206) 934-3644

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

For the children of students at North, the ASB Child Care Center provides a safe, supportive, welcoming, and diverse environment that fosters student access, retention and success. The childcare 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 five years old. Call for tours or fee information.

**Hours: 7:30 am–4 pm, Mon–Fri**

## Food Services

(206) 934-3728

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

The Espresso Lounge features Caffè Vita coffee, other drinks, an array of fresh pastries and sweets, and healthy, locally-prepared breakfast items. The North Star Cafe serves breakfast and lunch and features a rotating menu of regional and international entrées, gourmet pizza and burgers, and a selection of vegetarian and dietary-friendly options. Both venues feature local, sustainable ingredients. The Espresso Lounge can be opened for special events, and Food Services offers special event catering services.

## 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](http://northseattle.edu/safety)

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

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



## Student Administrative Team (SAT)

(206) 934-3642

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

The Student Administrative Team (SAT) serves as North Seattle College'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 7 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 Insurance

Brochure information on student injury and sickness insurance is available at the Cashier's Office (206-934-3627) or at [northseattle.edu/cashiers-office/student-insurance](http://northseattle.edu/cashiers-office/student-insurance).

*See page 37 for information on Student Insurance.*

## Student Leadership & Multicultural Programs

(206) 934-3642

<https://studentleadership.northseattle.edu/>

The department of Student Leadership and Multicultural Programs (SLMP) administers North's Student Leadership program, which consists of approximately forty 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

(206) 934-0060

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

North is served by several Metro bus routes. Carpooling, walking, busing, biking, and van pooling 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 start of the quarter online at [seattlecolleges.edu/parkingpermit](http://seattlecolleges.edu/parkingpermit). Carpool parking is also available. Campus speed limit is 15 mph. Purchase daily parking at Cashier's Office or permit machines on the parking lots.

### The Roy Flores Wellness Center / Student Recreation

(206) 934-3631

Information Line (206) 934-3649

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

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

### Alumni Association

(206) 934-3604

[www.facebook.com/nsccalumni](http://www.facebook.com/nsccalumni)

The Alumni Association of North Seattle College was established to build and sustain meaningful relationships with our former students in order to foster the success of current and future students. All students who have attended the college, even if they did not complete a certificate or degree, are considered alumni. The goals of the Alumni Association are to provide alumni recognition; encourage participation in lifelong learning; offer professional development and networking opportunities; establish volunteer opportunities, including mentorship for current students; and gather feedback to enhance college programs and services. Membership is free. Join online at [nsceducationfund.org/alumni](http://nsceducationfund.org/alumni).

### North Seattle College Education Fund

(206) 934-3604

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

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

A non-profit 501(c)(3) organization guided by a volunteer board of directors comprised 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 and faculty mini-grants are awarded on a quarterly basis.



# 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 serves a diverse student population with a wide variety of education backgrounds and goals. As a learning community, we foster and promote the following outcomes:

### KNOWLEDGE

- facts, theories, perspectives and methodologies within and across disciplines

### INTELLECTUAL AND PRACTICAL SKILLS, INCLUDING

- critical thinking and problem-solving
- communication and self-expression
- quantitative reasoning
- information literacy
- technological proficiency
- collaboration: group and team work

### PERSONAL AND SOCIAL RESPONSIBILITY, INCLUDING

- civic engagement: local, global, and environmental
- intercultural knowledge and competence
- ethical awareness and personal integrity
- lifelong learning and personal well-being

### INTEGRATIVE AND APPLIED LEARNING

- synthesis and application of knowledge, skills, and responsibilities to new settings and problems

## Associate of Arts Degree Learning Outcomes

*See page 5.*

## Associate of Science Degree Learning Outcomes

*Students completing the Associate of Science degree should:*

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





# 8 Directions for Your Education and Training

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

## 1

## College Transfer

### Academic Programs

(206) 934-7306

North Seattle College offers a full range of college transfer courses that apply toward a four-year program of study. In addition to the Associate of Arts (A.A.) and Associate of Science (A.S.) degrees, North also offers an Associate in Business (A.B.) degree, and an Associate of Fine Arts (A.F.A.) degree in Art. For detailed information on the A.A. degree, see pages 7-9.

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, including:

- |                              |                     |
|------------------------------|---------------------|
| ■ Accounting                 | ■ Geology           |
| ■ Anthropology               | ■ Health            |
| ■ Art                        | ■ History           |
| ■ Astronomy                  | ■ Humanities        |
| ■ Biology                    | ■ Journalism        |
| ■ Business                   | ■ Mathematics       |
| ■ Chemistry                  | ■ Music             |
| ■ Communication              | ■ Nutrition         |
| ■ Computer Science           | ■ Philosophy        |
| ■ Earth Science              | ■ Physics           |
| ■ Economics                  | ■ Political Science |
| ■ English                    | ■ Psychology        |
| ■ Environmental Science      | ■ Sociology         |
| ■ General/Biological Science | ■ Theater           |
| ■ Geography                  | ■ World Languages   |

### Associate of Arts Degree (A.A.) Direct Transfer Agreement

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

*See pages 7-9 for college transfer course requirements for A.A. or A.S. degree.*

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

This degree is intended for students who wish to transfer as juniors to four-year institutions in the state of Washington.

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

This business degree is designed for students who plan to transfer in the area of business studies. It will satisfy the lower division general education (core) requirements and the lower division business requirements at Washington’s public four-year colleges and universities.

This degree shall be granted only to students who have completed 90 college level credits with a minimum cumulative grade point average of at least 2.0 with at least 15 college credits taken at North.

#### GENERAL EDUCATION COURSES

ENGL& 101 English Composition I . . . . .	5
ENGL& 102 Composition II . . . . .	5
COMMUNICATION SKILLS	10
MATH 116 Applied Mathematics . . . . .	5
Following can be substituted:	
MATH&141 Precalculus I . . . . .	5
QUALITATIVE/SYMBOLIC REASONING	5
Choose from a minimum of two different prefixes with no more than 10 credits in a discipline area.	
VISUAL, LITERARY AND PERFORMING ARTS	15
ECON& 201 Micro Economics . . . . .	5
ECON& 202 Macro Economics . . . . .	5
Non-ECON course . . . . .	5
INDIVIDUAL, CULTURES AND SOCIETIES	15
MATH& 148 Business Calculus . . . . .	5
Following can be substituted:	
MATH&151 Calculus I . . . . .	5
-OR-	
MATH&124 Calculus w/Geometry II . . . . .	5
Physical, biological, and/or earth sciences. . . . .	10
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

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

## Fine Arts in Art

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

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

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 grade point average (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 (AFA) degree certifies completion of approved course work. 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 (AA) degree. However, it is accepted by Evergreen State College and some other colleges with transfer rights similar to those of the AA. Students seeking a Bachelor of Arts or a Bachelor of Fine Arts should consult NSC AA 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.: Art requires General Education courses as follows: ENGL& 101 and 102; and one of the following computation courses: MATH& 107 or above, BUS 116, ACCT 110 or above. Students must also complete 15 credits in the three areas of Knowledge: 5 - from Visual, Literary, and Performing Arts other than ART courses; 5 - from Individuals in Culture and Society, 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 Kelda Martensen. 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 Arts, Humanities & Social Sciences Dean and requests for such substitutions must be made on the request for waiver form.

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

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

### REQUIRED COURSES

ART 101	Design	5
ART 102	Design	5
ART 111	Drawing	5
ART 112	Drawing	5
ART 121	Introduction to Printmaking	5
ART 210	Digital & Graphic Art - Photoshop + Illustrator	5
ART 251	Art History	5

Following can be substituted:

ART 252	Art History	5
Art history courses are taught at Seattle Central or other college.		
ART 253	Survey of Western Art: Renaissance-Present	5
Art history courses are taught at Seattle Central or other college.		
ART 290	the Art Business	5

### GENERAL EDUCATION COURSES

Visual, Literary & Performing Arts course (non-Art)	5
Individuals, Cultures & Societies course	5
Natural World, the	5
ENGL& 101 English Composition I	5
ENGL& 102 Composition II	5
Computation Course credits	5

Select five credits from courses below:

ACCT 110	Introduction to Accounting/Bookkeeping I	5
Following can be substituted:		
ACCT course higher than ACCT 110		
BUS 116	Business Math/Spreadsheets	5
MATH&107	Math in Society	5

Following can be substituted:

Math course higher than MATH& 107

GENERAL EDUCATION CREDITS	30
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### ART ELECTIVES GROUP 1: 2-DIMENSIONAL ART

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

ART 110	Visualizing Science and Technology	5
ART 113	Drawing	5
ART 114	Introduction to Digital Photography I	5
ART 115	Introduction to Digital Photography II	5
ART 121	Introduction to Printmaking	5
ART 122	Introduction to Printmaking-Intermediate	5
ART 123	Continuing Printmaking: Monotype and Monoprint	5
ART 201	Painting	5
ART 202	Painting	5
ART 203	Painting	5
ART 204	Mural Art	5
ART 214	Digital & Graphic Art - Intermediate	5
AR 215	Adv. Computer Art II	5

GROUP 1 - 2-DIMENSIONAL ART	MINIMUM 5
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### ART ELECTIVES GROUP 2: 3-DIMENSIONAL ART

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

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

GROUP 2 - 3-DIMENSIONAL ART	MINIMUM 5
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ELECTIVES BETWEEN GROUP 1 AND GROUP 2	MINIMUM 25
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TOTAL PROGRAM CREDITS	MINIMUM 100 + PORTFOLIO
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## Special Opportunities for Upper Division Courses

### Eastern Washington University at North

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

<http://wce.wvu.edu/teop/north-seattle>

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

# 2 Professional & Technical Programs

See page 113 for details about North's programs.

# 3 Bachelor's Degrees

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

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

## Application Development

**Math and Science Division**  
(206) 934-7025

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

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

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

### DEGREE REQUIREMENTS

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

### PREREQUISITES - IT COURSES

Database Development/Programming in SQL . . . . .	5
Web Programming/Web Development . . . . .	5
Programming . . . . .	10
5 credits of Object-Oriented Programming strongly recommended	
(Equivalent courses may be substituted)	

PREREQUISITES - IT CREDITS 20

### PREREQUISITES - GENERAL EDUCATION

Quantitative/Symbolic Reasoning (QSR) . . . . .	5
QSR course in Computer Science, Statistics or Mathematics (Statistics recommended)	
(Equivalent courses may be substituted)	
ENGL& 101 English Composition I . . . . .	5

PREREQUISITES - GENERAL EDUCATION CREDITS 10

### TECHNICAL SPECIALTY COURSES

AD 300 Component Software . . . . .	5
AD 310 Software Lifecycle . . . . .	5
AD 315 Discrete Mathematics in Computer Programming . . . . .	5
AD 320 Web Application Development . . . . .	5
AD 325 Data Structure & Algorithms . . . . .	5
AD 330 Professional Communication in IT . . . . .	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 490 Internship/Capstone Project AD-B.A.S. . . . .	5

TECHNICAL SPECIALTY CREDITS 70

### RELATED INSTRUCTION

See Advising Center for list of approved courses.

Visual, Literary and Performing Arts . . . . .	10
Individual, Cultures and Societies . . . . .	10
Natural World, the . . . . .	10
At least one 5 Credits lab required.	
Communication . . . . .	5
5 credits in a Composition, Writing-intensive, or basic speaking skills courses	
General Education Elective . . . . .	15
Credits may be selected to best suit the needs of the baccalaureate program.	

RELATED INSTRUCTION CREDITS 60

### ELECTIVES

See Advising Center for list of courses.  
Includes any credits taken towards the associate degree and/or technology prerequisites

ELECTIVES CREDITS 50

TOTAL PROGRAM CREDITS 180

## Early Childhood Education

Workforce Instruction Division  
(206) 934-3783

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 Degree (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
INFO 300	Information Literacy for Undergraduate Research . . . . .	2

#### TECHNICAL SPECIALTY COURSES

ECE 305	Early Childhood Education Approaches and History . . . . .	3
ECE 310	Cognition and General Knowledge . . . . .	5
ECE 315	Language, Literacy and Communication . . . . .	5
ECE 320	Creative Expression . . . . .	3
ECE 350	Practicum: Interactions . . . . .	4
ECE 355	Anti-Bias Education . . . . .	3
ECE 405	Partnership and Collaboration in Early Care and Education . . . . .	3
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

TECHNICAL SPECIALTY CREDITS 60

#### GENERAL EDUCATION

ENGL& 101	English Composition I . . . . .	5
	ENGL& 101 is counted toward general education requirements. Must be eligible for ENGL& 101 through English Placement Exam or completion of ENGL 097/ENGL 098.	
ENGL& 102	Composition II . . . . .	5
	<i>Following can be substituted:</i>	
	ENGL&235 Technical Writing . . . . .	5
	Visual, Literary and Performing Arts . . . . .	15
	U.S. Cultures & Global Studies . . . . .	10
	-OR-	
	Individual, Cultures, and Societies . . . . .	10
	Natural World, the . . . . .	10
	One course must include lab.	
	Quantitative/Symbolic Reasoning . . . . .	5
GENERAL EDUCATION CREDITS		60
<b>ELECTIVES</b>		
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
TOTAL PROGRAM CREDITS		180

## International Business

Workforce Instruction Division  
(206) 934-3730

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

## International Business Bachelor of Applied Science Degree (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 . . . . .	5
	<i>Following can be substituted:</i>	
	MATH&146 Intro to Statistics . . . . .	5
	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 English Placement Exam or completion of ENGL 097 or ENGL 098.	

### TECHNICAL SPECIALTY COURSES

CWE 494	International Business Internship Preparation .	1
CWE 495	Baccalaureate Internship . . . . .	8
IBN 301	International Management. . . . .	5
IBN 302	International Marketing . . . . .	5
IBN 303	Ethics and International Business . . . . .	3
IBN 310	Operations Management . . . . .	5
IBN 311	International Business Law . . . . .	3
IBN 320	International Finance . . . . .	5
IBN 350	International Business Practicum . . . . .	7
IBN 401	International Project Management . . . . .	3
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

TECHNICAL SPECIALTY CREDITS 60

### GENERAL EDUCATION COURSES

CMST 215	International Communication and Relations . .	5
	<i>Following can be substituted:</i>	
	CMST&220 Public Speaking . . . . .	5
ECON& 201	Micro Economics . . . . .	5
ECON& 202	Macro Economics . . . . .	5
ENGL& 102	Composition II . . . . .	5
	<i>Following can be substituted:</i>	
	ENGL& 235 Technical Writing. . . . .	5
MATH 116	Applications of Math to Management, Life & SSCI . . . . .	5
	<i>Following can be substituted:</i>	
	MATH&141 Pre-Calculus I . . . . .	5
MATH& 148	Business Calculus . . . . .	5
	<i>Following can be substituted:</i>	
	MATH&151 Calculus I . . . . .	5
	Visual, Literary and Performing Arts. . . . .	10
	Any two World Language courses.	
	See advising for course list.	
	Individual, Cultures and Societies . . . . .	5
	One course. See advising for course list.	
	Natural World, the . . . . .	5
	One of any physical, biological, or earth science 5-credit lab class. See advising for course list.	
	U.S. Cultures . . . . .	5
	<i>Following can be substituted:</i>	
	Global Studies (any U.S. or GS designated course)	
	See advising for course list.	

GENERAL EDUCATION CREDITS 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

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

ELECTIVES CREDITS 60

TOTAL PROGRAM CREDITS 180

## 4

## Continuing & Contract Education



### Continuing Education Classes

(206) 934-3705  
[learnatnorth.org](http://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 non-credit 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.

## 5

## Bridge to College/ Pre-College

Basic & Transitional Studies Division  
 (206) 934-4720

Basic Studies provide instruction for those who want to improve their English, improve basic verbal and math skills, earn a high school diploma or GED in order to get better jobs, 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](http://northseattle.edu/programs/pre-college-english)  
[northseattle.edu/programs/pre-college-math](http://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 270.*

## Concurrent High School/ College Programs

### Running Start

(206) 934-3682

[northseattle.edu/running-start](http://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 high school. Full to partial tuition is paid for by the state; students pay mandatory fees, buy their own books, and provide their own transportation. To qualify students must take a placement test and be ready for college level coursework. As a dual enrollment program, students receive both high school and college credit, thus accelerating their progress through the education system. Running Start is a good option for high school students who are ready to start college early.

*See page 22 for more information.*

## Pre-College Programs

### Adult Basic Education

(206) 934-7303

[northseattle.edu/programs/abe-ged](http://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 post-secondary education programs. Course descriptions are listed under ABE. Classes are non-credit. Tuition is low, currently \$25 per quarter (subject to change).

## English as a Second Language (ESL)

(206) 934-7303

[northseattle.edu/programs/esl](http://northseattle.edu/programs/esl)

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 non-credit 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 concentrate on college-preparation skills.

## GED Preparation

(206) 934-7303

[northseattle.edu/programs/abe-ged](http://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](http://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 waiver for high school completion.*



## High School 21+

An alternative to the GED, High School 21+ (HS 21+) is a competency-based program that adds rigorous 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 this program receive an actual 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 for them. HS 21+ students also take portfolio classes in such subjects as 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. Students 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

<https://elearning.northseattle.edu>

North offers many credit courses that do not require any campus visits. Online classes are designed so students can keep in close contact with their instructors using virtual bulletin boards, discussion rooms and/or email. Hybrid courses blend on-campus and "virtual" classroom instruction, saving travel time and expense. Student/teacher 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

## International Programs

(206) 934-3672

Fax (206) 934-3794

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

<https://ip.northseattle.edu>

North Seattle College serves over 1,000 students from 50 countries who study in North's Intensive English Program, career training, or college transfer programs. Many are also active in campus activities and organizations. New students must first take the College Success placement test to see if they qualify for college level courses. Students who have TOEFL or IELTS scores must send them directly to the International Programs Office.

A three-day orientation program prepares students to begin a successful academic experience. 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.

Students 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 take regular college classes. Upon successful completion of the Intensive English Program (IEP) or testing into college-level English, students may enter one of the college's academic or technical programs.

*See page 27 for more information.*

## Travel/Study Abroad

(206) 934-3672

[northseattle.edu/programs/study-abroad](http://northseattle.edu/programs/study-abroad)

Students interested in Study Abroad should contact the International Programs Office to learn about programs and scholarship opportunities.

## 8

## Worker Retraining Program

(206) 934-3787

[northseattle.edu/workforce-education](http://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 work force
- 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
- Separated from the military with an honorable discharge within the last 24 months
- Suffered a loss of more than 50% 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 29 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  
(206) 934-3730

### Accounting Achievement Short-Term Certificate

This certificate provides students with a basic understanding of accounting principles and procedures, and computers and accounting software.

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

#### TECHNICAL SPECIALTY COURSES

ACCT	110	Introduction to Accounting/Bookkeeping. . . . .	5
ACCT	131	QuickBooks . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
TOTAL PROGRAM CREDITS			15

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

This two-year program prepares students for immediate and future accounting supervisory positions. The program includes accounting and business skills as well as college transfer and supporting courses designed to strengthen the students' self-assurance and leadership qualities.

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

#### TECHNICAL SPECIALTY COURSES

ACCT	110	Introduction to Accounting/Bookkeeping. . . . .	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	261	Accounting Information Systems . . . . .	5
ACCT	267	Not-for-Profit Financial Management . . . . .	5
ACCT	268	Computerized Accounting: Advanced QuickBooks . . . . .	5
ACCT	271	Ethics in Accounting . . . . .	5
CWE	110	Internship . . . . .	3
TECHNICAL SPECIALTY CREDITS			58

#### RELATED INSTRUCTION

BUS	124	Excel for Business . . . . .	5
BUS	131	Integrated Communications in the Workplace . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
BUS	200	Law and Society	
-OR-			
BUS&	201	Business Law . . . . .	5
BUS	210	Business and Economic Statistics . . . . .	5
BUS	236	Interpersonal Communication for the Workplace . . . . .	5
ELECTIVE	Five credits from list of approved U.S. Cultures or Global Studies courses . . . . .		5

RELATED INSTRUCTION CREDITS	35
TOTAL PROGRAM CREDITS	93

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

The Associate of Applied Science–Transfer (A.A.S.-T) degree is built upon technical skills for job preparation but also includes college-level general education components common to all the A.A.S.-T degrees. The 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 (B.A.S.) International Business degree program here at North Seattle College.

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.

#### PREREQUISITES

Individual courses may have prerequisites.

#### TECHNICAL SPECIALTY COURSES

ACCT&	201	Principles of Accounting I . . . . .	5
-OR-			
ACCT	110	Intro to Accounting/Bookkeeping I . . . . .	5
ACCT&	202	Principles of Accounting II . . . . .	5
-OR-			
ACCT	120	Intro to Accounting/Bookkeeping II . . . . .	5
ACCT&	203	Principles of Accounting III . . . . .	5
ACCT	131	QuickBooks . . . . .	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	Principles of Economics - Micro . . . . .	5
ECON&	202	Principles of Economics - Macro . . . . .	5
Accounting/Business Electives (See list below) . . . . .			10
TECHNICAL SPECIALTY CREDITS			70

**RELATED INSTRUCTION**

ENGL& 101 English Composition . . . . .5  
 MATH& 116 Applications of Math to Management,  
 Life and Social Sciences . . . . .5  
 Natural World . . . . .5  
 U.S. Cultures or Global Studies. . . . .5

RELATED INSTRUCTION CREDITS 20  
 TOTAL PROGRAM CREDITS 90

**APPROVED ACCOUNTING/BUSINESS ELECTIVES**

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 268 Computerized Accounting: Advanced  
 QuickBooks . . . . .5  
 ACCT 270 Cost Accounting . . . . .5  
 ACCT 271 Ethics in Accounting . . . . .5  
 ACCT 272 Fraud Examination . . . . .5  
 ACCT 273 Introduction to Financial Crime. . . . .5  
 ACCT 274 Forensic Accounting . . . . .5  
 ACCT 275 Auditing. . . . .5  
 BUS 112 Multi-Cultural Issues in the Workplace . . . . .5  
 BUS 114 Introduction to Marketing . . . . .5  
 BUS 118 Project Management and Overview . . . . .5  
 BUS 119 Leadership Management Skills . . . . .5  
 BUS 151 Introduction to Entrepreneurship . . . . .5  
 BUS 169 Using Computers in Business . . . . .5  
 BUS 186 Sustainable Business . . . . .5  
 BUS 215 Introduction to International Business . . . . .5  
 BUS 229 Project Management Tools, Techniques  
 and Control . . . . .5  
 BUS& 101 Introduction to Business . . . . .5  
 CMST& 220 Public Speaking . . . . .5

*Note: Not all classes are offered every quarter, and many classes have prerequisites. Refer to the class schedule, the annual forecast, to the department, and to an advisor for efficient planning.*

**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 fraud. The curriculum includes case studies and discussions on preventative methods, effective internal control, and corporate culture and ethics. Instructional

material includes videos of actual financial crimes, interviews with perpetrators, record reconstruction, and presentations by experts.

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

**PREREQUISITES**

ACCT&201 is required for ACCT 272 or ACCT 273. ACCT&201 may be taken concurrently with ACCT 272 or 273. ACCT 201 may be waived if student receives instructor permission due to equivalent work experience.

**TECHNICAL SPECIALTY COURSES**

ACCT 272 Fraud Examination . . . . .5  
 ACCT 273 Introduction to Financial Criminology . . . . .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**

All prospective I-BEST students must attend an information/application session to receive permission to enroll.

**TECHNICAL SPECIALTY COURSES**

ACCT 110 Introduction to Accounting/Bookkeeping I . . . .5  
 BUS 115 Computational Skillbuilding . . . . .2  
 BUS 169 Using Computers in Business . . . . .5  
 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

### Bookkeeping Assistant Certificate

This certificate provides the student with a basic understanding of accounting principles and procedures, business computer software, computational skill-building, and specialized accounting software procedures. In addition, students will broaden their understanding of the bookkeeping/accounting field through real-world job shadowing experiences in the public and/or private sector. 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 Associate of Applied Science degree in Accounting.

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

#### TECHNICAL SPECIALTY COURSES

ACCT	110	Introduction to Accounting/Bookkeeping. . . . .	5
BUS	115	Computational Skill Building . . . . .	2
BUS	169	Using Computers in Business . . . . .	5
ACCT	131	QuickBooks . . . . .	5
CWE	101	Portfolio, Job Search and Interviewing. . . . .	2
-OR-			
CWE	102	Job Shadowing . . . . .	2
BUS	124	Excel for Business . . . . .	5
TOTAL PROGRAM CREDITS			24

### Bookkeeping Certificate in Accounting

This program prepares graduates for bookkeeping careers and general office employment. The program normally can be completed in four quarters. The curriculum contains instruction that enables students to acquire knowledge through content and methodology, to think critically, to formulate values and make decisions, and to appreciate and understand their own and other cultures. Course requirements outside the accounting department represent related instruction in support of skills and knowledge necessary in the accounting and general office fields. Please be aware that some of the courses may require prerequisites or instructor permission.

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

#### TECHNICAL SPECIALTY COURSES

ACCT	110	Introduction to Accounting/Bookkeeping I. . . . .	5
-OR-			
		ACCT& 201 Principles of Accounting I. . . . .	5
ACCT	120	Introduction to Accounting/Bookkeeping II . . . . .	5
-OR-			
		ACCT& 202 Principles of Accounting 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

### Certificate of Accountancy

This certificate is designed for college graduates who are working toward meeting the educational requirements of the Washington State CPA Examination. Additional courses are necessary to fulfill the requirements to sit for the exam. The courses in this certificate are not considered to be an official statement of acceptability by the Washington State Board of Accountancy. Students should consult the State Board's website for specific exam requirements. In addition, we strongly recommend that all CPA applicants complete a CPA review course to adequately prepare for the CPA Examination. See [discovercpa.org](http://discovercpa.org) for CPA Exam review providers.

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

#### PREREQUISITES

ACCT&201, ACCT&202, ACCT&203, and ACCT 255

#### TECHNICAL SPECIALTY COURSES

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

### Computerized Accounting Technology Certificate

The Computerized Accounting Technology Certificate is a four-quarter program designed to provide students with computerized accounting skills using widely-used accounting software. The program bridges the gap between manual and computerized accounting systems with students gaining hands-on experience and expertise with basic and mid-range accounting systems. This experience will provide graduates with viable entry into and/or advancement in the accounting job market with both large and small organizations.

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

**TECHNICAL SPECIALTY COURSES**

ACCT 110	Introduction to Accounting/Bookkeeping I . . . . .	5
-OR-		
ACCT& 201	Principles of Accounting I . . . . .	5
ACCT 120	Introduction to Accounting/Bookkeeping II . . . . .	5
-OR-		
ACCT& 202	Principles of Accounting II . . . . .	5
ACCT 131	QuickBooks . . . . .	5
ACCT 257	Business Tax Accounting . . . . .	5
ACCT 261	Accounting Information Systems . . . . .	5
ACCT 267	Not for Profit Financial Management . . . . .	5
ACCT 268	Computerized Accounting: Advanced QuickBooks . . . . .	5
ACCT TBD	Accounting class to be determined . . . . .	5
CWE 110	Internship . . . . .	3

TECHNICAL SPECIALTY CREDITS 43

**RELATED INSTRUCTION**

BUS 115	Computational Skill Building . . . . .	2
BUS 124	Excel for Business . . . . .	5
BUS 169	Using Computers in Business . . . . .	5
BUS 236	Interpersonal Communications for the Workplace . . . . .	5
ENGL& 230	Technical Writing . . . . .	5

TOTAL PROGRAM CREDITS 60

**Not-for-Profit Management Short-Term Certificate**

The Not-for-Profit Management certificate provides students with an overview of financial management in the not-for-profit sector. It is designed for those already working at a not-for-profit organization, and those accounting students who wish to work in this field.

Important topics covered include: the basic tools of financial management and financial analysis, computerized accounting simulations of real-world financial events, IRS Form 990 preparation, charitable giving and fundraising issues, internal control, ethics, and operational effectiveness.

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

**TECHNICAL SPECIALTY COURSES**

ACCT 110	Introduction to Accounting/Bookkeeping. . . . .	5
-OR-		
ACCT& 201	Principles of Accounting I . . . . .	5
-OR-		
ACCT 200	Accounting for Non-Accountants . . . . .	5
ACCT 267	Not for Profit Financial Management . . . . .	5
ACCT 269	Not for Profit Practices & Procedures . . . . .	5

TOTAL PROGRAM CREDITS 15

**Allied Health**

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

North Seattle College offers an Associate of Applied Science degree (A.A.S.) in Allied Health Sciences for graduates of certificate programs in Medical Assisting, Practical Nursing, and Pharmacy Technician.

**Allied Health Sciences**  
**Associate of Applied Science Degree (A.A.S.)**

**DEGREE CRITERIA INCLUDE**

- A NSC health occupation certificate with a minimum of 45 technical credits specific to that occupation. Graduates from similar programs at other Washington community colleges or accredited vocational-technical schools may also be candidates.
- Completion of specific technical courses, related General Education and related instruction.
- Completion of 90 credit hours.
- An overall grade point average of 2.0. Other requirements may be established by faculty or administrative policies.

Program Requirements For Medical Assisting, Pharmacy Technician & Practical Nursing:

**TECHNICAL SPECIALTY**

45 (minimum) - 60 (maximum) vocational-technical credits

TECHNICAL SPECIALTY CREDITS 45-60

**GENERAL EDUCATION**

Minimum of 25 credits in General Education or related instruction. 10 credits from the list of approved courses for the A.A. degree, which must include five credits from U.S. Cultures or Global Studies U.S. Cultures . . . . .

U.S. Cultures . . . . .	5
<i>Following can be substituted:</i> Global Studies course Communication . . . . .	5
Quantitative/Symbolic Reasoning . . . . .	5
Human Relations course . . . . .	5

GENERAL EDUCATION CREDITS 25

**ELECTIVES**

Up to 20 elective credits may be taken as necessary to complete the 90 credits required for the degree.

ELECTIVE CREDITS 20

TOTAL PROGRAM CREDITS 90

**Emergency Department Technician Short-Term Certificate**

This certificate provides students with a general understanding of emergency department operations and prepares them for work as emergency department technicians. A minimum of 17 credits with a 2.0 grade or above in all classes is required to earn the certificate.

**PREREQUISITES**

- Existing healthcare professional with certification equivalent to licensed practical nurse, certified medical assistant, certified nursing assistant, paramedic, emergency medical technician, or equivalent.
- 12 months (2,080 hours) experience working with patients in an acute care setting.
- Program advisor permission.
- Attend an orientation session.
- Meet the requirements of our current clinical sites—background check, immunizations, etc.)

**TECHNICAL SPECIALTY COURSES**

EDT	101	Emergency Department Technician Fundamentals . . . . .	4
EDT	102	Emergency Department Technician Procedures and Diagnostics Testing . . . . .	5
EDT	103	Emergency Department Technician Lab Skills I. . . . .	4
EDT	104	Emergency Department Technician Lab Skills II . . . . .	5
EDT	105	Emergency Department Practicum . . . . .	2
<b>TOTAL PROGRAM CREDITS</b>			<b>20</b>

**Emergency Medical 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.

**PREREQUISITES**

Be currently licensed by the Washington State Department of Health as a Nursing Assistant.

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 high school diploma or GED equivalency or college transcript showing high school completion.
- Provide a copy of a clear Washington State patrol background check.
- Provide copies of required immunizations: 1. Hepatitis B Series or positive titer, 2. A current Tuberculin skin test or alternative health documentation.

To gain employment in this field, you typically must have the physical strength to carry, lift, extricate, and perform similar maneuvers in a manner not detrimental to the patient, fellow emergency technicians, or self.

**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 Healthcare Providers . . . . .	1
<b>TOTAL PROGRAM CREDITS</b>			<b>13</b>

**Healthcare Technology Management Associate of Applied Science Degree (A.A.S.)**

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

**PREREQUISITES**

For placement testing, contact Testing Center 934-3674

To begin program, students must test into the English and Math courses listed below:

BUS	169	Using Computers in Business . . . . .	5
<i>Following can be substituted:</i>			
equivalent computer experience			
ENGL	097	English 097: Integrated Reading and Writing I. . . . .	10
<i>Following can be substituted:</i>			
ENGL	098	College Prep Writing IV . . . . .	5
-OR-			
higher ENGL course			
MATH	084	Algebra I . . . . .	5
<i>Following can be substituted:</i> higher MATH course			
-OR-			
have taken equivalent or higher MATH course			

**TECHNICAL SPECIALTY COURSES**

AHI	100	Introduction to Medical Vocabulary . . . . .	3
<i>Following can be substituted:</i>			
Online module AMA 170 or AMA 117 for AHI 100 . . . . .			
BIOL	128	Survey of Human Anatomy and Physiology. . . . .	5
<i>Following can be substituted:</i>			
Online modules AMA 172, AMA 175, AMA 177, AMA 178, AMA 179, AMA 119 inclusive			
CHEM&	121	Intro to Chemistry . . . . .	5
EET	105	Introduction to Technology . . . . .	2
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 & Plcs I . . . . .	5
EET	286	Biomedical Equipment I. . . . .	5
EET	287	Biomedical Equipment II . . . . .	5
EET	297	Biomedical Technician Externship. . . . .	4
CWE 101 Portfolio Job Search Int is a prerequisite for EET 297.			

TECHNICAL SPECIALTY CREDITS

83-86

**RELATED INSTRUCTION**

BUS 112 Multi-Cultural 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  
 This course has acceptable substitutes.  
 See Advising Center for approved list.

EET 109 Mathematical Applications for Circuit Analysis . . .5  
*Following can be substituted:*  
 MATH& 141 - Pre-Calculus . . . . .5  
 -OR-  
 higher MATH course

ENGL& 101 English Composition I . . . . .5  
 While students must test into ENGL 097 to start the degree, they must complete ENGL& 101 to finish.

IT 122 Network OS 1 - Windows Client OS . . . . .5  
*Following can be substituted:*  
 any combination of higher IT courses totaling 10 credits  
 Total of 10 credits in IT courses required

RELATED INSTRUCTION CREDITS	30
TOTAL PROGRAM CREDITS	112-116

Any student wishing to transfer to the BSBMET program at DeVry University should take the following math and physics courses in place of courses listed above:

- MATH& 142 - Precalculus I
- MATH& 151 - Calculus I
- MATH& 152 - Calculus II
- PHYS& 221 - Engineering Physics I
- PHYS& 222 - Engineering Physics II
- PHYS& 223 - Engineering Physics III

**Sustainability in Healthcare Short-Term Certificate**

For hospital employees, in particular Environmental Service Workers, Waste Management, Hospital Facilities and/or Dietary Services, to achieve a deeper understanding of the importance of sustainable hospitals, develop competency in “best practices in sustainability”, and obtain the knowledge and skills in order to assist the hospital in becoming more sustainable. (Sustainability and/or “green” are defined in the context of this program as the use of products and processes that do not harm the environment nor adversely affect the health and safety of patients and workers in the hospital.)

**TECHNICAL SPECIALTY COURSES**

SUST 111 Sustainability in Healthcare . . . . .5  
 TOTAL PROGRAM CREDITS 5

**Business**

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

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

**Administrative Assistant Associate of Applied Science Degree (A.A.S.)**

This program prepares students for employment as office support professionals, secretaries and administrative assistants with computer literacy in information processing, spreadsheets, databases, presentation graphics and word processing. Advanced placement testing, work experience, and transfer of credits MAY result in course waivers, credit transfer, and advanced program standing.

**TECHNICAL SPECIALTY COURSES**

BUS& 101 Introduction to Business . . . . .5  
 BUS 106 Keyboarding/Skillbuilding . . . . .3  
 Course may be taken up to three times to assist students in achieving typing skills required by industry.

BUS 112 Multi-Cultural Issues in the American Workplace . . . . .5

BUS 115 Computational Skillbuilding . . . . .2

BUS 124 Excel for Business . . . . .5

BUS 140 Customer Relations . . . . .5

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

BUS 170 Information Technology I . . . . .5

BUS 182 Information and Database Management . . . . .5

BUS 205 Human Resource Management . . . . .5  
 Eligible for ENGL& 101 through English Placement Exam or completion of ENGL 097/098

BUS 230 Business Communications . . . . .5  
 Prerequisite: BUS 131 Integrated Communications I

CWE 101 Portfolio, Job Search and Interviewing. . . . .2

TECHNICAL SPECIALTY CREDITS	57
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**RELATED INSTRUCTION**

ACCT 110	Introduction to Accounting/Bookkeeping I . . . . .	5
BUS 116	Business Math/Spreadsheets . . . . .	5
BUS 131	Integrated Communications I . . . . .	5
BUS 236	Interpersonal Communications for the Workplace . . . . .	5
U.S. Cultures	. . . . .	5
<i>Following can be substituted: Global Studies course</i>		
See advising for list of approved courses		
General Education Elective . . . . .		10
See advising for list of approved courses		
Business Related Elective . . . . .		5
CWE 110, BUS 114, BUS& 201, BUS 210, ACCT 131, IT 111 or any BUS course numbered 110 or above.		
Total Required credits: 3-5		

RELATED INSTRUCTION CREDITS	35
TOTAL PROGRAM CREDITS	90-92

**Administrative Assistant Certificate**

This certificate prepares students for jobs as administrative assistants and office support professionals. It is geared for students who are currently working in a related field or who already have a college degree (or certificate), or have taken a substantial number of college level courses.

**PREREQUISITES**

Type 25 correct words a minute, placement into ENGL 097 or higher, MATH 081.

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

**TECHNICAL SPECIALTY COURSES**

BUS 182	Information and Database Management . . . . .	5
BUS 106	Keyboarding/Skillbuilding . . . . .	3
Course may be taken up to three times to assist students in achieving typing skills required by industry.		
BUS 112	Multi-Cultural Issues in the American Workplace . . . . .	5
BUS 124	Excel for Business . . . . .	5
BUS 169	Using Computers in Business . . . . .	5
BUS 170	Information Technology I . . . . .	5
BUS 230	Business Communications . . . . .	5
CWE 101	Portfolio, Job Search and Interviewing. . . . .	2

TECHNICAL SPECIALTY CREDITS	35
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**RELATED INSTRUCTION**

BUS 116	Business Math/Spreadsheets . . . . .	5
BUS 131	Integrated Communications I . . . . .	5
BUS 140	Customer Relations . . . . .	5

RELATED INSTRUCTION CREDITS	15
TOTAL PROGRAM CREDITS	50

**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 are administrative employees who wish to build new skills and enhance current skills in order to become proficient and demonstrate on-the-job competencies.

**TECHNICAL SPECIALTY COURSES**

BUS 116	Business Math/Spreadsheets . . . . .	5
BUS 131	Integrated Communications I . . . . .	5
BUS 236	Interpersonal Communications for the Workplace . . . . .	5

TOTAL PROGRAM CREDITS	15
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**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/Mkting . . . . .	5
BUS 153	Entrepreneurship Planning Business Financials . . . . .	5
BUS 156	Introduction to E-Business/Commerce . . . . .	5

*Following can be substituted:*

BUS 169	Using Computers in Business. . . . .	5
BUS 186	Sustainable Business. . . . .	5
BUS 236	Interpersonal Communications for the Workplace . . . . .	5

TOTAL PROGRAM CREDITS	38-40
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**Customer Service Certificate**

Customer Service certificates combine office support training in communications, customer relations, information technology, and on-the-job work experience to prepare students for entry-level positions as customer service representatives.

**TECHNICAL SPECIALTY COURSES**

BUS 106	Keyboarding/Skillbuilding . . . . .	3
	Prerequisite: BUS 105 - Keyboarding (4 credits) or concurrent enrollment in BUS 105, or 25 wpm accurate keyboarding. May be repeated twice to build speed.	
BUS 131	Integrated Communications I . . . . .	5
	Eligible for ENGL& 101 through English Placement Exam or completion of ENGL 097/098.	
BUS 140	Customer Relations . . . . .	5
BUS 169	Using Computers in Business . . . . .	5
CWE 110	Internship . . . . .	3
<b>TOTAL PROGRAM CREDITS</b>		<b>21</b>

**Customer Service Certificate – Advanced**

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

Customer Service certificates combine office support training in communications, customer relations, information technology, skill-building, and on-the-job work experience to prepare students for entry-level positions as customer service representatives.

**TECHNICAL SPECIALTY COURSES**

BUS 106	Keyboarding/Skillbuilding . . . . .	3
	<i>Following can be substituted:</i>	
	BUS 105 Keyboarding . . . . .	4
	or concurrent enrollment in BUS 105, or 25 wpm accurate keyboarding. May be repeated twice to build speed.	
BUS 112	Multi-Cultural Issues in the American Workplace . . . . .	5
BUS 123	Word for Business . . . . .	5
BUS 124	Excel for Business . . . . .	5
	<i>Following can be substituted:</i>	
	BUS 125 Access for Business . . . . .	5
BUS 131	Integrated Communications I . . . . .	5
	Eligible for ENGL& 101 through English Placement Test or satisfactory completion of ENGL 097/098.	
BUS 140	Customer Relations . . . . .	5
BUS 169	Using Computers in Business . . . . .	5
BUS 230	Business Communications . . . . .	5
CWE 110	Internship . . . . .	3
<b>TOTAL PROGRAM CREDITS</b>		<b>41</b>

**Entrepreneur Foundation Short-Term Certificate**

If you have a passion for a business venture but aren't sure how to go about implementing it, this 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 course work.

Course work 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/Mkting . . . . .	5
BUS 153	Entrepreneurship Planning Business Financials . . . . .	5
<b>TOTAL PROGRAM CREDITS</b>		<b>13</b>

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

This 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.

**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 Multi-cultural Communication . . . . .	5
BUS 114	Introduction to Marketing . . . . .	5
	Must complete BUS 131 Integrated Communications or be eligible for ENGL& 101 through English Placement Exam or completion of ENGL 097/098.	
BUS 169	Using Computers in Business . . . . .	5
	<i>Following can be substituted:</i>	
	BUS 171 Information Technology II . . . . .	5
BUS& 201	Business Law . . . . .	5
BUS 210	Business and Economic Statistics . . . . .	5
BUS 230	Business Communications . . . . .	5
	Must complete BUS 131 Integrated Communications or be eligible for ENGL& 101 through English Placement Exam or completion of ENGL 097/098.	

BUS 236	Interpersonal Communications for the Workplace . . . . .	5
<b>TECHNICAL SPECIALTY CREDITS</b>		<b>50</b>
<b>GENERAL EDUCATION COURSES</b>		
Contact the Advising Center for approved list of courses		
U.S. Cultures . . . . .		5
General Education Elective . . . . .		5
<b>GENERAL EDUCATION CREDITS</b>		<b>10</b>
<b>ELECTIVES</b>		
Electives must include a minimum of 15 credits with BUS designation (except students with CB&M certificate)		
BUS course . . . . .		5
<b>ELECTIVES CREDITS</b>		<b>10</b>
<b>ELECTIVES - PATHWAY</b>		
Total of 8-10 credits required		
ACCT& 203	Principles of Accounting III . . . . .	5
BUS 118	Project Management Introduction and Overview . 5	
BUS 151	Introduction to Entrepreneurship . . . . .	3
<i>Following can be substituted:</i>		
BUS 154	Exploring Entrepreneurship . . . . .	5
BUS 186	Sustainable Business . . . . .	5
BUS 205	Human Resource Management . . . . .	5
BUS 215	Introduction to International Trade Business . 5	
ECON& 201	Micro Economics . . . . .	5
RES 100	Real Estate Fundamentals. . . . .	5
<b>ELECTIVES - PATHWAY CREDITS</b>		<b>38</b>
<b>ELECTIVES - GENERAL</b>		
Total of 20-22 credits required.		
Elective BUS courses must be numbered 100 or above AND not listed under Technical Specialty Courses. May include BUS courses list under Electives - Pathway.		
Any CMST designated courses in the Communication, Business and Media (CB&M) certificate. Only students completing the CB&M certificate may apply CMST courses.		
ACCT 131	QuickBooks . . . . .	5
ACCT& 203	Principles of Accounting III . . . . .	5
ACCT 261	Accounting Information Systems . . . . .	5
ECON& 201	Micro Economics . . . . .	5
ECON& 202	Macro Economics . . . . .	5
ENVS 160	Principles of Environmental Sustainability . . . 5	
RES 100	Real Estate Fundamentals. . . . .	5
RES 202	Multi-Family Property Management . . . . .	3
<i>Following can be substituted:</i>		
RES 203	Property Management - Commercial . . . . .	3
<b>ELECTIVES - GENERAL CREDITS</b>		<b>38</b>
<b>TOTAL PROGRAM CREDITS</b>		<b>90</b>

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

**General Business Associate of Applied Science - T Degree (A.A.S.-T)**

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

**TECHNICAL SPECIALTY COURSES**

ACCT& 201	Principles of Accounting I . . . . .	5
ACCT& 202	Principles of Accounting II . . . . .	5
BUS& 101	Introduction to Business . . . . .	5
BUS 112	Multi-Cultural Issues in the American Workplace . . . . .	5

*Following can be substituted:*

CMST 205	Multi-cultural Communications . . . . .	5
		WITH Academic Exception approval
BUS 114	Introduction to Marketing . . . . .	5
BUS& 201	Business Law. . . . .	5
BUS 210	Business and Economic Statistics . . . . .	5
BUS 215	Introduction to International Trade Business . 5	

*Following can be substituted:*

CMST 195	Media Management Operations . . . . .	5
		WITH Academic Exception approval
BUS 236	Interpersonal Communications for the Workplace . . . . .	5
ECON& 201	Micro Economics . . . . .	5
ECON& 202	Macro Economics . . . . .	5

**RELATED INSTRUCTION**

ENGL& 101	English Composition I . . . . .	5
		Must be eligible for English 101 through English Placement Exam or completion of English 097/098.

-OR-

ENGL&235	Technical Writing . . . . .	5
MATH 116	Applications of Math to Management, Life & SSCI . . . . .	5

*Following can be substituted:*

MATH&141	Precalculus I	
		-OR-
		Any math class with MATH&141 as a prerequisite

**ELECTIVES**

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

ELECTIVES CREDITS	15
TOTAL PROGRAM CREDITS	90

**International Trade Certificate**

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.

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

This certificate program focuses on both the development of knowledge and professional skills 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 plan, schedule, budget, and 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	Project Management Tools Techniques and Control . . . . .	5
	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. . . . .	5
	Prerequisite: Must be eligible for English 101 via English Placement Exam or completion of ENGL 097/098	

-OR-

ENGL&235	Technical Writing . . . . .	5
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TOTAL PROGRAM CREDITS	21
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**Retail Management Certificate**

The Retail Management Certificate provides a solid foundation in basic business management skills and an added course in retail management. This certificate was developed in collaboration with other community colleges around the state and the Western Association of Food Chains (WAFC). Two classes are taken online through Skagit Valley College.

**TECHNICAL SPECIALTY COURSES**

ACCT 110	Introduction to Accounting/Bookkeeping I . . . . .	5
BUS 114	Introduction to Marketing . . . . .	5
BUS 116	Business Math/Spreadsheets . . . . .	5
BUS 119	Leadership and Management Skills . . . . .	3
BUS 169	Using Computers in Business . . . . .	5
BUS 205	Human Resource Management . . . . .	5
BUS 214	Retail Management. . . . .	5
BUS 230	Business Communications . . . . .	5
BUS 236	Interpersonal Communications for the Workplace . . . . .	5

TECHNICAL SPECIALTY CREDITS	43
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TOTAL PROGRAM CREDITS	43
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**Early Childhood Education**

**Workforce Instruction Division**  
(206) 934-3783

North offers certificates and an Associate of Applied Science degree in early childhood education. The A.A.S. degree is a two-year teacher preparation program focusing on the educational and developmental needs of children from birth to 8 years old. Career opportunities include positions as a childcare teacher, preschool teacher or nanny.

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

### GENERAL EDUCATION

Contact the Advising Office for approved courses.

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

*Following can be substituted: Global Studies courses*

REQUIRED GENERAL EDUCATION CREDITS	10
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### GENERAL EDUCATION - COMPUTATION/QUANTITATIVE ELECTIVE

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

ACCT 110	Introduction to Accounting/Bookkeeping I	5
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REQUIRED C/Q ELECTIVE CREDITS	5
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### 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
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### REQUIRED COURSES

Practicum - Instructional Interactions	5	
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

REQUIRED COURSES CREDITS	46
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### ELECTIVE COURSES

Select from the following courses:

EDUC& 205	Introduction to Education with Field Experience	5
CCE 145	Music and Creative Expression	4
Credit range: 3-4; Total required credits: 4		
CCE 195	Art for Young Children	3
CCE 200	Children and Nature	3
CCE 261	Readings in Early Childhood Education	6
Credit range: 1-6; Total required credits: 1-6		
ECED& 134	Family Child Care	3
EDUC& 136	School-Age Care	3

REQUIRED ELECTIVE CREDITS	14
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TOTAL PROGRAM CREDITS	90
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## 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, high School or equivalent and 20 hours basic STARS/MERIT training or 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

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

### TECHNICAL SPECIALTY COURSES

ECED& 160	Curriculum Development	5
ECED& 170	Environments-Young Child	3
<i>Following can be substituted:</i>		
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 CREDITS	17
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### 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
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### TECHNICAL SPECIALTY COURSES - SPECIALIZATION

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

ECED& 132	Infants and Toddlers	3
Completion this course, EDUC& 115 - Child Development (5 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 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 . . . . .	3
	Completion 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 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 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
	<i>Following can be substituted:</i>	
	English course higher than ENGL& 101	
	College Level MATH course. . . . .	5
	Quantitative or Computational Math above 100 or designated Q/SR	

RELATED INSTRUCTION CREDITS 10

TOTAL PROGRAM CREDITS 47

**State Initial Early Childhood Education Certificate**

The initial 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, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) The initial Certificate (level 2 Step 5) is the first “ Stackable certificate” providing a foundation for the ECS Sate Credential and association degree.

**TECHNICAL SPECIALTY COURSES**

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

TOTAL PROGRAM CREDITS 12

**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, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

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

**TECHNICAL SPECIALTY COURSES - INITIAL CERTIFICATE**

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

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

**TECHNICAL SPECIALTY COURSES - SPECIALIZATION**

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

TOTAL PROGRAM CREDITS 20

**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, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals.

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

**TECHNICAL SPECIALTY COURSES - INITIAL CERTIFICATE**

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

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

**TECHNICAL SPECIALTY COURSES - SPECIALIZATION**

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

TOTAL PROGRAM CREDITS 20

**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, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals. The State Short Early Childhood Education Certificate - General is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

**TECHNICAL SPECIALTY COURSES - INITIAL CERTIFICATE**

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

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

**TECHNICAL SPECIALTY COURSES - SPECIALIZATION**

EDUC& 115	Child Development . . . . .	5
EDUC& 130	Guiding Behavior . . . . .	3

TOTAL PROGRAM CREDITS 20

**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, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals. The State Short Early Childhood Education Certificate - Infant Toddler Care is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

**TECHNICAL SPECIALTY COURSES - INITIAL CERTIFICATE**

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

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

**TECHNICAL SPECIALTY COURSES - SPECIALIZATION**

ECED& 132	Infants and Toddlers . . . . .	3
EDUC& 115	Child Development . . . . .	5

TOTAL PROGRAM CREDITS 20

**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, high School or equivalent and 20 hours basic STARS/MERIT training OR 2 college credits in basics of child care course, at least 2 hours of training in each of the ECE Core Competency areas.) for early care and education professionals. The State Short Early Childhood Education Certificate - School-Age Care is awarded following completion of completion of the State Initial Early Childhood Education Certificate (12 credits) plus 8 credits in additional required coursework as noted.

**TECHNICAL SPECIALTY COURSES - INITIAL CERTIFICATE**

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

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

**TECHNICAL SPECIALTY COURSES - SPECIALIZATION**

EDUC& 115	Child Development . . . . .	5
EDUC& 136	School-Age Care . . . . .	3

TOTAL PROGRAM CREDITS 20

**Electronics**

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

Electronics and associated technologies at North prepare students for careers in this diverse and expanding field. Ongoing changes in the electronics technology programs reflect changing community and industry needs. Instruction emphasizes a hands-on approach, the use of sophisticated test equipment unique to each discipline and a solid base of pertinent information. These programs provide high-skill learning opportunities, including professional certification and Associate of Applied Science degree options.

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

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

- Programs : Day (D) - Evening (E)
- Biomedical Equipment Technology
- Electronics Engineering Technology
- Electronics Technology\*
- Electronics Technology\*, Certificate
- Industrial Power & Control Technology
- Industrial Power & Control Technology, Certificate

\*Students interested in Electronics Technology should contact the program advisor at (206) 528-4588, or the Advising Center at (206) 934-3658 before enrolling. Courses and programs are transferable to certain four-year institutions.

TOTAL CREDITS: (SEE INDIVIDUAL PROGRAMS)

**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.

**PREREQUISITES**

For placement testing: contact Testing Center, 934-3674  
 To begin program, students must test into the English and Math courses listed below:

- BUS 169 Using Computers in Business . . . . .5  
*Following can be substituted:*  
 equivalent computer experience
- ENGL 097 English 097: Integrated Reading and Writing I . . . . .10  
*Following can be substituted:*  
 ENGL 098 College Prep Writing IV . . . . .5  
 -OR-  
 higher ENGL course
- MATH 084 Algebra I . . . . .5  
*Following can be substituted: higher MATH course*  
 -OR-  
 have taken equivalent or higher MATH course

**TECHNICAL SPECIALTY COURSES**

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

Electronics and associated technologies at North prepare students for careers in this diverse and expanding field. Ongoing changes in the electronics technology programs reflect changing community and industry needs. Instruction emphasizes a hands-on learning, the use of sophisticated test equipment unique to each discipline, and a solid base of electronics/electrical theory. These programs provide high-skill learning opportunities, including professional certification and Associate of Applied Science degree options. Also see the Sustainable & Conventional Energy & Control Technology program.

This certificate program prepares students for entry-level positions in aerospace-related technologies.

**PREREQUISITES**

For placement testing: contact Testing Center, 934-3674.  
 To begin program, students must test into the English and Math courses listed below:

- BUS 169 Using Computers in Business . . . . .5  
*Following can be substituted:*  
 equivalent computer experience
- ENGL 097 English 097: Integrated Reading and Writing I 10  
*Following can be substituted:*  
 ENGL 098 College Prep Writing IV . . . . .5  
 -OR-  
 higher ENGL course
- MATH 084 Algebra I . . . . .5  
*Following can be substituted: higher MATH course*  
 -OR-  
 have taken equivalent or higher MATH course

**TECHNICAL SPECIALTY COURSES**

- EET 105 Introduction to Technology . . . . .2
- EET 107 Introduction to Aviation Electronics . . . . .5
- EET 108 Introduction to Fiber Optics . . . . .5
- EET 109 Mathematical Applications for Circuit Analysis . .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
- BUS 236 Interpersonal Communications for the Workplace . . . . .5
- ENGL& 101 English Composition I . . . . .5  
*Following can be substituted:*  
 ENGL&230 Technical Writing . . . . .3  
 -OR-  
 ENGL&235 Technical Writing . . . . .5

TOTAL PROGRAM CREDITS 60 - 63



**GENERAL EDUCATION COURSES**

Air Washington is an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities. This workforce solution was funded \$20M (100%) by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use, by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.

**Avionics Technician Short-Term Certificate**

This certificate is designed to provide students with the basic knowledge, skills and abilities to meet minimum requirements for employment as an entry level avionics technician in aerospace-related technologies. This program is intended as a supplement for Aviation Maintenance Technicians.

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

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

**PREREQUISITES**

Successful completion of South Seattle College's AMT 112 - Basic Electricity for Aviation

-OR-

Approved equivalent

-OR-

FAA Airframe license

**TECHNICAL SPECIALTY COURSES**

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

**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 a hands-on learning, the use of sophisticated test equipment unique to each discipline, and a solid base of electronics/electrical theory. These programs provide high-skill learning opportunities, including professional certification and Associate of Applied Science degree options. Also see the Sustainable & Conventional Energy & Control Technology program. Students can take a short-term certificate in Green Energy. This certificate program prepares students for entry-level positions in the broadband cable TV industry.

**PREREQUISITES**

For placement testing: contact Testing Center, 934-3674.

To begin program, students must test into the English and Math courses listed below:

BUS 169	Using Computers in Business . . . . .	5
<i>Following can be substituted:</i>		
equivalent computer experience		
ENGL 097	English 097: Integrated Reading and Writing I . . . . .	10
<i>Following can be substituted:</i> higher ENGL course		
-OR-		
ENGL 098	College Prep Writing IV . . . . .	5
MATH 084	Algebra I . . . . .	5
<i>Following can be substituted:</i> 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
<i>Following can be substituted:</i>		
EET 161	D.C. Principles Of Electronics . . . . .	5

**RELATED INSTRUCTION**

BUS 236	Interpersonal Communications for the Workplace . . . . .	5
<i>Following can be substituted:</i>		
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
<b>TOTAL PROGRAM CREDITS</b>		<b>30</b>

**Electronics Engineering Technology  
Associate of Applied Science - T Degree (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 selected institutions such as Western Washington University or Central Washington University.

The program focuses on teaching practical engineering applications and skills, and provides a good foundation for those who wish to seek employment after the two-year program. Because of the complexity of course prerequisites and course sequences, students need advanced planning assistance with an advisor. Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

**PREREQUISITES**

For placement testing, contact Testing Center, 934-3674.

To begin program, students must test into the English and Math courses listed below:

BUS 169	Using Computers in Business . . . . .	5
	<i>Following can be substituted:</i>	
	equivalent computer experience	
ENGL 097	English 097: Integrated Reading and Writing I. .10	
	-OR-	
ENGL 098	College Prep Writing IV. . . . .	5
	higher ENGL course	
MATH 084	Algebra I . . . . .	5
	-OR-	
	have taken equivalent or higher MATH course	

**TECHNICAL SPECIALTY COURSES**

CSC 142	Computer Programming I . . . . .	5
	<i>Following can be substituted: any higher CSC course</i>	
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

TECHNICAL SPECIALTY CREDITS 70

**RELATED INSTRUCTION**

See Advising Center for list of designated courses for above requirements.

CMST& 210	Interpersonal Communication . . . . .	5
ENGL& 101	English Composition I . . . . .	5
	While students must test into ENGL 097 to start the degree, they must complete ENGL& 101 to finish	
ENGL& 230	Technical Writing. . . . .	3
MATH& 142	Precalculus II . . . . .	5
MATH& 151	Calculus I. . . . .	5
MATH& 152	Calculus II . . . . .	5
Global Studies	. . . . .	5

*Following can be substituted: U.S. Cultures credits*

Human Relations Elective. . . . . 5

**TECHNICAL ELECTIVES**

Select five credits from approved list. See Advising Center.

REQUIRED TECHNICAL ELECTIVES	5
RELATED INSTRUCTION CREDITS	10
<b>TOTAL PROGRAM CREDITS</b>	<b>110-112</b>

**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, 934-3674

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	
	<i>Following can be substituted: higher ENGL course</i>	
	-OR-	
ENGL 098	College Prep Writing IV	
MATH 084	Algebra I . . . . .	5
	<i>Following can be substituted: higher MATH course</i>	
	-OR-	
	have taken equivalent or higher MATH course	

**TECHNICAL SPECIALTY COURSES**

EET 105 Introduction to Technology . . . . .2  
 EET 107 Introduction to Aviation Electronics. . . . .5  
 EET 108 Introduction to Fiber Optics . . . . .5  
 EET 131 IT Essentials I - A+ Certification . . . . .5  
 EET 132 IT Essentials A+ Certification Advanced . . . . .5

*Following can be substituted:*

EET 135 Intro to Broadband . . . . .5  
 EET 137 Introduction to Robotics . . . . .5  
 EET 161 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:*

MATH 141 Pre-Calculus I . . . . .5  
 -OR-

higher MATH course

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

*Following can be substituted:*

ENGL&230 Technical Writing . . . . .3  
 -OR-

ENGL&235 Technical Writing . . . . .5

**GENERAL EDUCATION COURSES - HUMAN RELATIONS ELECTIVES**

Choose from one of the following courses:

BUS 236 Interpersonal Communications for the Workplace (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

GENERAL EDUCATION - HUMAN RELATIONS ELECTIVES 5

TOTAL PROGRAM CREDITS 65-68

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

This program provides opportunities for students interested in the operation, maintenance and repair of a wide array of electronics equipment, creating a broad foundation in electronics training. Instruction emphasizes a hands-on approach, use of sophisticated test equipment, and a solid base of information concerning computer hardware and software for technical applications. This program offers job training directed toward immediate employment and future advancement with companies specializing in manufacturing or servicing all types of electronic equipment.

**PREREQUISITES**

For placement testing: contact Testing Center, 934-3674.

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 English 097: Integrated Reading and Writing I . . . . .10

*Following can be substituted:*

ENGL 098 College Prep Writing IV . . . . .5

-OR-

higher ENGL course

MATH 084 Algebra I . . . . .5

*Following can be substituted: higher MATH course*

**TECHNICAL SPECIALTY COURSES**

EET 105 Introduction to Technology . . . . .2  
 EET 106 Introduction to Soldering . . . . .1  
 EET 107 Introduction to Aviation Electronics. . . . .5  
 EET 108 Introduction to Fiber Optics . . . . .5  
 EET 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 135 Introduction to Broadband . . . . .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 & Plcs I . . . . .5  
 EET 171 Digital Electronics & Plcs II . . . . .5  
 EET 219 Metrology and Measurement Science . . . . .3

**RELATED INSTRUCTION**

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

While students must test into ENGL 097 to start the degree, they must complete ENGL& 101 to finish.

**RELATED INSTRUCTION - HUMAN RELATIONS ELECTIVES**

Choose from one of the following:

BUS	236	Interpersonal Communications for the Workplace (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

REQUIRED HUMAN RELATIONS ELECTIVE CREDITS 5

**RELATED INSTRUCTION - TECHNICAL ELECTIVES**

Any non-required course(s) from the following departments - EEL, EET, HVC, TDR, CSC, CHEM, ENGR, NANO 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
<i>Following can be substituted: higher IT course</i>			
MATH	116	Applications of Math to Management, Life & SSCI	. . . . .5
<i>Following can be substituted: higher MATH course</i>			

REQUIRED TECHNICAL ELECTIVES CREDITS 8-10

TOTAL PROGRAM CREDITS 108-111

**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, AC and DC rotating equipment, instrumentation and measurement, and system control principles. Sustainable and Conventional Energy and Control differs from Electronics in the scale and application of electrical, electronic and mechanical systems, and may be considered "Industrial Electronics."

**PREREQUISITES**

For placement testing contact Testing Center, 934-3674. 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
<i>Following can be substituted: equivalent computer experience</i>			
ENGL	097	Integrated Reading and Writing I.	. . . . .10
<i>Following can be substituted: higher ENGL course</i>			
ENGL	098	College Prep Writing IV.	. . . . .5
MATH	084	Algebra I	. . . . .5

*Following can be substituted: higher MATH course*

-OR-

have taken an equivalent or higher MATH course

**TECHNICAL SPECIALTY COURSES**

EEL	201	Energy Generation Conversion and Sustainability	. . . . .5
EEL	202	Industrial Motor Controls	. . . . .5
EEL	203	Industrial Motor Drives	. . . . .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

TECHNICAL SPECIALTY CREDITS 58

**RELATED INSTRUCTION**

BUS	236	Interpersonal Communications for the Workplace	. . . . .5
<i>Following can be substituted:</i>			
HUM	105	Intercultural Communication	. . . . .5
-OR-			
ISP	101	The Global Society.	. . . . .5
-OR-			
ISP	110	Introduction to Global Studies	. . . . .5
-OR-			
POLS	112	Contemporary World	. . . . .5
-OR-			
SOC&	101	Introduction to Sociology	. . . . .5
EET	109	Mathematical Applications for Circuit Analysis	. . . .5
<i>Following can be substituted: higher MATH course</i>			
MATH&	141	Precalculus	. . . . .5
ENGL&	101	English Composition I	. . . . .5
ENGL&	230	Technical Writing.	. . . . .3
<i>Following can be substituted:</i>			
ENGL&	235	Technical Writing	. . . . .5

RELATED INSTRUCTION CREDITS 13-15

TOTAL PROGRAM CREDITS 71-73

## Engineering Graphics & Design Technology

Workforce Instruction Division  
(206) 934-3730

### Advanced Design for Manufacturing Short-Term Certificate

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

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

#### TECHNICAL SPECIALTY COURSES

TDR	170	Introduction to Design for 3D Printing . . . . .	5
TDR	171	Introduction to SolidWorks. . . . .	5
TDR	172	Intermediate SolidWorks . . . . .	5
TDR	173	3D Printing. . . . .	5
TOTAL PROGRAM CREDITS			20

### Architecture Engineering Drafting Certificate

This certificate prepares students for the growing number of entry-level jobs in engineering, construction, and architectural firms. Our laboratory is equipped with industry standard computer-aided design (CAD) systems to provide state-of-the-art graphics training. Coursework includes instruction and hands on training in computer and conventional drafting, construction materials and processes, basic engineering mechanics, and architectural cost estimating.

#### PREREQUISITES

Placement into ENGL 97/ENGL 98 or higher, placement into MATH 084 or higher, and completion of BUS 169 or IT 101.

#### TECHNICAL SPECIALTY COURSES

TDR	111	Basic CAD Drafting for Construction and Design . . . . .	5
TDR	112	Intermediate CAD Drafting for 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	144	Design and Construction Environment . . . . .	5
TDR	176	Advanced AutoCAD for Architectural Engineering Drafting . . . . .	4
TECHNICAL SPECIALTY CREDITS			34

#### GENERAL EDUCATION

BUS	236	Interpersonal Communications for the Workplace . . . . .	5
EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
-OR-			
MATH	102	College Algebra . . . . .	5
ENGL&	101	Composition . . . . .	5
GENERAL EDUCATION CREDITS			15
TOTAL PROGRAM CREDITS			49

### Architecture Engineering Drafting Associate 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 and Construction . . . . .	5
TDR	102	Advanced BIM for Design & Construction . . . . .	5
TDR	109	Architectural Engineering Lab. . . . . (110 total lab hours, repeated for 5 quarters)	5
TDR	111	Basic CAD Drafting for Construction & Design . . . . .	5
TDR	112	Intermediate CAD Drafting for Construction & Design. . . . .	5
TDR	113	Basic Drafting . . . . .	5
TDR	124	Materials and Methods of Construction . . . . .	5
TDR	134	Systems in Buildings. . . . .	5
TDR	144	Design and Construction Environments. . . . .	5
TDR	160	Applied Mechanics I . . . . .	5
TDR	161	Applied Mechanics II. . . . .	5
TDR	269	Construction Estimating . . . . .	5
TECHNICAL SPECIALTY CREDITS			65

#### GENERAL EDUCATION INSTRUCTION

ENGL&	101	Composition. . . . .	5
ENGL&	230	Technical Writing. . . . .	3
EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
-OR-			
MATH&	141	Pre-Calculus I . . . . .	5
BUS	169	Using Computers in Business . . . . .	5
-OR-			
IT	101	Software Applications . . . . .	5
-OR-			
CSC	111	Computers for Math and Science . . . . .	5
BUS	236	Interpersonal Communications for the Workplace . . . . .	5
Elective	5 credits must be selected from a list of approved U.S. Cultures or Global Studies courses. . . . .		
GENERAL EDUCATION CREDITS			28
TOTAL PROGRAM CREDITS			93

**Building Information Modeling (BIM)**

**Short-Term Certificate**

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

**TECHNICAL SPECIALTY COURSES**

TDR	100	Basic BIM for Design and Construction . . . . .	5
TDR	101	Intermediate BIM for Design and Construction . . . . .	5
TDR	102	Advanced BIM for Design and Construction . . . . .	5
TDR	103	Energy Analysis Fr 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. Course work includes instruction and hands-on training in basic engineering, architectural, and drafting practices.

**TECHNICAL SPECIALTY COURSES**

TDR	111	Basic CAD Drafting for Construction and Design . . . . .	5
TDR	112	Intermediate Drafting for Construction and Design . . . . .	5
TDR	176	Advanced AutoCAD for Arch & Engineering Drafting . . . . .	4
TOTAL PROGRAM CREDITS			14

**Fine Arts in Acting (Drama)**

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

**Certificate**

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

Candidates for the Certificate in Fine Arts in Acting (C.F.A.) must have successfully completed 90 quarter hours in college transfer-level (numbered 100 and above) courses with a GPA of 2.0 or better. At least 30 credits must be earned at North Seattle College and the final quarter of enrollment must be at NSC.

The Certificate in Fine Arts: Acting is not a transfer program, so students seeking a B.A. or B.F.A. in Drama should consult the degree requirements for the Associate of Arts degree at NSC and the graduation requirements for the university at which they intend to enroll. C.F.A. students in drama must have a drama advisor so that they can plan their two-year program. Students who wish to receive this certificate must submit a portfolio of work and/or a special performance during their final quarter for evaluation by the drama faculty. The specific courses are to be planned with the drama advisor who will also review and recommend final certification. Substitutions may be made only with the approval of the drama advisor and Humanities Associate Dean.

General Education requirements of 5 credits each are met by communication, computation and human relations courses.

**REQUIRED COURSES**

DRMA&101	Introduction to Theatre . . . . .	5
DRMA 121	Acting . . . . .	5
DRMA 122	Acting . . . . .	5
DRMA 123	Acting . . . . .	5
DRMA 221	Advanced Acting . . . . .	5
DRMA 222	Advanced Acting . . . . .	5
DRMA 223	Advanced Acting . . . . .	5
DRMA 298	Individual Projects in Theater . . . . .	5
REQUIRED COURSES CREDITS		40

**GENERAL EDUCATION COURSES**

All General Education credits should be completed by 4th quarter. Select credits from courses below:

ACCT 110	Introduction to Accounting/Bookkeeping I . . . . .	5
		Satisfies Computation Course Requirement.
BUS 116	Business Math/Spreadsheets . . . . .	5
		Satisfies Computation Course Requirement.
CMST&101	Introduction to Communication . . . . .	5
		Satisfies Communications Course Requirement.
CMST&220	Public Speaking . . . . .	5
		Satisfies Communications Course Requirement.
CMST&230	Small Group Communication . . . . .	5
		Satisfies Communications Course Requirement.
MATH&107	Math in Society . . . . .	5
		Satisfies Computation Course Requirement.
MATH 110	Applied Math for Technicians . . . . .	3
		Satisfies Computation Course Requirement.
PSYC&100	General Psychology . . . . .	5
		Satisfies Human Relations Course Requirement.
PSYC 245	Social Psychology . . . . .	5
		Satisfies Human Relations Course Requirement.
SOC 102	Introduction to American Culture . . . . .	5
		Satisfies Human Relations Course Requirement.
Communication . . . . .		5
Human Relations course . . . . .		5
Computation course . . . . .		5
GENERAL EDUCATION CREDITS		63

**ELECTIVES - DRAMA-RELATED**

Select 20 credits from courses listed below:

ART& 100	Art Appreciation . . . . .	5
ART 251	Art History . . . . .	5
ART 252	Survey of Western Art: Medieval-Renaissance . . . . .	5
ART 253	Survey of Western Art: Renaissance-Present . . . . .	5
DRMA 108	Rehearsal and Performance. . . . .	5
	Credit range: 2-5	
DRMA 109	Rehearsal and Performance. . . . .	5
	Credit range: 2-5	
DRMA 110	Rehearsal and Performance. . . . .	5
	Credit range: 2-5	
DRMA 116	Fundamentals of Acting for the Camera. . . . .	5
DRMA 200	Special Projects in Drama . . . . .	5
	Credit range: 1-5	
DRMA 201	Special Studies: Drama. . . . .	5
	Credit range: 1-5	
DRMA 202	Special Studies . . . . .	5
	Credit range: 1-5	
DRMA 271	Acting . . . . .	5
	Credit range: 1-5	
DRMA 272	Acting . . . . .	5
	Credit range: 1-5	
DRMA 273	Acting . . . . .	5
	Credit range: 1-5	
DRMA 291	Special Projects in Drama: Theatrical Internship . . . . .	5
	Credit range: 1-5	
DRMA 292	Special Projects in Drama: Theatrical Internship . . . . .	5
	Credit range: 1-5	
DRMA 298	Individual Projects in Theater . . . . .	5
	Credit range: 1-5	
ENGL& 112	Introduction to Fiction . . . . .	5
ENGL& 224	Shakespeare 1. . . . .	5
ENGL& 225	Shakespeare 2. . . . .	5
ENGL& 226	British Literature I. . . . .	5
ENGL& 227	British Literature II . . . . .	5
ENGL& 228	British Literature III . . . . .	5
ENGL& 244	American Literature I. . . . .	5
ENGL& 245	American Literature II . . . . .	5
ENGL& 246	American Literature III . . . . .	5
ENGL 258	Literature of American Cultures . . . . .	5
HUM 104	Visual Thinking. . . . .	5
HUM 110	Introduction to American Film. . . . .	5
HUM 200	Reading the Media . . . . .	5
MUSC 100	Music in the Western World . . . . .	5
MUSC 126	Beginning Group Piano - 1st Quarter . . . . .	2
MUSC 140	College Choir . . . . .	5
	Credit range: 1-5	

DRAMA-RELATED ELECTIVES CREDITS 20

**ELECTIVES - TECHNICAL THEATER**

Total of 15 credits to be taken for 2-5 credits each, in at least 3 different quarters. Students should arrange their credit needs before enrolling.

Select credits from courses listed below:

DRMA 211	Theater Management . . . . .	5
	Credit range: 1-5; Total required credits: 2-5	
DRMA 224	Production and Stage Management . . . . .	5
	Credit range: 1-5; Total required credits: 2-5	
DRMA 231	Props and Sound . . . . .	5
	Credit range: 1-5; Total required credits: 2-5	
DRMA 241	Costuming . . . . .	5
	Credit range: 1-5; Total required credits: 2-5	
DRMA 251	Stage Scenery . . . . .	5
	Credit range: 1-5; Total required credits: 2-5	
DRMA 261	Stage Lighting . . . . .	5
	Credit range: 1-5; Total required credits: 2-5	

TECHNICAL THEATER ELECTIVES CREDITS	15
TOTAL PROGRAM CREDITS	87-90

**Fine Arts in Art**

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

**Certificate**

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

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

The Certificate in Fine Arts: Art certifies completion of approved work and is suitable for students currently working in art, but it is not a transfer certificate. Students seeking a B.A. or B.F.A. should consult NSC Associate of Arts degree requirements and the graduation requirements of the university at which they intend to enroll. All C.F.A.: 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 C.F.A.: Art rests with the Art faculty.

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

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

**REQUIRED COURSES**

ART 101	Design	. . . . .5
ART 102	Design	. . . . .5
ART 111	Drawing	. . . . .5
ART 112	Drawing	. . . . .5
ART 113	Drawing	. . . . .5
ART 251	Art History	. . . . .5

Art history courses are taught at Seattle Central College or other college.

ART 252	Survey of Western Art: Medieval-Renaissance	. . .5
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Art history courses are taught at Seattle Central College or other college.

ART 253	Survey of Western Art: Renaissance-Present	. .5
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Art history courses are taught at Seattle Central College or other college.

ART 290	the Art Business	. . . . .5
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**GENERAL EDUCATION COURSES**

Total required Computation Course credits: 5

Select five credits from courses as noted below:

ACCT 110	Introduction to Accounting/Bookkeeping I	. . . .5
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*Following can be substituted:*

ACCT course higher than ACCT 110

BUS 116	Business Math/Spreadsheets	. . . . .5
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MATH& 107	Math in Society	. . . . .5
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*Following can be substituted:*

Math course higher than MATH& 107

**ART ELECTIVES**

Total required ART Electives credits: 35 minimum between

Group 1 and Group 2. ART Electives by group listed below:

ART& 100	Art Appreciation	. . . . .5
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ART 299	Special Problems in Art	. . . . .5
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up to 12 credits

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

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

ART 114	Introduction to Digital Photography I	. . . . .5
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ART 121	Introduction to Printmaking	. . . . .5
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ART 122	Introduction to Printmaking-Intermediate	. . . .5
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ART 123	Continuing Printmaking: Monotype and Monprint	5
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ART 201	Painting	. . . . .5
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ART 202	Painting	. . . . .5
ART 203	Painting	. . . . .5
ART 210	Digital & Graphic Art - Photoshop + Illustrator	.5
ART 214	Digital & Graphic Art - Intermediate	. . . . .5

GROUP 1 ELECTIVES CREDITS MINIMUM 15

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

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

ART 211	Sculpture	. . . . .5
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ART 212	Sculpture	. . . . .5
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ART 213	Sculpture	. . . . .5
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ART 221	Ceramic Art	. . . . .5
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ART 222	Ceramic Art	. . . . .5
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ART 223	Ceramic Art	. . . . .5
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ART 281	Jewelry Design I	. . . . .5
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ART 282	Jewelry Design II	. . . . .5
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ART 283	Introduction to Alloying and Jewelry Casting	. . .5
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ART 284	Bench Techniques and Practices	. . . . .5
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ART 285	Metal Techniques for Small Scale Sculpture	. .5
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GROUP 2 ELECTIVES CREDITS MINIMUM 15

TOTAL PROGRAM CREDITS 85 MINIMUM + PORTFOLIO

**HVAC**

Workforce Instruction Division  
(206) 934-3730

**HVAC Technician Certificate**

The HVAC program, in partnership with HVAC Learning Systems and Lennox, provides systems training in heating, ventilation, air-conditioning and refrigeration. The only one of its kind in the country available at a two-year college, North's HVAC program tailors skills to employer needs and can help students get an internship or entry-level job with career potential. Two certificate options and a degree are offered.

**PREREQUISITES**

Placement into ENGL 097 or ENGL 098 or higher, or equivalent  
Test into MATH 084 or higher, or have taken equivalent or higher level class.

**TECHNICAL SPECIALTY COURSES**

EET 160	Introduction to Electricity and Electronics	. . . .5
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HVC 101	Essentials of HVAC	. . . . .5
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HVC 210	HVAC Cooling Systems Installation	. . . . .5
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HVC 211	HVAC Systems Installation II	. . . . .5
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HVC 212	HVAC System Installation & Nate PREP	. . . .5
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HVC 220	Green HVAC	. . . . .3
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HVC 226	HVAC Electronics and Control Systems	. . . .5
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HVC 228	Energy Performance for the Field Technician	. .5
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**RELATED INSTRUCTION**

BUS 140	Customer Relations . . . . .	5
BUS 169	Using Computers in Business . . . . .	5
BUS 236	Interpersonal Communications for the Field Technician . . . . .	5
<b>TOTAL PROGRAM CREDITS</b>		<b>53</b>

**HVAC/Sustainable Building Engineering Technician Associate of Applied Science Degree (A.A.S.)**

Students completing the HVAC/Sustainable Building Engineering Technician degree will be qualified to work in multiple industries in the roles of designing, operating and inspecting HVAC systems. Additionally, students will be able to smoothly transition into the Sustainable Building Technologies B.A.S. Program at South Seattle College.

**PREREQUISITES:**

Placement into English 097/098 or higher or equivalent.  
Test into Math 098 or higher, or have taken an equivalent or higher level class.

*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
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**TECHNICAL SPECIALTY COURSES**

EET 160	Introduction to Electricity and Electronics . . . . .	5
ENGL& 235	Technical Writing. . . . .	5
ENVS 170	Energy and Resources - Now and Future . . . . .	5
HVC 101	Essentials of HVAC . . . . .	5
HVC 220	Green HVAC . . . . .	3
HVC 226	HVAC Electronics and Control Systems . . . . .	5
HVC 251	Load Estimation for HVAC Systems. . . . .	5
HVC 254	Sustainable Urbanism and Architecture . . . . .	5
HVC 258	Principles of Passive Building Design . . . . .	5
HVC 260	HVAC Airside Systems. . . . .	5
HVC 261	HVAC Hydronic Systems . . . . .	5
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 Fr Building Information Modeling . . . . .	4

<b>TECHNICAL SPECIALTY CREDITS</b>		<b>72</b>
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**RELATED INSTRUCTION**

BUS 236	Interpersonal Communications for the Workplace . . . . .	5
EET 109	Mathematical Applications for Circuit Analysis . . . . .	5
ENGL& 101	English Composition I . . . . .	5
ENVS& 100	Survey of Environmental Science . . . . .	5

*Following can be substituted:*

U.S. Cultures or Global Studies course . . . . .	5
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<b>RELATED INSTRUCTION CREDITS</b>	<b>20</b>
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<b>TOTAL PROGRAM CREDITS</b>	<b>92</b>
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**Tech & Project Management Associate of Applied Science - T Degree (A.A.S.-T)**

Graduates with this degree in Heating, Ventilation, and Air Conditioning (HVAC) Project Management are prepared to work as project managers in residential and light commercial settings. This degree is designed to provide all the skills needed to successfully compete for HVAC project manager at entry level positions or transfer those skills to a four-year institution.

**PREREQUISITES**

English: placement into ENGL 097 or ENGL 098 or higher; or equivalent.

Math: test into MATH 097 or MATH 098 or higher; or have taken equivalent or higher level class

**TECHNICAL SPECIALTY COURSES**

BUS 118	Project Management Introduction and Overview . . . . .	5
BUS 119	Leadership and Management Skills . . . . .	3
BUS 229	Project Management Tools Techniques and Control . . . . .	5
EET 160	Introduction to Electricity and Electronics . . . . .	5
ENGL& 230	Technical Writing. . . . .	3
HVC 101	Essentials of HVAC . . . . .	5
HVC 210	HVAC Cooling Systems Installation. . . . .	5
HVC 211	HVAC Systems Installation II . . . . .	5
HVC 212	HVAC System Installation & Nate PREP . . . . .	5
HVC 220	Green HVAC . . . . .	3

**RELATED INSTRUCTION**

CMST& 210	Interpersonal Communication . . . . .	5
EET 109	Mathematical Applications for Circuit Analysis . . . . .	5

*Following can be substituted:*

MATH&107 Math in Society. . . . .	5
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ENGL& 101	English Composition I . . . . .	5
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*Following can be substituted:*

ENGL&102 English Composition II . . . . .	5
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ENVS 150	Environmental Issues and Problems I . . . . .	5
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PHYS& 114	General Physics I with Lab . . . . .	5
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**ELECTIVES**

Electives (See advising for list of approved electives). . . . . 9

<b>TOTAL PROGRAM CREDITS</b>	<b>90</b>
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## Industrial Power and Control

Workforce Instruction Division  
(206) 934-3730

The Industrial Power & Control Program offers a one-year certificate in Sustainable and Conventional Energy and Control Technology and a two-year Associate of Applied Science degree in Industrial Power & Control Technology. This program prepares students for entry level employment in companies or government organizations that manufacture, service, sell, design or support electrical and electronic systems that control machinery, automation, and/or processes. Emphasis is placed on the control of large electrical currents and large electromechanical systems through solid state, digital, and microprocessor devices. The program involves in-depth study of industrial controls, fluid power, AC and DC rotating equipment, instrumentation and measurement, and system control principles. Sustainable and Conventional Energy and Control differs from Electronics in the scale and application of electrical, electronic and mechanical systems, and may be considered "Industrial Electronics."

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

#### PREREQUISITES

For placement testing: contact Testing Center, 934-3674

To begin program, students must test into the English and Math courses listed below:

BUS 169	Using Computers in Business . . . . .	5
	<i>Following can be substituted:</i>	
	equivalent computer experience	
ENGL 097	English 097: Integrated Reading and Writing I. .10	
	<i>Following can be substituted: higher ENGL course</i>	
	-OR-	
ENGL 098	College Prep Writing IV . . . . .	5
MATH 084	Algebra I . . . . .	5
	<i>Following can be substituted:</i>	
	have taken an equivalent or higher MATH course	

#### TECHNICAL SPECIALTY COURSES

EEL 201	Energy Generation Conversion and Sustainability .5	
EEL 202	Industrial Motor Controls . . . . .	5
EEL 203	Industrial Motor Drives . . . . .	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	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 & Plcs I . . . . .	5
EET 219	Metrology and Measurement Science . . . . .	3
<b>TECHNICAL SPECIALTY CREDITS</b>		<b>81</b>

#### RELATED INSTRUCTION

BUS 112	Multi-Cultural Issues in the American Workplace. .5	
	<i>Following can be substituted:</i>	
	Global Studies or U.S. Cultures designated course . . . .5	
	See Advising Center for approved list.	
BUS 236	Interpersonal Communications for the Workplace . . . . .	5
	<i>Following can be substituted:</i>	
	Choose one of the following Human Relations:	
	HUM 105, ISP 101 , ISP 110, POLS 112, SOC& 101	
EET 109	Mathematical Applications for Circuit Analysis . .5	
	<i>Following can be substituted: higher MATH course</i>	
	-OR-	
MATH 141	Pre-Calculus . . . . .	5
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
	<i>Following can be substituted: higher IT course</i>	
<b>RELATED INSTRUCTION CREDITS</b>		<b>30</b>
<b>TOTAL PROGRAM CREDITS</b>		<b>111</b>

## Information Technology

Workforce Instruction Division  
(206) 934-3730

### 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 IOS (Internet Operating System) and a simulation program called Packet Tracer.

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

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

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

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

**PREREQUISITES**

There are no formal program prerequisites, but students are strongly advised to have skills comparable to EET 131 (IT Essentials I/A+ Certification) and EET 132 (IT Essentials II/Advanced A+ Certification). Cisco 1 must be completed before enrolling in Cisco 2. Cisco 2 must be completed before enrolling in Cisco 3.

**TECHNICAL SPECIALTY COURSES**

IT	142	Network Management - Cisco I . . . . .	5
IT	144	Network Management - Cisco II . . . . .	5
IT	146	Network Management - Cisco III . . . . .	5
TOTAL PROGRAM CREDITS			15

**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 information technology related field.

The certificate prepares students for employment as electronic systems application or facilities engineers, security and field technicians, systems and sales consultants, technical support staff. Typical duties include installation, maintenance, and monitoring information technology systems and IT-controlled electronic systems such as security systems, entertainment systems, and HVAC systems.

**PREREQUISITES**

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

**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	160	Introduction to Electricity and Electronics . . . . .	5

*Following can be substituted:*

EET	161	D.C. Principles of Electronics . . . . .	5
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TECHNICAL SPECIALTY CREDITS			15
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**MICROSOFT TRACK**

IT	122	Network OS 1 - Windows Client OS . . . . .	5
IT	124	Network OS 2 - Windows Server . . . . .	5

MICROSOFT TRACK CREDITS			10
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**UNIX TRACK**

IT	135	Introduction to UNIX . . . . .	5
IT	138	UNIX for Network Administration . . . . .	5

UNIX TRACK CREDITS			10
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**CISCO TRACK**

IT	142	Network Management - Cisco I . . . . .	5
IT	144	Network Management - Cisco II . . . . .	5
IT	146	Network Management - Cisco III . . . . .	5

CISCO TRACK CREDITS			15
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**RELATED INSTRUCTION**

BUS	118	Project Management Introduction and Overview .5	
BUS	236	Interpersonal Communications for the Workplace . . . . .	5

RELATED INSTRUCTION CREDITS			10
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TOTAL PROGRAM CREDITS			35-40
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**Controlled Electronic Systems Associate of Applied Science Degree (A.A.S.)**

The IT Controlled Electronic Systems Associate of Applied Science degree is a 2-year degree focused on developing skills needed to install, maintain, and monitor information technology systems and IT-controlled electronic systems such as security, entertainment, and HVAC systems. Course work in electronics and computer networking is emphasized along with building the interpersonal skills necessary to work with customers and coworkers.

**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, 934-3674

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
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

TECHNICAL SPECIALTY CREDITS 70

**RELATED INSTRUCTION - GENERAL EDUCATION**

BUS	236	Interpersonal Communications for the Workplace . . . . .	5
EET	109	Mathematical Applications for Circuit Analysis . . . . .	5
ENGL&	101	English Composition I . . . . .	5

RELATED INSTRUCTION - GENERAL EDUCATION CREDITS 5

**RELATED INSTRUCTION - TECHNICAL ELECTIVES**

U.S. Cultures . . . . .	5
Global Studies . . . . .	5

RELATED INSTRUCTION - TECHNICAL ELECTIVES CREDITS 5

TOTAL PROGRAM CREDITS 90

**Network Administration Linux/UNIX Completion Short-Term Certificate**

This Certificate of Completion in Linux/UNIX administration is intended for students not already enrolled in a Network Administration 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.

Courses are intended to be taken in the order given. Credit may be awarded for specific work experience or formal training at other institutions.

**PREREQUISITES**

There are no formal program prerequisites as such; students are expected to possess the necessary training and experience to enable them to successfully complete this certificate. 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).

**TECHNICAL SPECIALTY COURSES**

IT	135	Introduction to UNIX . . . . .	5
IT	138	UNIX for Network Administration . . . . .	5
IT	140	UNIX Shell Scripts with Perl . . . . .	5

TOTAL PROGRAM CREDITS 15

**Network Administration Microsoft Windows Completion Short-Term 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. 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.

**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). Courses are intended to be taken in the order given. Students may take classes simultaneously with instructor's permission. Credit may be awarded for specific work experience or formal training at other institutions.

**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

TOTAL PROGRAM CREDITS 15

**Network and Server Administration Specialist Certificate**

The Information Technology program offers both a certificate and an Associate of Applied Science–T degree in Information Technology (A.A.S.-T). Satisfactory completion of the Network Infrastructure & Security Support Specialist program qualifies a student for the A.A.S.-T. The program trains entry-level network and infrastructure support technicians and administrators in specific computer networking skills and general troubleshooting of hardware and software related problems. Please see a college advisor about taking any courses other than those that have been identified.

Graduates of the Network Infrastructure & Security Support program find jobs as network technician, assistant network administrator, PC technician, workstation support technician, technical support technician or computer systems technician.

**PREREQUISITES**

EET	131	IT Essentials I - A+ Certification . . . . .	5
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*Following can be substituted:*

CompTIA A+ Certification for EET 131 & EET 132

**TECHNICAL SPECIALTY COURSES**

Other courses may be substituted for courses below with permission of Program Coordinator. See advising for list of approved courses.

IT	102	Introduction to Programming . . . . .	5
IT	122	Network OS 1 - Windows Client OS . . . . .	5
IT	126	Network OS 3 - Windows Network Infrastructure . . . . .	5
IT	128	Network OS 4 - Windows Active Directory . . . . .	5

IT 135	Introduction to UNIX . . . . .	5
<i>Following can be substituted:</i>		
IT 138	UNIX for Network Administration . . . . .	5
-OR-		
IT 140	Network Management - UNIX . . . . .	5
IT 142	Network Management - Cisco I . . . . .	5
IT 144	Network Management - Cisco II . . . . .	5
IT 146	Network Management - Cisco III . . . . .	5
TOTAL PROGRAM CREDITS		40

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

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

Graduates of the Network Infrastructure & Security Support program find jobs as network technician, assistant network administrator, PC technician, workstation support technician, technical support technician or computer systems technician.

**PREREQUISITES**

- English placement into ENGL&101
- Math placement into MATH 084 or MATH 097

**TECHNICAL SPECIALTY COURSES**

EET 131	IT Essentials I - A+ Certification . . . . .	5
<i>Following can be substituted:</i>		
CompTIA A+ Certification for EET 131 & EET 132 and two 5-credit technical courses		
EET 132	IT Essentials A+ Certification Advanced . . . . .	5
<i>Following can be substituted:</i>		
CompTIA A+ Certification for EET 131 & EET 132 and two 5-credit technical courses		
BUS 169	Using Computers in Business. . . . .	5
IT 102	Introduction to Programming . . . . .	5
<i>Following can be substituted:</i>		
CSC 110	Intro to Computer Programming . . . . .	5
IT 122	Network OS 1 - Windows Client OS . . . . .	5
IT 124	Network OS 2 - Windows Server . . . . .	5
IT 125	Network OS 3 - Windows Network Infrastructure . . . . .	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

IT 220	Desktop Management and Virtualization . . . . .	5
TECHNICAL SPECIALTY CREDITS		65
<b>GENERAL EDUCATION COURSES</b>		
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
<i>Following can be substituted: Global Studies course</i>		
Contact the division office for a list of approved courses.		
GENERAL EDUCATION CREDITS		20
<b>ELECTIVES</b>		
Technical Electives . . . . .		5
Contact the division office for a list of approved courses.		
ELECTIVES CREDITS		5
TOTAL PROGRAM CREDITS		90

**Programming and IT Network Support Associate of Applied Science - T Degree (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 to 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
<i>Following can be substituted:</i>		
BUS 169	Using Computers in Business I. . . . .	5
CSC 142	Computer Programming I . . . . .	5
IT 102	Introduction to Programming . . . . .	5
<i>Following can be substituted:</i>		
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:		
IT 109	Itil Foundation Certification Preparation . . . . .	1

IT	111	Internet and Web Authoring Using XHTML . . . . .	5
IT	122	Network OS 1 - Windows Client OS . . . . .	5
IT	125	Using Structured Query Language and SQL Server . . . . .	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

TECHNICAL SPECIALTY CREDITS 61

**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
MATH&	146	Introduction to Statistics . . . . .	5
U.S. Cultures		. . . . .	5

See Advising for assistance. Select course from list of approved courses. View list at: <http://seattlecolleges.edu/intranet/getdocument.aspx?siteID=289&doctype=pdf&docid=5235>

*Following can be substituted:* Global Studies course

Natural World - Lab Science		. . . . .	5
		See Advising for assistance. Select course from list of approved Natural World Lab Science courses. View list at: <a href="http://seattlecolleges.edu/intranet/getdocument.aspx?siteID=289&amp;doctype=pdf&amp;docid=5269">http://seattlecolleges.edu/intranet/getdocument.aspx?siteID=289&amp;doctype=pdf&amp;docid=5269</a>	

TOTAL PROGRAM CREDITS 91

**Internships**

**Internships / Cooperative Education (206) 934-3734**

Internships provide students with opportunities to earn college credit while gaining practical work experience in their field of study. The Internship program consists of Cooperative Work Experience classes CWE 101, 102, 110 and for B.A.S. CWE 494 and 495. For more information regarding the CWE series please contact the Internship office within the Workforce Instruction Division.

**Jewelry Design**

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

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

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

Final approval and recommendation to award the CJD rests with the ART faculty. The Certificate in Jewelry Design certifies completion of approved work, and is suitable for students currently working in Art, but it is not a transfer certificate.

Students seeking a B.A. or B.F.A. should consult 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 only offered once a year and students should consult their advisor and the annual schedule. Substitution may be made with the approval of the Art advisor and the Dean of Arts, Humanities & Social Sciences Division.

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

This certificate is a 4 quarter program that can be completed during the regular school year and in the following summer quarter.

**Certificate of Fine Arts, Jewelry Design**

**REQUIRED COURSES - JEWELRY DESIGN**

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

**REQUIRED COURSES - ART**

ART	101	Design. . . . .	5
ART	111	Drawing . . . . .	5
ART	210	Digital & Graphic Art - Photoshop + Illustrator . . . . .	5
ART	251	Art History . . . . .	5

*Following can be substituted:*

ART 252 Art History . . . . .	5
-OR-	
ART 253 Art History . . . . .	5
Art history courses are taught at Seattle Central or other colleges.	
ART 290 the Art Business. . . . .	5

**GENERAL EDUCATION COURSES**

Total required Communication course credits: 5  
 Met by ART 251 (or ART 252 or ART 253 ) above  
 Total required Human Relations course credits: 5  
 Total required Computation Course credits: 5  
 Select credits from notated courses below:

ACCT 110 Introduction to Accounting/Bookkeeping I . . . . .	5
<i>Following can be substituted:</i>	
ACCT course higher than ACCT 110	
This course will satisfy Computation Course Requirement.	
CMST& 210 Interpersonal Communication . . . . .	5
This course will satisfy the Human Relations Course Requirement.	
CMST& 230 Small Group Communication . . . . .	5
This course will satisfy the Human Relations Course Requirement.	
<b>TOTAL PROGRAM CREDITS</b>	<b>60</b>

**Medical Assisting**

**Workforce Instruction Division**  
 (206) 934-3790

The Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)), upon the recommendation of the Medical Assisting 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 has cohorts that begin in the Fall and Spring. Classes offered are online, face-to-face and hybrid. Scheduled labs and lectures are during the week Monday – Thursday. We are a competency based program with hands on labs where the student works in a group setting or one on one with another student. Class size makes it possible to get one-on-one attention from the instructor as needed.

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, program costs such as background checks, a \$35 application fee and an immunization registry that is online.

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

**Certificate**

**PREREQUISITES**

Prerequisite courses must be taken within the last ten years.

AHE 103 Math for Health Careers . . . . .	3
ENGL& 101 English Composition I . . . . .	5

**TECHNICAL SPECIALTY COURSES**

AMA 100 Introduction to Healthcare and Critical Thinking 5	
AMA 101 Intercultural Communication in Patient Care . . . 3	
AMA 102 Medical Law and Ethics . . . . .	2
AMA 117 Medical Terminology . . . . .	4
AMA 118 Disease and Pathology for Medical Assistants . . 5	
AMA 119 Anatomy and Physiology for Medical Assistants . 5	
AMA 120 Front Office Basics . . . . .	4
AMA 125 Introduction to Medical Insurance and Coding . . 5	
AMA 140 Patient Care . . . . .	5
AMA 230 Medical Office Management . . . . .	3
AMA 231 Pharmacology . . . . .	3
AMA 232 Sterile Procedures . . . . .	4
AMA 233 Diagnostic Procedures . . . . .	4
AMA 234 Phlebotomy for the Medical Assistant . . . . .	3
AMA 235 Urinalysis, Microbiology, and Chemistry. . . . .	4
AMA 236 Credentials & Employment . . . . .	2
AMA 250 Medication Administration . . . . .	5
AMA 290 Externship & CMA Review . . . . .	9
NUTR& 101 Nutrition . . . . .	5
PSYC& 100 General Psychology. . . . .	5

<b>TOTAL PROGRAM CREDITS</b>	<b>85</b>
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**Medical Assisting**

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

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

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

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, program costs such as background checks, a \$35.00 application fee and an immunization registry that is online.

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

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

**PREREQUISITES**

Prerequisite courses must be taken within the last ten years.

AHE 103 Math for Health Careers . . . . .3  
 ENGL& 101 English Composition I . . . . .5

**TECHNICAL SPECIALTY COURSES**

AMA 100 Introduction to Healthcare and Critical Thinking 5  
 AMA 101 Intercultural Communication in Patient Care . .3  
 AMA 102 Medical Law and Ethics . . . . .2  
 AMA 117 Medical Terminology . . . . .4  
 AMA 118 Disease and Pathology for Medical Assistants . 5  
 AMA 119 Anatomy and Physiology for Medical Assistants .5  
 AMA 120 Front Office Basics . . . . .4  
 AMA 125 Introduction to Medical Insurance and Coding . .5  
 AMA 140 Patient Care . . . . .5  
 AMA 230 Medical Office Management . . . . .3  
 AMA 231 Pharmacology . . . . .3  
 AMA 232 Sterile Procedures . . . . .4  
 AMA 233 Diagnostic Procedures . . . . .4  
 AMA 234 Phlebotomy for the Medical Assistant . . . . .3  
 AMA 235 Urinalysis, Microbiology, and Chemistry. . . . .4  
 AMA 236 Credentials & Employment . . . . .2  
 AMA 250 Medication Administration . . . . .5  
 AMA 290 Externship & CMA Review . . . . .9  
 NUTR& 101 Nutrition . . . . .5  
 PSYC& 100 General Psychology. . . . .5

TECHNICAL SPECIALTY CREDITS 85

**RELATED INSTRUCTION**

ENGL& 101 English Composition I . . . . .5  
 U.S. Cultures . . . . .5  
     *Following can be substituted: Global Studies . . . . .5*  
     <http://seattlecolleges.edu/intranet/getdocument.aspx?siteID=289&doctype=pdf&docid=5235>  
 Human Relations Elective. . . . .5  
 College Level MATH course. . . . .5  
     This course meets the Quantitative Skills Requirement.

RELATED INSTRUCTION CREDITS 20

TOTAL PROGRAM CREDITS 105

**Medical Office Administration Certificate**

An option of the Medical Assisting program, this program is intended to prepare the student for work in the administrative, clerical and management areas of an ambulatory care setting. It covers anatomy and physiology, terminology, pathology, safety, communication, professionalism and job search skills to enhance understanding in the clinic/ office. No hands-on patient care tasks or procedures are included. This is an open-entry/open-exit, self-paced, variable-length program. Students will have additional expenses other than the fees charged by the college. A separate list is available from the Medical Assisting program coordinator.

**PREREQUISITES**

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

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

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

AHE 103 Math for Health Careers . . . . .3  
 ENGL& 101 English Composition I . . . . .5

*Following can be substituted:*

ENGL&230 Technical Writing . . . . .3  
 -OR-  
 AHE 100 Critical Thinking and Communications for Healthcare . . . . .5

**TECHNICAL SPECIALTY COURSES**

AHM 124 Introduction to Medical Transcription . . . . .1  
 AMA 100 Introduction to Healthcare . . . . .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 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
AMA	226	Medical Insurance Coding	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 Workplace	.5
A non-modular (not self-study) course required for the program.			

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

## Nanotechnology

Math and Science Division  
(206) 934-3746

Nanotechnology applies scientific and engineering principles to make new materials and observe structures by controlling matter on the nanoscale—the scale of atoms—one billionth of a meter. Cross-disciplinary in nature, the Nanotechnology program prepares you to work in the micro- or nanotechnology industries, including cleanroom environments, in a variety of fields ranging from cosmetics to aeronautics, electronics to water filtration.

### Nanotechnology Certificate

This year-long certificate is intended for people who already have work or academic experience in microelectronics, biotechnology, optics or similar technical fields. Through this program, students will become familiar with the field of nanoscience and proficient in nanotechnological protocols. Potential students who do not meet the prerequisites for this certificate, please see the A.A.S.-T degree in nanotechnology.

**PREREQUISITES**

Two quarters of college-level physics, all with a minimum GPA of 2.0

Either of the following chemistry sequences, all with a minimum GPA of 2.0

- CHEM& 121 and CHEM& 131
- CHEM& 161, CHEM& 162 and CHEM& 163

**TECHNICAL SPECIALTY COURSES**

BUS	210	Business and Economic Statistics	.5
CWE	101	Portfolio, Job Search and Interviewing	.2
CWE	110	Internship	.3
MSC	101	Introduction to Materials Science	.5
NANO	101	Introduction to Nanotechnology	.5
NANO	220	Micro/Nanofabrication	.5
NANO	230	Nano/Micro Characterization Packaging & Testing	.5
NANO	250	Capstone/Practicum II	.5
TOTAL PROGRAM CREDITS			35

## Nanotechnology

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

This two-year program prepares graduates for entry level technician positions in the nano/micro-fabrication industry and related manufacturing industries. This is a cross-disciplinary program combining elements of material science, chemistry, biology, physics, engineering and electronics. The multi-disciplinary design of this program will provide graduates with the skills to enter a wide range of materials-based industries.

**PREREQUISITES**

ENGLISH: must test into ENGL 099 or higher

MATH: must test into MATH 098 or higher

**TECHNICAL SPECIALTY COURSES**

BIOL&	211	Majors Cellular	.5
<i>Following can be substituted:</i>			
BIOL&	160	General Biology with Lab	.5
BUS	210	Business and Economic Statistics	.5
CHEM&	121	Intro to Chemistry	.5
CHEM&	131	Intro to Organic Chemistry and Biochemistry	.5
CSC	110	Introduction to Computer Programming	.5
<i>Following can be substituted:</i>			
CSC	111	Computers for Math and Science	.5
CWE	101	Portfolio, Job Search and Interviewing	.2
CWE	110	Internship	.3
EET	160	Introduction to Electricity and Electronics	.5
MSC	101	Introduction to Materials Science	.5
NANO	101	Introduction to Nanotechnology	.5
NANO	220	Micro/Nanofabrication	.5
NANO	230	Nano/Micro Characterization Packaging & Testing	.5
NANO	250	Capstone/Practicum II	.5
PHYS&	114	General Physics I with Lab	.5
PHYS&	115	General Physics II with Lab	.5
<i>Following can be substituted:</i>			
PHYS&	116	General Physics III	.5

**TECHNICAL ELECTIVES**

Select one of the following:

BIOL	161	Human Genetics . . . . .	5
CSC	142	Computer Programming I . . . . .	5
EET	137	Introduction to Robotics . . . . .	5
ENVS	170	Energy and Resources - Now and Future . . . . .	5
ENVS&	100	Survey of Environmental Science . . . . .	5
PHYS&	115	General Physics II with Lab . . . . .	5
		If NOT taken as required course	
PHYS&	116	General Physics III with Lab . . . . .	5
		If NOT taken as required course	
TDR	111	Basic CAD Drafting for Construction and Design	5

TECHNICAL ELECTIVES CREDITS 5

**RELATED INSTRUCTION**

ENGL&	101	English Composition I . . . . .	5
MATH&	141	Precalculus I . . . . .	5
		<i>Following can be substituted:</i>	
MATH&	142	Precalculus II . . . . .	5
		-OR-	
MATH&	151	Calculus I . . . . .	5
U.S. Cultures		. . . . .	5

*Following can be substituted: Global Studies Elective . . . . .* 5

Human Relations Electives (see section below) . . . . . 5

RELATED INSTRUCTION CREDITS 20

**RELATED INSTRUCTION - HUMAN RELATIONS ELECTIVE**

Select one of the courses:

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

RELATED INSTRUCTION - HUMAN RELATIONS CREDITS 5

TOTAL PROGRAM CREDITS 95

**Nursing**

Nursing Division  
(206) 934-3790

**Nursing Associate of Applied Science - T Degree (A.A.S.-T)**

North Seattle College's LPN-to-RN Ladder program provides an option for LPNs to complete coursework for a three-quarter RN program that will make them eligible to take the Registered Nurse (RN) state boards.

Successful completion of the program earns an Associate of Applied Science–T Degree of Nursing. Students must first successfully complete an LPN certificate program and the general education and related instruction requirements.

Minimum of 35 credits from an accredited Practical Nursing program.

**RELATED INSTRUCTION - PREREQUISITES**

A 2.8 grade or higher is required in all general education and related instruction prerequisite and corequisite requirements.

BIOL&	241	Human Anatomy and Physiology 1 . . . . .	5
		Must be taken within 7 years of application date.	
BIOL&	242	Human Anatomy and Physiology 2 . . . . .	5
		Must be taken within 7 years of application date.	
BIOL&	260	Microbiology. . . . .	5
		Must be taken within 7 years of application date.	
CHEM&	121	Intro to Chemistry. . . . .	5
ENGL&	101	English Composition I . . . . .	5
PSYC&	200	Lifespan Psychology . . . . .	5

**RELATED INSTRUCTION - COREQUISITES**

Corequisites may be taken while in the Nursing Program however, all corequisites must be completed before eligibility for the A.A.S.-T Degree in Nursing and RN NCLEX needed for an RN license.

MATH&	146	Introduction to Statistics . . . . .	5
NUTR&	101	Nutrition . . . . .	5
U.S. Cultures		. . . . .	5

*Following can be substituted: Global Studies . . . . .* 5

**TECHNICAL SPECIALTY COURSES**

NUR	223	Advanced Nursing Skills . . . . .	2
NUR	224	Health Promotion and Education in Nursing. . . . .	2
NUR	225	Family Nursing . . . . .	6
NUR	226	Care Management and Leadership. . . . .	2
NUR	227	Complex Medical Surgical Psychiatric Nursing	7
NUR	228	Complex Nurg Medical Surgical Psychiatric Clinic . . . . .	5
NUR	231	Family Nursing Clinical . . . . .	4
NUR	237	Advanced Medical Surgical Nursing Care. . . . .	3
NUR	238	Transition to Registered Nursing Practice . . . . .	5

TOTAL PROGRAM CREDITS 116

**Nursing Assistant Short-Term Certificate**

The Nursing Assistant-Certified Program provides instruction in basic nursing care skills and nursing assistant scope of care including HIV/AIDS, 72 hours of supervised clinical training in a long-term care facility and CPR/First Aid for the Healthcare Provider. After successful completion of the Nursing Assistant-Certified Program, students are eligible to sit for the State of Washington NAC exam for certification as a Nursing Assistant.

**TECHNICAL SPECIALTY COURSES**

NTR	105	Introduction to Food Science . . . . .	5
NUR	107	Nursing Assistant - Theory & Concepts . . . . .	8

TOTAL PROGRAM CREDITS 14

**Nursing, Practical**

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

Candidates for the Practical Nursing certificate must meet specific course requirements established by the Washington State Board for Practical Nurse Examiners. The four-quarter program prepares graduates for practical nursing careers in acute care, long-term care and out-patient services.

The first quarter is devoted to classroom and laboratory studies emphasizing nursing skills, general medical knowledge and behavior. The remaining program includes extensive clinical experience in health care agencies.

New daytime classes begin in Fall and Spring Quarters. Contact the division office for entry requirements, information on approval procedures, the application process and the schedule for orientation/advising sessions.

Completion of Certificate Requirements: 44 credits

**TECHNICAL SPECIALTY COURSES**

NUR 100	Modified Fundamentals of Care	1
NUR 115	Introduction to Patient Care	2
NUR 116	Nursing Fundamentals	6
NUR 117	Nursing Fundamentals Lab	2
NUR 118	Clinical Nursing Skills I	2
NUR 119	Clinical Nursing Skills II	1
NUR 126	Role of the LPN	3
NUR 127	Medical/Surgical Nursing - Child/Adult I	6.5
NUR 128	Medical/Surgical Nursing - Child/Adult II	6
NUR 130	Critical Thinking in Nursing Practice	2
NUR 131	Clinical Nursing Practice I	3.5
NUR 133	Family Nursing Theory	1.5
NUR 134	Family Nursing Clinical	1.5
NUR 139	Transition to LPN Practice	4
NUR 141	Clinical Nursing Practice II	2
NUR 154	Intravenous Therapy Skills	1

**ELECTIVES**

Natural World, the	5
U.S. Cultures	5
Communication	5
General Education Elective	21
Computation Elective	5
Human Relations Elective	5
<b>TOTAL REQUIRED ELECTIVE CREDITS</b>	<b>46</b>
<b>TOTAL PROGRAM CREDITS</b>	<b>90</b>

**Nursing, Practical Certificate**

Candidates for the Practical Nursing certificate must meet specific course requirements established by the Washington State Board for Practical Nurse Examiners. The four quarter program prepares graduates for practical nursing careers in acute care, long-term care and out-patient services through classroom, laboratory and clinical studies. Emphasis is placed on nursing skills, general medical knowledge and behavior in various health care agencies.

New daytime classes currently begin in Fall and Winter Quarters. Contact the division office for entry requirements, information on approval procedures, the application process and the schedule for the required information session.

**PREREQUISITES : REQUIRED**

Successful completion of an approved Nursing Assistant program.  
 Math requirement: Compass test placement into MATH& 107 - Math in Society or higher within 2 years of application date or transcript showing successful completion of MATH 098 - Intermediate Algebra within 7 years of application date. Math requirement must be taken within 7 years of application date.  
 All prerequisites must be completed with a 2.8 grade.

Total Prerequisites: 30 credits

BIOL& 241	Human Anatomy and Physiology 1	5	Prerequisite: BIOL& 160 - General Biology or CHEM& 121 - Intro into Chemistry Must be taken within 7 years of application date.
BIOL& 242	Human Anatomy and Physiology 2	5	Must be taken within 7 years of application date.
BIOL& 260	Microbiology	5	Must be taken within 7 years of application date.
CHEM&121	Intro to Chemistry	5	
ENGL& 101	English Composition I	5	
PSYC& 200	Lifespan Psychology	5	Prerequisite: PSYC& 100 - General Psychology

**PREREQUISITES: STRONGLY RECOMMENDED**

AHE 103	Math for Health Careers	3
AHI 100	Introduction to Medical Vocabulary	3

**PREREQUISITES: A.A.S.-T DEGREE IN NURSING**

The following additional courses are required only for progression to the A.A.S.-T Degree in Nursing:

US Cultures and Global Studies	5	
MATH& 146	Introduction to Statistics	5
NUTR& 101	Nutrition	5

**TECHNICAL SPECIALTY COURSES**

NUR 115	Introduction to Patient Care	2
NUR 116	Nursing Fundamentals	6
NUR 117	Nursing Fundamentals Lab	2
NUR 118	Clinical Nursing Skills I	2
NUR 119	Clinical Nursing Skills II	1
NUR 126	Role of the LPN	3
NUR 127	Medical/Surgical Nursing - Child/Adult I	6.5
NUR 128	Medical/Surgical Nursing - Child/Adult II	6

NUR	130	Critical Thinking in Nursing Practice . . . . .	.2
NUR	131	Clinical Nursing Practice I . . . . .	3.5
NUR	133	Family Nursing Theory . . . . .	1.5
NUR	134	Family Nursing Clinical . . . . .	1.5
NUR	139	Transition to LPN Practice . . . . .	.4
NUR	141	Clinical Nursing Practice II . . . . .	.2
NUR	154	Intravenous Therapy Skills . . . . .	.1
<b>TOTAL PROGRAM CREDITS</b>			<b>44</b>

## Parent Education

**Workforce Instruction Division**  
(206) 934-3783

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

## Pharmacy Technician

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

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

*Note:* Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement. To complete the program a 2.0 grade or higher is required in all courses.

## Pharmacy Technician Certificate

### PREREQUISITES

- College transcript showing successful completion of ENGL 097/098 with final placement into ENGL& 101 or placement into ENGL& 101 within the 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.
- College classes must be taken with 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 in externship
  - HIV/AIDS education minimum of four hours per State Pharmacy Quality Assurance Commission requirements
  - Active Washington State Pharmacy Assistant License/Registration

### TECHNICAL SPECIALTY COURSES

AMA	117	Medical Terminology* . . . . .	.4
PHA	112	Pharmacy Law . . . . .	.2
PHA	115	Orientation to Pharmacy Practice . . . . .	.3
PHA	120	Pharmacy Calculations* . . . . .	.3
PHA	130	Over the Counter Drugs . . . . .	.2
PHA	140	Sterile Products/Aseptic Technique I* . . . . .	.3
PHA	141	Sterile Products/Aseptic Technique II* . . . . .	.3
PHA	145	Pharmacy Ethics* . . . . .	.1
PHA	146	Communications in Pharmacy Practice* . . . . .	.2
PHA	150	Pharmacology I . . . . .	.3
PHA	151	Pharmacology II . . . . .	.2
PHA	160	Pharmacy Technology I* . . . . .	.3
PHA	161	Pharmacy Technology II* . . . . .	.3
PHA	170	Pharmacy Records Management* . . . . .	.5
PHA	190	Pharmacy Technology Externship** . . . . .	.13
PHA	191	Job Skills and National Exam Preparation . . . . .	.1
<b>TOTAL PROGRAM CREDITS</b>			<b>53</b>

*\*Courses marked with one asterisk (\*) contain significant program related topics in the areas of communication, computation, human relations, and leadership.*

*\*\*PHA 190: The Pharmacy Technician externship is usually split over a two-quarter time frame. A minimum of 13 credits, approximate 432 externship hours, must be completed satisfactorily for certification.*

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

*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.

### Certificate

#### PREREQUISITES

- College transcript showing successful completion of ENGL 097/098 with final placement into ENGL& 101 or placement into ENGL& 101 within the 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.
- College classes must be taken with 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 in externship
  - HIV/AIDS education minimum of four hours per State Pharmacy Quality Assurance Commission requirements
  - Active Washington State Pharmacy Assistant License/Registration

#### TECHNICAL SPECIALTY COURSES

AMA	127	Medical Terminology*	4
PHA	112	Pharmacy Law	2
PHA	115	Orientation to Pharmacy Practice	3
PHA	120	Pharmacy Calculations*	3
PHA	130	Over the Counter Drugs	2
PHA	140	Sterile Products/Aseptic Technique I*	3
PHA	141	Sterile Products/Aseptic Technique II*	3
PHA	145	Pharmacy Ethics*	1
PHA	146	Communications in Pharmacy Practice*	2
PHA	150	Pharmacology I	3
PHA	151	Pharmacology II	2
PHA	160	Pharmacy Technology I*	3

PHA	161	Pharmacy Technology II*	3
PHA	170	Pharmacy Records Management*	5
PHA	190	Pharmacy Technician Externship	13
PHA	191	Job Skills and National Exam Preparation	1

TECHNICAL SPECIALTY CREDITS	94
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*\*Courses marked with one asterisk (\*) contain significant program related topics in the areas of communication, computation, human relations, and leadership.*

*\*\*PHA 190: The Pharmacy Technician externship is usually split over a two-quarter time frame. A minimum of 13 credits, approximate 432 externship hours, must be completed satisfactorily for certification.*

#### GENERAL EDUCATION COURSES

Human Relations from approved list	5
Communication Elective from approved list	5
Computation Elective from approved list	5
Natural World Elective from approved list	5
General Electives credits at 100 level and above	16
U.S. Cultures or Global Studies Elective from approved list	5

GENERAL EDUCATION CREDITS	41
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TOTAL PROGRAM CREDITS	94
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## Phlebotomist

### Phlebotomist Short-Term Certificate

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

#### PREREQUISITES

- Instructor Permission Required
- CASAS (Comprehensive Adult Student Assessment Systems) Reading and Listening minimum scores of 215 or COMPASS English Placement Test minimum score of 40.
- Concurrent enrollment in ABE 049 or ESL 059 required, except with placement into ENGL& 101 or completion thereof.

#### TECHNICAL SPECIALTY COURSES

AHE	118	Introduction to Phlebotomy I	5
AHE	119	Introduction to Phlebotomy II	7

TOTAL PROGRAM CREDITS	12
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## Real Estate

Workforce Instruction Division  
(206) 934-3730

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

### Commercial Real Estate 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 AAS degree program. The program provides the skills and educational clock hours necessary to satisfy Washington State Department of Licensing and industry and continuing education requirements. Students learn from industry experts in settings emphasizing experiential learning.

#### TECHNICAL SPECIALTY COURSES

RES 141	Land Use Principles and Practice . . . . .	3
RES 217	Real Estate Development and Sustainability . . . . .	3
RES 260	Real Estate Finance-Commercial . . . . .	2
RES 290	Commercial Sales and Leasing . . . . .	3

*Following can be substituted:*

RES 110	Introduction to Commercial Real Estate. . . . .	3
-OR-		
RES 140	Real Estate Sales Practices . . . . .	3
RES 295	Commercial Real Estate Investment Analysis . . . . .	2

#### ELECTIVES

Choose credits from the approved list below:

RES 101	Technology for Real Estate. . . . .	5
RES 110	Introduction to Commercial Real Estate . . . . .	3
	Students are required to take this elective if they have NOT already completed an equivalent course or do NOT have a real estate license or have 2 years of commercial real estate experience. If course fulfills the above course requirement, then it cannot also count as an approved elective.	
RES 140	Real Estate Sales and Practice . . . . .	3
	Students are required to take this elective if they have NOT already completed an equivalent course or do NOT have a real estate license or have 2 years of commercial real estate experience. If course fulfills the above course requirement, then it cannot also count as an approved elective.	

Electives required . . . . .	3
Choose at least 3 credits from approved list. See Advising Center.	

TOTAL PROGRAM CREDITS	16-18
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All of the above courses also apply toward the Real Estate Associate of Applied Science Degree and the Commercial Real Estate and Investment Certificate.

The Department of Licensing (DOL) of the State of Washington requires the successful completion of RES 100 and RES 140 before taking the real estate broker license exam. Also, DOL requires completion of RES 290 before the first license renewal.

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

### Commercial Real Estate and Investment Certificate

#### TECHNICAL SPECIALTY COURSES

RES 110	Introduction to Commercial Real Estate . . . . .	3
	<i>Following can be substituted:</i>	
RES 290	Commercial Sales and Leasing. . . . .	3
	RES 290 fulfills WA DOL requirement for first real estate license renewal.	
RES 125	Applications of Real Estate Math . . . . .	2
RES 141	Land Use Principles and Practice . . . . .	3
RES 170	Real Estate Law . . . . .	3
RES 217	Real Estate Development and Sustainability . . . . .	3
RES 220	Real Estate Economics . . . . .	3
RES 260	Real Estate Finance-Commercial . . . . .	2
RES 295	Commercial Real Estate Investment Analysis . . . . .	2

#### ELECTIVES

Choose 5 credits from approved electives listed below.

CWE 101	Portfolio, Job Search and Interviewing. . . . .	2
CWE 110	Internship . . . . .	3
RES 100	Real Estate Fundamentals. . . . .	5
	Students are required to take this elective if they have NOT already completed it or do NOT have a real estate license.	
RES 101	Technology for Real Estate. . . . .	5
RES 110	Introduction to Commercial Real Estate . . . . .	3
	If not taken as required course.	
RES 120	Real Estate Principles of Maintenance and Repair. . . . .	1.5
RES 130	Green Real Estate. . . . .	3
RES 140	Real Estate Sales and Practice . . . . .	3
RES 142	Inspecting the Condition of Real Estate. . . . .	3
RES 150	Residential Sales and Leasing Documentation	1.5
RES 176	Using Tax-Deferred Exchanges to Your Advantage	1
RES 177	Real Estate Taxes . . . . .	1.5
RES 178	Buyers Agency . . . . .	1.5
RES 180	Basic Appraisal Principles . . . . .	3
RES 190	Real Estate Escrow I. . . . .	3
RES 200	Seminar in Current Real Estate Issues . . . . .	5
RES 201	Principles of Real Estate Management . . . . .	3

RES 202	Multi-Family Property Management . . . . .	3
RES 203	Property Management-Commercial . . . . .	3
RES 204	Community Association Management . . . . .	3
RES 210	Residential Property Investments . . . . .	3
RES 225	Current Trends in Real Estate Market Analysis	1.5
RES 230	Professional Business Practices of Brokerage Mgt . . . . .	5
RES 235	Sales and Marketing . . . . .	3
RES 280	Commercial Real Estate: Markets and Income . . .	3
RES 290	Commercial Sales and Leasing . . . . .	3
	If not taken as a required course. This course fulfills WA DOL requirement for first real estate license renewal.	
RES 298	Special Projects, Internships in Real Estate. . .	6
<b>TOTAL PROGRAM CREDITS</b>		<b>26</b>

**Green Real Estate Short-Term Certificate**

This certificate program provides a strong background in green and sustainable residential real estate. This certificate 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 D . . . . .	3
RES 133	Energy Efficient Design and Development . . . .	2
RES 134	Smart Locations Integrated Communities Sustainable . . . . .	1.5
RES 135	Healthy Buildings and Indoor Air Quality . . . . .	2
RES 217	Real Estate Development and Sustainability . . .	3
<b>TOTAL PROGRAM CREDITS</b>		<b>16.5</b>

**Real Estate Certificate**

This certificate program gives a strong basic background in real estate. The completion of six real estate courses entitles the student to a certificate in real estate issued by the Washington Department of Licensing and by North Seattle College.

**TECHNICAL SPECIALTY COURSES**

RES 100	Real Estate Fundamentals. . . . .	5
RES 101	Technology for Real Estate. . . . .	5
RES 164	Real Estate Finance Residential. . . . .	5
<i>Following can be substituted:</i>		
RES 260	Real Estate Finance - Commercial. . . . .	2
RES 170	Real Estate Law . . . . .	3
<b>TECHNICAL SPECIALTY CREDITS</b>		<b>18</b>

**ELECTIVES**

Real Estate course with RES prefix . . . . .		3
<b>ELECTIVES CREDITS</b>		<b>3</b>
<b>TOTAL PROGRAM CREDITS</b>		<b>18-21</b>

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

**Real Estate Associate of Applied Science Degree (A.A.S.)**

**TECHNICAL SPECIALTY COURSES**

RES 100	Real Estate Fundamentals. . . . .	5
RES 101	Technology for Real Estate. . . . .	5
RES 106	Real Estate Fraud . . . . .	1
<i>Following can be substituted:</i>		
RES 160	Ethics for Loan Originators . . . . .	1
RES 110	Introduction to Commercial Real Estate . . . . .	3
RES 125	Applications of Real Estate Math . . . . .	2

*Following can be substituted:*

MATH&107	Math in Society . . . . .	5
-OR-		
MATH 116	Applications of Math to Management, Life and Social Science . . . . .	5

Students may challenge RES 125 by passing the RES 125 test and receive 2 credits.

RES 130	Green Real Estate . . . . .	3
RES 140	Real Estate Sales and Practice . . . . .	3

*Following can be substituted:*

RES 290	Commercial Sales and Leasing. . . . .	3
RES 141	Land Use Principles and Practice . . . . .	3
RES 142	Inspecting the Condition of Real Estate. . . . .	3
RES 150	Residential Sales and Leasing Documentation	1.5
RES 165	Real Estate Loan Originator . . . . .	3

*Following can be substituted:*

RES 166	Real Estate Loan Processing . . . . .	4
-OR-		
RES 260	Real Estate Finance - Commercial . . . . .	2
RES 170	Real Estate Law . . . . .	3
RES 175	Introduction to Title. . . . .	3
RES 177	Real Estate Taxes . . . . .	1.5
RES 180	Basic Appraisal Principles . . . . .	3
RES 190	Real Estate Escrow I . . . . .	3
RES 201	Principles of Real Estate Management . . . . .	3

*Following can be substituted:*

RES 202	Multi-Family Property Management . . . . .	3
-OR-		
RES 203	Commercial Property Management . . . . .	3
-OR-		
RES 204	Community Association Management . . . . .	3

RES 210	Residential Property Investments. . . . .	3
RES 217	Real Estate Development and Sustainability . . .	3
RES 220	Real Estate Economics . . . . .	3
RES 235	Sales and Marketing. . . . .	3

<b>TECHNICAL SPECIALTY CREDITS</b>		<b>61</b>
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**RELATED INSTRUCTION**

Global Studies or U.S. Cultures elective: 5 credits  
 Select elective credits from approved list. See Advising Center.  
 ACCT 215 Accounting for Small Business Owners . . . . .3  
 BUS 140 Customer Relations . . . . .5  
 BUS 236 Interpersonal Communications for  
 the Workplace . . . . .5

RELATED INSTRUCTION CREDITS 13

**ELECTIVES**

Choose credits from any non-required courses with RES prefix  
 or from the following:  
 CWE 101 Portfolio, Job Search and Interviewing. . . . .2  
 CWE 110 Internship . . . . .3

ELECTIVES CREDITS 13

TOTAL PROGRAM CREDITS 91-96

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

**Real Estate – Appraiser Trainee Certificate**

**REQUIRED COURSES**

RES 100 Real Estate Fundamentals. . . . .5  
 RES 101 Technology for Real Estate. . . . .5  
 RES 106 Real Estate Fraud . . . . .1  
 RES 125 Applications of Real Estate Math . . . . .2  
 Students may challenge RES 125 by  
 passing the RES 125 test  
 RES 180 Basic Appraisal Principles . . . . .3  
 RES 183 Basic Appraisal Procedures . . . . .3  
 RES 281 National USPAP Course. . . . .1.5

TOTAL PROGRAM CREDITS 20.5

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

**Real Estate – Escrow Certificate**

**TECHNICAL SPECIALTY COURSES**

RES 100 Real Estate Fundamentals. . . . .5  
 RES 106 Real Estate Fraud . . . . .1

*Following can be substituted:*

RES 160 Ethics for Loan Originators. . . . .1  
 RES 150 Residential Sales and Leasing Documentation 1.5  
 RES 170 Real Estate Law . . . . .3  
 RES 175 Introduction to Title. . . . .3  
 RES 190 Real Estate Escrow I . . . . .3

**ELECTIVES**

Total required RES Electives credits: 6  
 Choose credits from any course(s) with RES prefix, CWE 101  
 or CWE 110.  
 Visual, Literary and Performing Arts. . . . .5

TOTAL PROGRAM CREDITS 22.5

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

**Real Estate – Loan Originator Certificate**

The Real Estate Loan Originator Certificate prepares the student  
 to become a loan originator, mortgage broker, bank officer  
 and loan underwriter; and/or to better understand real estate  
 finance, title, escrow, real estate law, real estate fraud and  
 real estate documentation.

**TECHNICAL SPECIALTY COURSES**

RES 100 Real Estate Fundamentals. . . . .5  
 RES 106 Real Estate Fraud . . . . .1  
 RES 125 Applications of Real Estate Math . . . . .2  
 Students may challenge RES 125 by passing  
 the RES 125 test. Processing fees apply.  
 RES 164 Real Estate Finance Residential. . . . .5  
 RES 180 Basic Appraisal Principles . . . . .3

*Following can be substituted:*

RES 190 Real Estate Escrow 1. . . . .3  
 RES 235 Sales and Marketing. . . . .3

TECHNICAL SPECIALTY CREDITS 19

**ELECTIVES**

Choose credits from approved list. See Advising Center.  
 ELECTIVES CREDITS 6

TOTAL PROGRAM CREDITS 25

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

**Real Estate – Loan Processor 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 106 Real Estate Fraud . . . . .1  
 RES 160 Ethics for Loan Originators. . . . .1  
 RES 166 Real Estate Loan Processing . . . . .4  
 RES 175 Introduction to Title. . . . .3  
 RES 190 Real Estate Escrow I . . . . .3  
 RES 266 Real Estate Loan Underwriter. . . . .3

TECHNICAL SPECIALTY CREDITS 20

**ELECTIVES**

Choose credits from the approved list. See Advising Center.  
 ELECTIVES CREDITS 3

TOTAL PROGRAM CREDITS 23

*Note:* Most employers require Loan Processors 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.



### Real Estate – Property Management Certificate

#### TECHNICAL SPECIALTY COURSES

RES 100	Real Estate Fundamentals. . . . .	5
RES 101	Technology for Real Estate. . . . .	5
RES 120	Real Estate Principles of Maintenance and Repair. . . . .	1.5
RES 140	Real Estate Sales and Practice . . . . .	3
RES 170	Real Estate Law . . . . .	3
RES 201	Principles of Real Estate Management . . . . .	3

Choose two of these 4 classes for total of 6 credits.

RES 202	Residential Property Management . . . . .	3
-OR-		
RES 203	Commercial Property Management . . . . .	3
-OR-		
RES 204	Community Association Management . . . . .	3

RES 220 Real Estate Economics . . . . . 3

TOTAL PROGRAM CREDITS 26.5

Note: Most employers require Property Managers to be a licensed real estate sales associate in the State of Washington and to be able to quickly learn and use industry-specific software. For up to date information on Real Estate certificates, degrees and courses, visit northseattle.edu/real-estate.

### Real Estate – Sales Certificate

#### TECHNICAL SPECIALTY COURSES

RES 100	Real Estate Fundamentals. . . . .	5
RES 106	Real Estate Fraud . . . . .	1
RES 125	Applications of Real Estate Math . . . . .	2
	Students may challenge RES 125 by passing the RES 125 test.	
RES 140	Real Estate Sales and Practice . . . . .	3

Following can be substituted:

RES 290	Commercial Sales and Leasing . . . . .	3
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RES 142 Inspecting the Condition of Real Estate. . . . . 3

Following can be substituted:

RES 175	Introduction to Title . . . . .	3
-OR-		
RES 180	Basic Appraisal Principles . . . . .	3
-OR-		
RES 190	Real Estate Escrow I . . . . .	3

RES 150 Residential Sales and Leasing Documentation. . . . . 1.5

RES 165 Real Estate Loan Originator. . . . . 3

Following can be substituted:

RES 166	Real Estate Loan Processing . . . . .	4
-OR-		
RES 260	Real Estate Finance - Commercial . . . . .	2

RES 170 Real Estate Law . . . . . 3

TOTAL PROGRAM CREDITS 20.5-22.5

State of Washington, Department of Licensing (DOL), 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.

### Real Estate – Sales (Advanced) Certificate

#### TECHNICAL SPECIALTY COURSES

RES 100	Real Estate Fundamentals. . . . .	5
RES 101	Technology for Real Estate. . . . .	5
RES 106	Real Estate Fraud . . . . .	1
RES 125	Applications of Real Estate Math . . . . .	2
	Students may challenge RES 125 by passing the RES 125 test.	
RES 140	Real Estate Sales and Practice . . . . .	3

Following can be substituted:

RES 290	Commercial Sales and Leasing . . . . .	3
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RES 142 Inspecting the Condition of Real Estate. . . . . 3

Following can be substituted:

RES 175	Introduction to Title . . . . .	3
-OR-		
RES 180	Basic Appraisal Principles . . . . .	3
-OR-		
RES 190	Real Estate Escrow I . . . . .	3

RES 150 Residential Sales and Leasing Documentation 1.5

RES 165 Real Estate Loan Originator . . . . . 3

Following can be substituted:

RES 166	Real Estate Loan Processing . . . . .	4
-OR-		
RES 260	Real Estate Finance - Commercial . . . . .	2

RES 170 Real Estate Law . . . . . 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.

## Watch Technology Institute

Workforce Instruction Division  
(206) 934-0169

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 Swiss American Watchmaking Training Alliance (SAWTA) exam for certification.

The 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.

### 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
HIN 123	Watch Technology II: Practicum . . . . .	10
HIN 131	Watch Technology III: Winding and Setting Mechan. . . . .	6
HIN 132	Watch Technology III: Watch Gear Trains . . . . .	6
HIN 133	Watch Technology III: Practicum . . . . .	10
HIN 141	Watch Technology IV: Escapements . . . . .	4
HIN 142	Watch Technology IV: External Parts . . . . .	4
HIN 143	Watch Technology IV: Practicum . . . . .	8
HIN 211	Watch Tech V: Introduction to Precision Timing .	6
HIN 212	Watch Tech V: Introduction to Electronic Watches . . . . .	6
HIN 213	Watch Tech V: Practicum . . . . .	10
HIN 221	Watch Technology VI: Precision Timing 2 . . . . .	6
HIN 222	Watch Technology VI: Automatic Watches . . . . .	6
HIN 223	Watch Technology VI: Practicum . . . . .	10
HIN 231	Watch Technology VII: Advanced Precision Timing. . . . .	6
HIN 232	Watch Technology VII: Chronographs. . . . .	6
HIN 233	Watch Technology VII: Practicum. . . . .	10
HIN 241	Watch Technology VIII: After-Sales Service. . . .	4
HIN 242	Watch Technology VIII: Review of Courses . . . .	4
HIN 243	Watch Technology VIII: Practicum . . . . .	8

TOTAL PROGRAM CREDITS: 164

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

### TECHNICAL SPECIALTY COURSES

HIN 111	Introduction to Watch Technology . . . . .	6
HIN 112	Watch Technology I: Tools, Equipment & Measurement . . . . .	6
HIN 113	Watch Technology I: Practicum . . . . .	10
HIN 121	Watch Technology II: Professional Knowledge .	6
HIN 122	Watch Technology II: the Watchmakers Lathe. .	6
HIN 123	Watch Technology II: Practicum . . . . .	10
HIN 131	Watch Technology III: Winding and Setting Mechan. . . . .	6
HIN 132	Watch Technology III: Watch Gear Trains . . . . .	6
HIN 133	Watch Technology III: Practicum . . . . .	10
HIN 141	Watch Technology IV: Escapements . . . . .	4
HIN 142	Watch Technology IV: External Parts . . . . .	4
HIN 143	Watch Technology IV: Practicum . . . . .	8
HIN 211	Watch Tech V: Introduction to Precision Timing .	6
HIN 212	Watch Tech V: Introduction to Electronic Watches . . . . .	6
HIN 213	Watch Tech V: Practicum . . . . .	10
HIN 221	Watch Technology VI: Precision Timing 2 . . . . .	6
HIN 222	Watch Technology VI: Automatic Watches . . . . .	6
HIN 223	Watch Technology VI: Practicum . . . . .	10
HIN 231	Watch Technology VII: Advanced Precision Timing. . . . .	6
HIN 232	Watch Technology VII: Chronographs. . . . .	6
HIN 233	Watch Technology VII: Practicum. . . . .	10
HIN 241	Watch Technology VIII: After-Sales Service. . . .	4
HIN 242	Watch Technology VIII: Review of Courses . . . .	4
HIN 243	Watch Technology VIII: Practicum . . . . .	8

TECHNICAL SPECIALTY CREDITS 164

### GENERAL EDUCATION COURSES

Total required General Education credits: 20

BUS 236	Interpersonal Communications for the Workplace . . . . .	5
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*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