9600 College Way North
Seattle, WA 98103-3599
(206) 527-3600
www.northseattle.edu


N O R T H SEATTLE

COMMUNITY COLLEGE



30 North Seattle Community College provides a supportive, responsive teaching and learning environment distinguished by its commitment to openness, innovation, and excellence in education.

FACTS ATAGLANCE*
Annual attendance 2000-2001 .......................................................... 16,751
FALL 2000 PROFILES
STUDENTS

| Medianage |  |
| :---: | :---: |
| Ethnic diver | sity .......................................................................... 34\% |
| Male/femal | e .................................................................... 41\%/59\% |
|  | With bachelor or higher degrees .................................... $22 \%$ |
| Employed | ................. 64\% |
|  | full-time .................................................................. $38 \%$ |
| With depend | ents ....................................................................... 27\% |
|  | single parents ............................................................ $6 \%$ |
| Full-time/p | art-time attendance ............................................ 43\%/57\% |

## PROGRAMS

College Transfer ............................................................................................. 31\%
Professional/Technical ........................................................................ 31\%
Basic Skills .................................................................................... 18\%
Continuing Education \& Other .......................................................... 20\%

COURSES
State-funded .................................................................................... 73\%
Contract-supported ........................................................................... 7\%
Student-supported ............................................................................ 20\%

SPECIAL ENROLLMENTS
DistanceLearning ............................................................................... 375
Running Start ....................................................................................... 214
International Contract ............................................................................... 331
Worker Retraining ............................................................................. 230

## STUDENT SERVICES ATNORTH

| Academic Advising | $(206) 527-3658$ |
| :--- | :--- |
| Admission | $(206) 527-3664$ |
| Career Information | $(206) 527-3685$ |
| Counseling | $(206) 527-3676$ |
| Financial Aid | $(206) 527-3688$ |
| Registration | $(206) 527-3664$ |
| Testing Services | $(206) 527-3674$ |
| TTY | $(206) 526-0079$ |

## ABOUTTHECOLLEGE

When our students talk about North, they express appreciation for the school's excellent instruction. They praise the faculty's knowledge of their subjects, pride in their teaching and true concern for student learning. Students also cite North's convenient location, a 62 -acre campus just off I-5, and its ample parking as pluses.
Many of our students earn the first two years of their bachelor's degree at North and then transfer successfully to four-year colleges and universities. The students who transfer to the University of Washington do as well as or better than students who attend the University for all four years. Small classes, and an emphasis on learning skills and critical thinking provide students with the tools to excel at four-year colleges. North is also at the forefront in distance learning, offering students the possibility of earning an associate's degree online. For working students, the online courses provide a convenient option.
Students can choose from more than 40 career training programs, which have close ties with business and industry. As a result, training matches employers' needs and assists students upon graduation. With programs such as Watch Technology, co-sponsored by The Rolex Company, Health/Medical and Culinary Arts, students have many options.
In addition to classroom learning, students also enjoy sports and wellness, with access to a well-equipped gym and sports facilities. The Storm intercollegiate basketball teams for men and women are also based at North. North Seattle Community College: One College, Many Choices.

## STUDENT SERVICES

## ACADEMIC \& CAREER RESOURCES

## Advising Center (206) 527-3658

The Advising Center provides resources and assistance for students planning to transfer to four-year colleges and universities and for students pursuing professional-technical programs. Advisors assist students in making academic choices to reach their educational goals. New students seeking degrees or certificates attend new student sessions, where they receive information about NSCC 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. The Advising Center is open to all current and potential students on a walk-in basis.

## Campus Library (206) 527-3607

The Library offers a wide range of materials and services to students and the community.
Library faculty are available to help students take full advantage of the college's online catalog, periodical indexes, and other databases that enable students to find books, reference guides, periodical articles and non-print materials.
The North library database is part of a district and regional inter-library loan service, which allows students access to library materials throughout the WesternUnitedStates.

## Career Services and Cooperative Education (206) 527-3685

Career Services provides students with full-time and part-time job listings, as well as job search training, labor market information, and assistance clarifying career and occupational goals. Career Services also has a computer lab with Internet access to support students' job search and career planning.
Cooperative Education provides credit for learning in a relevant work site, both on and off-campus. The programallows students to apply skills and knowledge learned in the classroom to a real life work environment.

## Computer Labs <br> (206) 527-3761

North Seattle Community College maintains two computer labs equipped with over 35 software applications and a high speed Internet connection. Students have access to both IBM and Macintosh equipment. The labs are open to all North students who have paid the appropriate fee. Students should call or visit the open labs in HT1845C or IB3303 for current hours of operation.

## Learning Center \& Tutoring Services (206) 526-0078\& (206) 527-3746

There are two major tutoring centers at North Seattle Community College, and many departments offer subject-specific tutoring arranged through the department secretary. The Loft Writing Center Plus (206-526-0164) is located in the Library and offers tutoring assistance on any reading, writing, listening or speaking assignment for any class offered at North. The multimedia lab in the Loft offers computer software intended to strengthen skills in reading, writing, listening, vocabulary, spelling and pronunciation in English and world languages.
The Math Learning Center (206-527-3746) is located in AS1522 and offers tutoring assistance to all students enrolled in math, science or computer science classes. Videotapes in Basic Math, Algebra and Trigonometry are available, as well as calculators and various math references.

## The Media Center (206)527-3611

Located on the second floor of the Library, the Media Center provides audio and visual materials, services, and equipment which support classroom instruction.
The Media Center has a collection of audiotapes, videotapes and CDs available for checkout or for use in the classroom. The equipment available includes: video cameras, VCRs, televisions, DVD players, audiocassette and CD players, slide projectors, sound reinforcement systems, and computers with data projectors for PowerPoint style presentations. Instruction in the use of these materials and equipment is available. Listening-viewing carrels and rooms are also provided for students' convenience.

## Multicultural Student Services (206) 527-3698

These programs and services are designed to retain, matriculate, and graduate students of color. They include transfer assistance, scholarship assistance, academic planning, college success workshops, leadership training opportunities, student advocacy and mentoring. Other goals are to cultivate campus cultural awareness through coordinating and sponsoring co-curricular and social events and activities to assist students of color reach their academic goals.
While the primary goal is to assist students of color (African American, Asian American and Pacific Islander, Chicano/Latino and Native American), all students are invited to participate in services and programs.

## Testing Center <br> (206) 527-3674

New studentsseeking a degree or certificate or those students wishing to enroll in most English or mathematics classes must take placement tests prior to registration.
These tests allow the student and advisor to select appropriate classes. The student should call the Testing Center for an appointment at least two weeks in advance of his or her registration date.
For additional information on ESL, GED, CIS testing or professional certification testing, students should contact the Testing Center.

## CAMPUSLIFE

## Bookstore (206) 527-3637

The Bookstore is well-stocked with new and used textbooks, general interest books, school supplies, and sundry items. The Bookstore offers atextbook buyback service during the last five to six days of each school quarter. Check the Web site for Bookstore hours at www.northseattle.edu.

## Childcare Center (206) 527-3644

This state-certified Childcare Center, funded primarily by student government, is staffed by professionals trained in early childhood education.
Activities foster children's social, emotional, physical and creative development. The Center serves children 18 months to five and a half years old and operates Monday through Friday, 7:30 a.m. - 5:00 p.m. Call for specific fee information.

## Copy Center

(206) 527-3616

Supplemental course materials may be purchased at the Copy Center, located in Room AS1524. Printing is also done by Copy Center staff, or can be done on a self-service copier. Various sizes and colors of paper, including résumé-quality, are available. The Copy Center also creates transparencies for classroom presentations.

## Food Services <br> (206) 527-3779

North Seattle Community College provides three dining areas in conjunction with its culinary training programs, in which students prepare food under the supervision of instructors. Food services operate during the academic quarter, but not during quarter breaks.

## COLLEGE CAFETERIA

Monday-Thursday .
7a.m. - 7:30 p.m.
Friday
7 a.m. - 2:30 p.m.
NORTH STAR DINING ROOM
Monday - Thursday ................................................11:30 a.m. - 12:45 p.m.
ROSE ROOM (SPECIAL EVENTS ONLY)

## Housing

(206) 527-3641

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.

## Metro Bus Service (206)553-3000

Due to space limitations and environmental concerns, carpooling or bus transportation is strongly encouraged. Student Metro bus passes can be purchased at the Cashier's Office at special discounted rates.

## Parking Services <br> (206) 527-3636

On-campus parking is available to those students who buy a permit. Due to space limitations, students are advised to buy a parking permit when registering. State motor vehicle laws and city traffic codes are strictly enforced. The campus speed limit is $15 \mathrm{~m} . \mathrm{p} . \mathrm{h}$.

## REFUNDS

Parking is refundable only upon complete withdrawal from school and return of the student's parking permit. The amount of the refund isdetermined by the date of withdrawal:
Withdrawl due to class being cancelled by the college .......................... 100\%
Prior to first day of the quarter 100\%
(less \$5 processingfee)
First seven days of quarter ........................................................................... 80\%
Eighth - 20th calendar day of quarter ................................................... 50\%
After 20th calendar day of quarter ...................................................... None

## Safety <br> (206) 527-3636

The well-being and safety of students are of utmost importance. It is vital that students follow strict safety procedures recommended in vocational classes. In the event of an on-campusaccident or injury, students should report the accident to the Security Office so the injury can be addressed and an accident report completed. Students should immediately call 9-911 for serious injuries. Instructors must be notified if an accident occurs during class. All campus "Qwest" pay phones are programmed for one-button, free calls to security.

## PERSONAL SAFETY

Each of the campuses in the Seattle Community College District is a unique community where thousands of people work and study. However, as each campus is also open to the public, students should use the same caution as they would in any public place in taking care of their personal safety and personal belongings. Helpful campus information and statistics on personal safety are available from the Security Office, as well as other locations around campus.

## POLICYONDRUGS

To provide a healthful, safe and secure work and learning environment, each employee and student of the Seattle Community College District is expected to be in an appropriate mental and physical condition to perform assigned duties and fully participate in the learning process. The Policy on Drugs, effects of commonly abused drugs, and resources for assistance are outlined in a brochure available at the campus Counseling Center.

## SEXUAL HARASSMENT

Brochures outlining policy and procedures regarding sexual harassment complaints are available through the Counseling Center.

## Student Accident Insurance (206) 527-3627

Accident insurance is available to students registered for six or more credit hours per quarter. This policy provides broad, but comparatively inexpensive coverage.

## Student Government (206) 527-3650

Each student taking credit courses pays service and activities (S\&A) fees and automatically becomes a member of the Associated Student Body (ASB).
ASB representatives, selected by a committee comprised of students, staff and faculty, represent student interests and concerns at the college. Student Government coordinates the Student Leadership Program. To get involved, call Student Programs at (206) 527-3641.

## Student Newspaper / Polaris (206) 527-3645

Polaris is written, edited, and published for and by students. A governing board sets policy guidelines. Students interested in joining the editorial or production staffshould contact the Polaris Office.

## Student Sports / Intercollegiate Athletics/ The Seattle C.C. "Storm" <br> (206) 527-3745 \& 528-4592

The Seattle Community Colleges men's and women's intermural basketball teams, the Seattle Community Colleges Storm, are based at North's state-of-the-art Gymand Wellness Center. Seattle Community Colleges Storm compete in the 33member Northwest Athletic Association of Community Colleges league.
Students from all three Seattle Community Colleges are eligible to play on the teams. Athletic scholarships are available to qualified students. For more information, please visit the Website at www.northseattle.edu/services/athletics.

## Wellness Center <br> (206) 527-3631, Information Line: (206) 527-3649

The Wellness Center is a new 44,000-square foot facility that offers a variety of opportunities for participation in fitness, wellness and recreational activities and classes.
All are encouraged to participate. Call for more information on wellness activities and center membership. Memberships are available to the general public. For more information, please visit the Web site at www.northseattle.edw/ services/wellness.

## BEYONDTHECAMPUS

## Alumni Association (206) 527-3604

The Alumni Association at North Seattle Community College Foundation was established to build and sustain meaningful relationships with past 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; broaden participation in lifelong learning; offer professional development and networking opportunities; establish volunteer opportunities, including mentorship for currentstudents; and gather feedback to enhance college programs and services. Membership is free. For more information, alumni may call the office at the number above, or visit the alumni page on the college Website.

## North Seattle Community College Foundation (206) 527-3604

The North Seattle Community College Foundation was established to support student success and provide a welcoming learning environment for students and the community.
As a non-profit501(c)(3) organization guided by a board of community and business leaders, the Foundation raisesfunds to provide support for the college in the form of scholarships, tutoring, equipment, program grants, professional development for faculty and staff, as well as campus enhancements. Each year, the Foundation distributes over $\$ 125,000$ in scholarships to deserving students. Students interested in scholarship opportunities should contact the Foundation Office.

## Western Washington University at North Seattle Community College (206) 527-3719

Western Washington University's Extended Education and Summer Program offers the following evening programs at North Seattle Community College: Elementary Teacher Education, B.A.E. and Elementary Teacher Certification (K-8);Secondary Teacher Education, M.I.T. and Secondary Teacher Certification (4-12).
Contact the program office for more information.

## SPECIAL PROGRAMS \& SERVICES

## American Indian Heritage Middle College (206) 527-3733

Housed at North Seattle Community College, the American Indian Heritage Middle College provides Native youths with the ability to acquire the skills they will need to prepare them for a two-year or four-year college or university, vocational training, or the workplace.

## Career Link Academy (206) 528-4573 \& (206) 527-3743

The Career Link Academy is an educational program that assists students interested in completing their GED, learning job skills, getting job placement assistance, or pursuing training on a college campus. The program focuses on job-readiness skills in computer applications, pre-vocational learning, applied academics and GED preparation. CareerLink Academy serves people ages 16-20 who left high school without graduating. There is no charge for tuition.

## Educational Access Center (206) 527-3697

 FAX(206) 527-3635 The North Seattle Community College Educational Access Center was created to establish a campus environment that is inclusive of students with disabilities.Students who have a disability are encouraged to meet with the staff of the Educational Access Center as early as possible during their entry into college to register with the office and to discuss appropriate accommodations. The Educational Access Center also sponsors awareness workshops, faculty training, and provides referrals to resources pertaining to disability issues.

## Families That Work (206527-7655

The Families That Work program is a 20-hour per week program providing lowincome pregnant women and parents with infants an opportunity to prepare for work, improve their basic reading, writing, math, and computer skills, and learn how to care for the well-being of their children. Parents and children spend time together on site as a unique learning feature of this program. For more information or to enroll in the program, visit the Families That Work Web site athttp://northonline.sccd.ctc.edu/FTW (username isFTWintake and password is casemanager) or call the number listed above.

## Institute of English <br> (206) 527-3795

The North Seattle Institute of English (NSIE) is an intensive English and college bridge program for international students. NSIE prepares non-native speakers of English to enter American colleges and universities. NSIE also offers English asaSecond Language classesfor non-university bound students, such as business and technical professionals, summer quarter students, spouses of students and other visitors on non-student visas.
Students study at different levels based on their English proficiency. Quarterly classes develop skills in conversation, listening, reading, writing, grammar, study skills, note-taking, academic paper writing, vocabulary and idioms, and American culture. An additional class is offered in computer applications and a computerized language laboratory is available.

Advanced students may take aregular college class. Successful completion of the NSIE program enables those who plan to become North Seattle Community College students to enter one of the college's academic or technical programs withouta TOEFL requirement.

## International Student Programs

 (206) 527-3672FAX(206) 527-3794 isp@sccd.ctc.edu
International Student Programs (ISP) oversees admissions, activities and services for students who have non-resident visas.
ISP processes admission applications for international students and assists them after admission. Contact this office for information about admissions, or for assistance with academic issues, immigration regulations, or personal concerns. See page 12 for more information.
Field trips and other student activities promoting intercultural communication and enhanced experience of American culture are provided by this office. Housing assistance with American families is also offered.

## Running Start (206) 527-3682

The Running Start program gives high school juniors and seniors the opportunity to enroll in tuition-free, college-level courses for credit while earning high school credit at the same time.
For more information, students should contact their high school counselor or the Running Start Office on campus.

## Senior Adult Education (206) 527-3783

Because North Seattle Community College believes that learning is a lifelong process, the college offers many classes and discussion groups designed especially for senior citizens. Classes cover a wide range of topics and reflect the broad interests of senior adults. Special programs, workshops and events are regularly scheduled.

Classes are normally held during daytime hours, both on campus and in various senior centers, community centers, and retirement homes. Generally, there are no long assignments, examinations or letter grades given.
Tuition ranges from $\$ 16$ to $\$ 75$ per five- to ten-week course. Students can register by mail or on campus.

## Senior Listener's Program (206) 527-3664

In addition to the senior adult education programs, persons over 60 may enroll in college transfer courses for audit (no homework, exams, or credit). Under a tuition waiver, seniors may attend up to two classes for a fee of $\$ 5$. This includes courses in the humanities, natural sciences and social sciences.
Registration under the waiver is on a space-available basis with instructor approval, after the first week of the quarter. This waiver is available for audit only; a student enrolled under the option will not receive an official grade or transcript.

## Upward Bound <br> (206) 527-3691

Upward Bound, a program funded by the Department of Education, provides high school students with services that support higher academic performance during high school and subsequent entry into a post-secondary institution. The program serves 50 high school students from four area high schools: Franklin, Roosevelt, Summit K-12 and Indian Heritage Middle College.
Upward Bound offers regular, intensive support to its program participants throughout the year. Academic year services include after school sessions, tutoring, academic advising, college preparation, personal counseling and referrals, field trips and cultural events. During the summer months, students gather on the North campus for six-weeks of academic classes and activities to simulate the experience of college.
North's Upward Bound program works closely with students, parents, and high schools to help guide each student in developing a strong sense of self and in acquiring the skills for a successful higher education experience.

## Veterans' Affairs <br> (206) 527-3699

## FINANCIAL ASSISTANCE FOR VETERANS

The Veterans' Affairs Office helps veterans and eligible family members receive and maintain VA educational benefits while at college.
Benefits include the G.I. Bill, Veterans Education Assistance Program/VEAP, Benefits Program for Dependents and Widows, Selective Reserve Assistance Program, Vocational Rehabilitation Program and other programs. The office maintains attendance records, monitors academic progress, provides tutorial and work-study benefits, makes counseling referrals and approves eligibility for tuition discounts.
To receive benefits veterans must contact the campus Veterans' Affairs Office prior to the beginning of the academic quarter. If transferring from another school or making an application through the Veterans Administration, students must also contact this office to ensure all application requirements have been met. All veterans must apply for a credentials evaluation and notify the office immediately of changes in address, program, family members and enrollment.
Monthly allowance is based on the number of credits. Full benefits are paid for $12+$ credits; $75 \%$ benefits for $9-11$ credits; $50 \%$ benefits for $6-8$ credits; and tuition and fees for 5 or fewer credits. Check with the Veterans' Coordinator about allowances for summer quarter. Veterans qualifying under Chapter 30 Rollover also receive an allotment for their family members.
Veterans and eligible family members receiving benefits are required to maintain specific academic standards to retain benefits. Some classes or credits are not certifiable for benefits.

## Women's Programs (206) 527-3696

The Women's Center provides continual support for current and prospective students at North. The services include:

- individual support and referrals to campus and community resources
- consultation and information sessions on topics such as career exploration, self-defense, financial assistance for college, legal issues, math anxiety and health and wellness
- arts and lecture series exploring multicultural perspectives
- college courses for credit
- leadership developmentopportunities for students
- assistance for women interested in studying and finding employment in the fields of computing, engineering, science and math


## Worker Retraining (206) 527-3787

The Worker Retraining program offers a variety of services to dislocated workers. Individuals who have been laid off and are collecting unemployment insurance, have been issued a WARN notice, are displaced homemakers, or had to close a small business due to the economic turndown, should attend a worker retraining orientation session. Services may include:

- careeradvising/counseling
- interestassessment
- résuméassessment
- educationalplanning
- tuition assistance (subject to income guidelines and availability of funds)
- help with applying for other funding such as Federal Trade Act Assistance, NAFTA and regular financial aid


## WorkFirst Programs <br> (206) 527-7655

WorkFirst programs serve students receiving public assistance (TANF) and other low-income parents seeking to improve their education and job skills. WorkFirst classes and services are free to eligible students. North's current WorkFirst programs include:

## FAMILIES THAT WORK

This is a 20 -hour per week program that combines career exploration, parenting support, and GED or ESL classes. (see page 34 for more information)

## WORKFIRST WORKSTUDY

This is a program that combines work and classroom learning experiences for WorkFirststudents.

## WORK-BASED LEARNING TUITION ASSISTANCE

This is a program that provides free tuition and books to help low-income working parents improve their job skills and increase their income. For more information, please contact the WorkFirst Office.

## COLLEGE TRANSFER PROGRAMS

North Seattle Community College offers a full range of college transfer courses that apply toward a four-year program of study. In addition to offering Associate of Arts and Associate of Science degrees, North also offers an Associate of Fine Arts degree and certificate programs.
Students are encouraged to complete a two-year degree program for greater transfer ease to a four-year institution, but can take individual classes for transfer. It is recommended that students confer with an academic advisor to ensure course transferability.
Students planning to earn an A.A., A.F.A., or A.S. degree must meet minimum standards of preparation. Those whose records and testscores 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:

American Ethnic Studies
Anatomy and Physiology
Anthropology
Art
Astronomy
Biology
Botany
Chemistry
Communications
ComputerScience
Drama
EarthScience
Economics
Engineering
English
EnvironmentalScience
Geography
Geology
Global Studies
Health
Humanities
International Studies
Journalism
Languages andLiterature
Mathematics
Meteorology
Music
Nutrition
Oceanography
Philosophy
Physics
PoliticalScience
Psychology
Science
Social Science
Sociology
WomenStudies
WorldLanguages
These fields of study are grouped into three Areas of Knowledge (page 16)
and are included throughout the A.A. degree curriculum.

ASSOCIATEOFPRE-PROFESSIONALSTUDIES

## Degree in Business

North offers a pre-professional studies degree in business that is transferrable to the University of Washington. Contact an advisor for information on this degree.

## Degree in Engineering

Students can transfer to bachelors programs in engineering with the normal A.S. degree. However, an Associate of Pre-Professional Studies in Engineering is available for students who plan to transfer to the University of Washington.

NOTE: This degree is specific for transfer to the University of Washington and may not be recognized by other colleges.

## TECHNICAL SPECIALTY COURSES

Twenty-six or more credits are dependent upon the specific engineering program of interest. Students should contact an advisor or call the Science \&Mathematics Division for details. These courses consist primarily of engineering, physics, mathematics and chemistry courses.

## ADDITIONAL REQUIREMENTS

EGR 231 Technical Writing ............................................................... 3
ENG 101 Composition .......................................................................... 5
CHE 140 General Chemistry ............................................................... 6
CSC 142 Computer Programming for Engineers .................................. 5
MAT 124, 125 \& 126 Calculus w/ Analytic Geometry .............................. 5
MAT 220 Linear Algebra .................................................................... 5

- OR -

MAT 238 Differential Equations ......................................................... 3
PHY 201 \& 202 Engineering Physics I \& II .................................................. 5
GENERAL REQUIREMENTS
Students must choose 15 credits from the fields of Visual, Literary \& Performing Arts, and Individuals \& Society.

## ASSOCIATE OFFINEARTS DEGREE \& CERTIFICATE OFFINEARTS

An Associate of Fine Arts degree is offered in Art and Music and a Certificate of Fine Arts is offered in Art and Drama. Students must complete at least 15 of their total credits at North Seattle Community College.

## Art

The Associate of Fine Arts degree does not currently transfer with the same transfer rights as the A.A. degree; however, most courses in the program will transfer. Evergreen State College will accept this degree with transfer rights similar to those of the A.A. degree. Students seeking a B.A. in art should consult both the A.A. degree requirements, their advisor, and the university they plan to attend. All A.F.A. candidates in art must plan their program with an art advisor.
The Certificate of Fine Arts affirms completion of work and is suitable for art professionals, but is not a transfer certificate. Although the program can be completed in two years, a longer time span is suggested. Due to the high demand on energy and outside work required for art classes, the faculty recommends a maximum course load of two studio courses per quarter.

## Fine Arts

Certificate
REQUIRED ART COURSES (MIN.)
Selectaminimumof35creditsfromthefollowingcourses:
ART 101 Design .............................................................................. 4
ART 102 Design .............................................................................. 4
ART 111 Drawing ................................................................................... 4
ART 112 Drawing ............................................................................ 4
ART 113 Drawing ............................................................................ 4
ART 251 Art History ....................................................................... 5
ART 252 Art History ............................................................................ 5
ART 253 Art History ....................................................................... 5
ART 290 The Art Business ................................................................. 5

## ADDITIONAL REQUIRED ART COURSES

## GROUPI (12creditsmin.)

ART 121 Intro to Printmaking .......................................................... 4
ART 122 Intro to Printmaking-Intermediate ....................................... 4
ART 123 The Painterly Print:Monotype and Monoprint ........................ 4
ART 201 Painting ............................................................................ 4
ART 202 Painting ............................................................................ 4
ART 203 Painting .............................................................................. 4
ART 205 Water Soluble Media ............................................................. 4
ART 206 Water Soluable Media .......................................................... 4
ART 207 Watercolor .......................................................................... 4
ART 210 Computer Art ................................................................... 4
GROUPII (12creditsmin.)
ART 211 Sculpture ........................................................................... 4
ART 212 Sculpture ........................................................................... 4
ART 213 Sculpture ........................................................................... 4
ART 221 Ceramic Art ........................................................................ 4
ART222 Ceramics ........................................................................... 4
ART 223 Ceramic Art .......................................................................... 4
ART 281 Jewelry Design4
ART 282 Jewelry Design .....  4
ART 283 Jewelry Design .....  4
ADDITIONAL REQUIREMENTS
Mathematics/Quantitative Reasoning .....  5
Choose one from MAT 107, MAT 110, BUS 116, BUS 152,ACC 132.

## ART ELECTIVES

ART 100 Intro to Art ........................................................................ 5
ART 254 Survey Pacific NW Art ......................................................... 5
ART 255 History of the Art of Asia .................................................... 5
ART 299 Special Problems in Art .................................................... 1-12
Portfolio Presentation Required

TOTALCREDITS 75
Art
Associate of Fine Arts
REQUIRED ART COURSES ..... 38
ART 101 Design ..... 4
ART 102 Design ..... 4
ART 111 Drawing ..... 4
ART 112 Drawing .....  4
ART 113 Drawing ..... 4
ART 251 Art History ..... 5
ART 252 Art History ..... 5
ART 253 Art History ..... 5
ART 290 The Art Business ..... 3
ADDITIONAL REQUIRED ART COURSES (MIN.)
Select a minimum of 20 credits from the following courses:
GROUPI (4-16 credits)
ART 121 Intro to Printmaking ..... 4
ART 122 Intro to Printmaking-Intermediate .....  4
ART 123 The Painterly Print:Monotype and Monoprint ..... 4
ART 201 Painting ..... 4
ART 202 Painting ..... 4
ART 203 Painting ..... 4
ART 205 Water Soluble Media ..... 4
ART 206 Water Soluable Media .....  4
ART 207 Watercolor ..... 4
ART 210 Computer Art ..... 4
GROUPII (4-16 credits)
ART 211 Sculpture ..... 4
ART 212 Sculpture ..... 4
ART 213 Sculpture ..... 4
ART 221 Ceramic Art ..... 4
ART 222 Ceramics ..... 4
ART 223 Ceramic Art ..... 4
ART 281 Jewelry Design ..... 4
ART 282 Jewelry Design ..... 4
GENERAL EDUCATION REQUIREMENTS
ENG 101 Composition .....  5
ENG 102 Composition ..... 5
Mathematics/Quantitative Reasoning ..... 5
MAT 107, BUS 116, BUS 152, or ACC 132.
U.S. Cultures or Global Studies ..... 5
Choose any one course from the two columns in A.A. degreeAreas of Knowledge.
Areas of Knowledge15Choose one course from Visual, Literary, and PerformingArts (excluding arts courses), one from Individuals, Culturesand Society, and one from The Natural World.
Portfolio Presentation Required.

## Acting

## Certificate of Fine Arts

The C.F.A. is not a transfer certificate; students seeking a B.A. or B.F.A. in drama should consult the degree requirements for the A.A. degree at North Seattle and the graduation requirements for the university at which they intend to enroll. C.F.A. students in drama must work with a drama advisor to plan their two-year program. Students wishing to receive this certificate must submit a portfolio of work and/or special performances during their final quarter for evaluation by the drama faculty. Specific courses are planned with a drama advisor who reviews and recommends final certification. Substitutions may be made only with approval of the drama advisor and Humanities Dean.

## REQUIRED DRAMA COURSES

DRA 100 Intro to Theatre ..... 5
DRA 121 Beginning Acting ..... 5
DRA 122 Intermediate Acting ..... 5
DRA 123 Intermediate Acting II ..... 5
DRA 221 AdvancedActing ..... 5
DRA 222 Advanced Acting II ..... 5
DRA 223 Advanced Acting III ..... 5
DRA 298 Special Projects ..... 5
GENERAL EDUCATION REQUIREMENTS
Select a minimum of 15 general education requirementcredits.

Students must choose one course in Computation, one course in Communication, and one course in Human Relations.

## TECHNICAL THEATER ELECTIVES

Select a minimum of 15 credits from the following:
DRA 131 Intro to Technical Theater
DRA 211 TheaterManagement
DRA 224 ProductionandStage Management
DRA231 PropsandSound
DRA241 Costume
DRA251 StageScenery
DRA261 Stage Lighting

| RELATED ELECTIVES（MIN．） |  |
| :---: | :---: |
|  | Selected a minimum of 20 credits from the following： |
| ART 100 | Intro to Art |
| ART 104 | Modern American Art |
| ART 105 | Survey of American Art |
| ART 251 | Art History |
| ART 252 | Art History |
| ART 253 | Art History |
| DRA 108 | Rehearsal \＆Performance |
| DRA 109 | Rehearsal \＆Performance |
| DRA 110 | Rehearsal \＆Performance |
| DRA 115 | Acting for the Camera |
| DRA 200 | Special Projects in Drama |
| DRA 201 | Special Projects in Drama |
| DRA 202 | Special Projects in Drama |
| DRA 271 | IndependentStudy in Acting |
| DRA 272 | Independent Study in Acting |
| DRA 273 | Independent Study in Acting |
| DRA 291 | Theatrical Internship |
| DRA 292 | Theatrical Internship |
| DRA 293 | Theatrical Internship |
| DRA 298 | Special Topics in Theater |
| ENG 133 | Intro to Dramatic Literature |
| ENG 141 | Shakespeare |
| ENG 142 | Shakespeare |
| ENG 211 | British Literature |
| ENG 212 | British Literature |
| ENG 213 | British Literature |
| ENG 221 | American Cultures |
| ENG 222 | American Cultures |
| ENG 223 | American Cultures |
| ENG 228 | Literature of American Culture |
| HUM 104 | Visual Thinking |
| HUM 110 | Intro to Film |
| HUM 200 | Reading the Media |
| MUS 100 | Music in the Western World |
| MUS 120 | Class Voice |
| MUS 121 | Piano |
| MUS 122 | Piano |
| MUS 123 | Piano |
| MUS 140 | College Chorale |
| MUS 142 | Community Chorale |
| MUS 143 | Vocal Jazz Ensemble |
| MUS 230 | Performance Workshop |
| PHI 100 | Intro to Philosophy |

hilosophy

## Music

## Associate of Fine Arts Degree

This degree does not transfer at present；however，all courses in the program will transfer．Students seeking a B．A．degree in music should consult both the A．A． degree requirements and the university they plan to attend．All A．F．A．candidates in music must have a music advisor．

## REQUIRED COURSES

MUS 101 lst Year Theory／Ear Training ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
MUS 102 lst Year Theory／Ear Training ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
MUS 103 1st Year Theory／Ear Training ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
MUS 201 2nd Year Theory ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 3
MUS 202 2nd Year Theory ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 3
MUS 203 2nd Year Theory ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 3
Piano Proficiency or MUS 121，122， 123 or MUS 221，222， 223 ．．．．．．．．．．．．．．．．． 6
MUS 130－139 Individual Instruction Series ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 6
（Should be taken in major and minor instrument each quarter of residency．）
REQUIRED PERFORMANCE COURSES
Select a minimum of 18 credits from the following courses： （minimum 1 per quarter）：
MUS 140，142，143，151，153，154， 150
ADDITIONAL MUSIC COURSES
Choose any additional music course（3－5 credits）
GENERAL EDUCATION REQUIREMENTS
ENG 101 Composition ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
ENG 102 Composition ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
Mathematics／Quantitative Reasoning ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5 MAT 107，MAT 110，BUS 116，BUS 152，or ACC 132.
U．S．Cultures or Global Studies $\qquad$ Choose any one course from the two columns in A．A．degree Areas of Knowledge．
Areas of Knowledge .15 Choose one course from Visual，Literary，and Performing Arts（excluding arts courses），one from Individuals，Cultures and Society，and one from The Natural World．
Final performance／project approved by faculty．
TOTALCREDITS

## BASIC STUDIES

## ARTS, HUMANITIES \& ADULT BASICEDUCATION DIVISION (206)527-3709

## Advising Center (206) 527-7303

Basic studies programs provide free instruction for those who want to improve basic English and math skills or to earn a high school diploma in order to get better jobs, continue their education, and improve their lives.
To take free ABE classes, a student must be a U.S. citizen, have permanent resident status, or be a refugee or immigrant. Students with different visa status, for example B2, F2, or J2, should visit the Office of International Students Programs in room CC 2461E, or call (206) 527-3672. All students must meet with the adult education advisor to enroll in these courses throughout the quarter. Students may call the Advising Center after 11:00 a.m. for more information.
Each of the programs in this area is designed to meet a particular set of student needs.

ADULT BASIC EDUCATION (ABE)
enables adults to improve basic reading, writing and math skills.
ENGLISH AS A SECOND LANGUAGE (ESL)
classes help non-native speakers to communicate in English and to increase their understanding of American culture.

## GENERAL EDUCATION DEVELOPMENT (GED)

preparation is an opportunity for adults who have not graduated from high school to earn the equivalent of a high school degree.

## HIGH SCHOOL COMPLETION

offers students who have not completed work for a high school diploma the opportunity to earn a diploma.

NOTE: The High School Completion Program is currently under revision and may end in 2004. Students should contact the department or an advisor for information.

## Adult Basic Education

Adult basic education classes prepare students to enroll in GED classes. Students may start at any time during the quarter on a space-available basis and should contact the adult education advisor for more details. See course descriptions under Adult Basic Education for details.

## English as a Second Language

English as a Second Language classes are offered to help non-English speaking persons understand, speak, read and write English in order to carry out daily personal activities, get or keep a job, advance in the workplace or continue their educational goals.
Classes are free for pre-literate to high-intermediate levels. For a student to be eligible for free ESL classes, he or she must be aU.S. citizen, have permanent resident status, or be a refugee or immigrant. Emphasis is on improving skills for listening, speaking, reading and writing. (See course descriptions under English as a Second Language for details). Students may begin at any time during the quarter as space becomes available.
Contact ESL Advisor or Testing Office for placement test information.

## General Education Development Preparation

GED Test Preparation
Students may demonstrate that they have reached an education level equal to a high school diploma by taking the General Education Development (GED) Test. To prepare for this test, the Seattle Community Colleges offer courses that cover the subjects tested, such as reading, writing, mathematics, science and social studies. These classes stress math for practical problem-solving, English usage, reading comprehension and test-taking skills.
No tuition is charged to students who are age 18 or older. Students 17 or younger must pay tuition. To be eligible for free GED classes, the student must be a U.S. citizen, have a green card, or be a refugee or immigrant.
Prerequisite: Placement by advisor or completion of ABE 040. Students who pass the GED Test earn a GED certificate, acceptable to colleges, vocational programs, unions and many employers as equivalent to a high school diploma.

| GED050 | GED Test Preparation |
| :--- | :--- |
| GED 051 | GED Math |
| GED060 | Advanced GED Preparation |
| GED061 | Advanced GED Math |

GED051 GEDMath

GED061 Advanced GEDMath

## High School Completion

High School Completion offers students who have not completed work for a high school diploma the opportunity to earn the diploma through one of two options.
The basic requirements for each of these options are listed below, but students planning to work toward a high school diploma should obtain a copy of "Requirements for the High School Diploma" from a counselor or advisor for more complete information.
According to Washington State Law (WAC 180-51-035): "A student shall have the right to graduate in accordance with the standards in effect for the school of graduation for any year since such student commenced the ninth grade unless more than ten years has passed since such entry. In such case, the student shall have the right to graduate in accordance with the standards in effect for the school of graduation for any year within the last ten years."
GED test scores may not be substituted for college or high school credits. GED preparation course credits may be approved for this program.

## OPTION A:

## Standard High School Diploma <br> ( 90 college credits)

A high school diploma may be earned by completing 90 college credits, including required and approved elective courses. Transfer credit may be approved for courses completed at other institutions; the final course must be taken at North Seattle Community College and a minimum of 2.0 GPA must be achieved.
Students who have not completed high school and are age 19 or older may enroll in this option for a fee. Students 18 or younger must pay tuition unless enrolled in a Running Start program through a participating high school.

## REQUIRED COURSES

(A number of other courses may be substituted for these requirements. See "Requirements for the HighSchool Diploma" for these courses.)

NOTE: A 5-credit college level class is equal to one year of study in high school.
ENG 040 Sophomore English .................................................................. 5
ENG 041 Junior English ........................................................................ 5
ENG 042 Senior English .......................................................................... 5
Fine Arts (DRA 100, MUS 100, ART 100
or other approved courses)5
HIS 035 U.S. History I ..... 5
HIS037 Wash. State History
(or satisfaction of requirement) ..... 3-5
POL022 Contemporary World Problems,World History or World Geography5
MAT 080 Pre-Algebra, Algebra I Series (or math class at student's placementlevel) ..... 10
It is strongly recommended that at least one course be algebraif the student is college-bound.

Science
To complete the science requirement, the student may take any two science courses (one of which must be a lab science) for which prerequisites have been met. Choice includes SCI 090 and SCI 100.
OccupationalEducation ............................................................ 5 (any vocational class)

| TOTAL REQUIRED CREDITS | $58-60$ |
| :--- | ---: |
| TOTALELECTIVE CREDITS | $30-32$ |
| TOTALCREDITS | 90 |

## OPTION B:

## Associate Degree Conversion Diploma

Upon successful completion of the Associate of Arts (A.A.) degree including the following courses, the student may be granted a high school diploma in addition to the A.A. degree.
U.S. History I

Wash. State History (or satisfaction of requirement) ........................................... 3-5
Transfer credit may be granted for equivalent courses completed at other institutions, but at least 20 quarter hours of credit, with a minimum grade point average of 2.0 , must be taken at one of the Seattle Community Colleges. Final quarter courses must be at the campus awarding the diploma.
Substitute Courses - Several pre-college transfer and college transfer courses may be substituted for required high school courses. Students who want to earn college credit while fulfilling high school graduation requirements should consult with the Advising Center or high school completion program director.
Elective Courses - Elective courses may be selected from the high school completion program and the following areas: vocational, general studies (liberal studies), college preparatory courses in math and English.
Work experience may also qualify for credit. Credits may be granted on proof of satisfactory employment ( 405 hours $=1$ high school credit or 5 college credits).

NOTE: This option is not automatic, and procedures vary from campus to campus.

## Pre-College English, Mathematics and Human Development Courses

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 Community 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 entrance tests required for admission to the specific college program. Courses in this category are those numbered below 100. They are described in the course description sections for English, mathematicsandhuman development.
For more informationabout Basic Studies programs, please contact the program advisor at (206) 527-7303.

## CONTINUING EDUCATION

## (206) 527-3705

## Community Service Classes

## (Non-credit and non-graded classes)

Courses are designed to help individuals explore personal interests and address business skill upgrade needs. North offers many contracted programs for customized skill upgrades in computers and management topics.
The programs are designed to respond to community and business needs. In addition, many area businesses, government agencies and non-profit agencies request specific programs for their employees. The programs are short, intensive, and hands-on whenever appropriate.

Continuing Education also co-sponsors classes and conferences with area agencies. Thisallows integration of expertise and an expandedaudience through special marketing.
Community service programs receive no state funding, but are supported by participants' tuition.
Courses and workshops are non-credit and non-graded, and certificates of completion are available upon request. Continuing Education Units (C.E.U.) are available for these programs.
Classes are offered in a wide range of computer applications, foreign languages, writing and skill development, exercise and health, and women's issues. For a current listing of Continuing Education classes, consult the quarterly class schedules.

## Customized Business Training (206) 985-3989

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 one of our convenient locations.

## Distance Learning (206) 527-3738

The Distance Learning Program offers courses through several non-traditional delivery modes, such as telecourses, online instruction, two-way interactive video and teleconferencing. They include credit and non-credit courses as well as teleconference services for area agencies. Alternative delivery modes provide access for students who are homebound, those who cannot attend at scheduled class times, and those who do not live within commuting distance. Through these offerings, students can earn credits or gain a new life skill.
Courses are currently available in science, math, the social sciences, the humanities and occupational areas. Students can earn credit toward degrees and certificates if they enroll in a program of study within the Seattle Community Colleges.
For more information, see page 24.

## PROFESSIONAL/TECHNICAL PROGRAMS

## ACCOUNTING

## Business and Engineering Technologies Division (206) 527-3730

The Accounting program provides in-depth study in the field of accounting and advanced accounting studies for those preparing to take professional examinations. The program leads to an accounting certificate or associate's degree and prepares graduates for employment in the industry.
It is recommended that any three-quarter accounting sequence (e.g., 210-230) be completed at the same campus.

## Accounting

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

This two-year program prepares students for immediate accounting and future 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.

## TECHNICAL SPECIALTY COURSES

ACC 110 Intro to Accounting/Bookkeeping I ..... 5
ACC 131 Small Business Recordkeeping-QuickBooks ..... 5
ACC 210 Financial Accounting Fundamentals I ..... 5
ACC 220 Financial Accounting Fundamentals II ..... 5
ACC 230 Fundamentals of Managerial Accounting ..... 5
ACC 251 Intermediate Accounting I ..... 5
ACC 262 MAS90 Accounting ..... 5
ACC255 Federal Income Tax I ..... 5
ACC257 Business Tax Accounting ..... 5
ACC260 Peachtree Accounting ..... 5
ACC 197 Work Experience: Accounting ..... 2-5
ALLIED SUPPORTCOURSES
BUS 124 Excel for Business ..... 3
BUS 125 Using Access in Business ..... 3
BUS 140 Customer Relations ..... 5
BUS 169 Using Computers in Business ..... 5

- ORCIS 101 Microcomputer Applications
5
BUS 200 Intro to Law ..... 5
- OR-
BUS 250 BusinessLaw ..... 5
BUS210 Business \& Economic Statistics ..... 5
BUS 236 Interpersonal Communications for the Workplace ..... 5
GENERAL EDUCATION COURSES
Electives* ..... 10
Must be selected from a list of approved general education courses, 5 of which must come from US Cultures or Global Studies and 5 from the remaining areas.*Recommended: ECO 200 or ECO 201.
TOTAL CREDITS93-96


## Accounting Technician (Bookkeeping) Certificate

The Accounting Technician certificate program prepares graduates for bookkeeping careers and general office employment. Most students complete this program in three quarters. ACC 110, Introduction to Accounting/Bookkeeping, is strongly recommended for students who have not previously taken a bookkeeping or an accounting course.

## TECHNICAL SPECIALTY COURSES

ACC 110 Intro to Accounting/Bookkeeping I ........................................ 5
ACC 131 Small Business Recordkeeping-QuickBooks .......................... 5
ACC 210 Financial Accounting FundamentalsI .................................... 5
ACC 220 Financial Accounting Fundamentals II ................................... 5
ACC 257 Business Tax Accounting ...................................................... 5
ALLIED SUPPORTCOURSES
BUS 116 Business Math/Spreadsheets .................................................. 5
BUS 124 Excel for Business ............................................................... 3
BUS 169 Using Computers in Business .............................................. 5
BUS 236 Interpersonal Communications for the Workplace ................... 5
BUS 200 Intro to Law ...................................................................... 5
-OR-
BUS250 BusinessLaw ...................................................................... 5
GENERAL EDUCATION ELECTIVES
Five credits must be selected from a list of approved general education courses. Contact the Advising Center for a list of these categories and acceptable courses.

TOTALCREDITS

## Computerized Accounting Technology

The Computerized Accounting Technology certificate is a three-quarter program designed to provide students with computerized accounting skills using state-of-the-art accounting software. The program bridges the gap between manual and computerizedaccounting systems with students gaining hands-on experience and expertise with basic, mid-range, and sophisticated accounting systems. This experience will provide graduates with viable entry and/or advancement in the accounting job market with both large and small organizations.

## Certificate

REQUIRED COURSES
ACC 131 Small Business Recordkeeping-QuickBooks ........................... 5
ACC 210 Financial Accounting FundamentalsI .................................... 5
ACC 220 Financial Accounting Fundamentals II ................................... 5
ACC 230 Fundamentals of Managerial Accounting ................................ 5
BUS 197 Work Experience-Business ................................................ 2-5
ACC 260 Peachtree Accounting ........................................................... 5
ACC 262 MAS-90 Accounting ............................................................. 5
BUS 124 Excel for Business ................................................................ 3
BUS 125 Using Access in Business ..................................................... 3
BUS 140 Customer Relations ............................................................. 5
BUS 169 Using Computers in Business .................................................. 5

- OR -

CIS 101 Microcomputer Applications ................................................. 5
BUS 236 Interpersonal Communications for the Workplace .................... 5
TOTALCREDITS

## Tax Practitioner

## Certificate

The Tax Practitioner certificate program provides the technical training necessary for persons intending to enter the tax preparation field. It also prepares students for the Special Enrollment Examination given by the IRS and offers refresher training for those who have experience in the tax field.
TECHNICAL SPECIALTY COURSES
ACC 210 Financial Accounting FundamentalsI .................................... 5
ACC 220 Financial Accounting Fundamentals II .................................... 5
ACC 255 Federal Income Tax I .......................................................... 5
ACC 256 Federal Income Tax II ......................................................... 5
ACC 257 Business Tax Accounting ...................................................... 5
ALLIED SUPPORTCOURSES
ACC 131 Small Business Recordkeeping-QuickBooks .......................... 5

- OR -

ACC 260 Peachtree Accounting ............................................................... 5
BUS 140 Customer Relations ............................................................. 5
BUS 169 Using Computers in Business ................................................ 5
BUS 200 Intro to Law ........................................................................ 5
-OR-
BUS 250 BusinessLaw .5

## GENERAL EDUCATION ELECTIVES

Five credits must be selected from a list of approved general education courses. Contact the Advising Center for a list of these categories and acceptable courses.

TOTALCREDITS 50

## ALLIED HEALTH SCIENCES

## Health/Medical Division (206) 527-3790

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

North Seattle Community College offers an Associate of Applied Science (A.A.S.) degree in Allied Health Sciences for graduates of certificate programs in Medical Assisting, Practical Nursing, and Pharmacy Technician. These programs are listed in alphabetical order in this section.

## DEGREE CRITERIA INCLUDE:

1. A North 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.
2. Completion of specific technical courses, related general education and liberal studies.
3. Completion of 90 credit hours.
4. An overall grade point average of 2.0. Other requirements may be established by faculty or administrative policies.

## PROGRAM REQUIREMENTS FOR MEDICALASSISTING, PHARMACY TECHNICIAN \& PRACTICAL NURSING:

a. 45 (minimum) - 60 (maximum) vocational-technical credits.
b. Minimum of 25 credits in general education or related instruction courses: Communication ( 5 cr ); Computation/Quantitative Reasoning ( 5 cr ); Human Relations ( 5 cr .); and 10 credits from the list of approved courses for the A.A. degree (must include 5 credits from U.S. Cultures or Global Studies).
c. Up to 20 elective credits may be taken as necessary to complete the 90 credits required for the degree.

## BIOMEDICALEQUIPMENTTECHNOLOGY

## Business and Engineering Technologies Division （206）527－3730

## Associate of Applied Science Degree

North Seattle Community College has offered a comprehensive program in Biomedical Equipment Technology for more than 10 years，with courses from the Electronics Technology program serving as a strong foundation．

## TECHNICAL SPECIALTY COURSES

EET 105 Intro to Technology ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 3
EET 107 Principles of Electronics ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 4
EET 108 Principles of Electronics Laboratory ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 4
EET 109＊Mathematical Applications for Circuit Analysis ．．．．．．．．．．．．．．．．．．．．．．． 5
EET 112 Fundamentals of Fluid Power and Electromechanical Systems ． 6
EET 114＊＊Applied Physics .5
EET 117 Electronic Devices ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 4
EET 118 Electronic Devices Laboratory ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 4
EET 127 Intro to Digital and Analog Circuits ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 4
EET 128 Intro to Digital and Analog Circuits Laboratory ．．．．．．．．．．．．．．．．．．．．．． 4
EET 130 Computer Basics－A＋Certification ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 9
EET 207 Advanced Principles of Electronics ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 4
EET 208 Advanced Principles of Electronics Laboratory ．．．．．．．．．．．．．．．．．．．．．．．．． 4
EET 217 Digital and Analog Circuits II ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 4
EET 218 Digital and Analog Circuits II，Laboratory ．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 4
EET 251 Microprocessor FundamentalsI ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
＊MAT 122 may be substituted for EET 109.
＊＊PHY 101， 102 may be substituted for EET 114.

## ALLIED SUPPORTCOURSES

AHI 100 Intro to Medical Vocabulary ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 3
ANP 128 Survey of Anatomy and Physiology ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
CHE 101 Chemistry ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
CSC 110 Intro to Computer Programming ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
ENG 101 Composition ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
TECHNICAL ELECTIVES
Fifteen credits of BMET modules．Contact the Advising Center for a list of acceptable courses．

## GENERALEDUCATION COURSES

Ten general education requirement credits must be selected from specific general education categories．Contact the Advising Center for a list of these categories and acceptable courses．

## BUSINESS

## Business and Engineering Technologies Division （206）527－3730

The Business program preparesstudents to enter business in management trainee positions．It encompasses most of the activities that fit within the realm of managementresponsibilities．

## General Business <br> Associate of Applied Science Degree（A．A．S．） <br> TECHNICAL SPECIALTY COURSES <br> ACC 210 Financial Accounting FundamentalsI ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5

ACC 220 Financial Accounting Fundamentals II ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
BUS 101 Intro to Business ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
BUS 112 Multicultural Issues in the American Workplace ．．．．．．．．．．．．．．．．．．．．．． 5
BUS 114 Intro to Marketing ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
BUS 131＊Integrated CommunicationsI ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
BUS 169 Using Computers in Business I ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
BUS 200＊＊Intro to Law ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
BUS210 Business and Economic Statistics ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
BUS 201 Human ResourceManagement ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
BUS215 Intro to International Business ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
BUS 216 Professional Development ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
BUS230 Business Communications ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
－OR
BUS 132 Integrated Communications II ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5
BUS 236 Interpersonal Communication for the Workplace ．．．．．．．．．．．．．．．．．．．．． 5
＊Eligible for ENG 101 through English placement exam or
completion of ENG 097／098．
＊＊BUS 200 transfers to the University of Washington．

## GENERAL EDUCATION COURSES

10 credits from the following lists：
At least 5 credits must be from the＂$A$＂list．
＂A＂List
ACC 131，BUS 124，BUS 125，BUS 156，BUS 182， BUS 269，CIS 111
＂B＂List
ACC 230，ACC 255，BUS 116，BUS 197，ECO 200， ECO 201，BUS 299

## ELECTIVES

Select 10 credits from a list of approved general education courses．Contact the Advising Center for a list of acceptable courses．

NOTE：Students transferring to a four－year college must take 10 credits in behavioral science．

## e-Business

The e-Business program prepares students for successful entry into e-business businesses and careers as entry-level customer service representatives, ebusiness project managers, business development specialists, e-business partnership managers and e-business managers. The demand for students upon completion of this program will span all major industries, providing a wealth of opportunities in every type of work environment. Thee-business arena provides competitive salaries, cutting-edge technology, and the opportunity to change the way business is done.
Eligibility for ENG 101 based on English Placement Test or satisfactory completion of English 097/098+080.

## Certificate

TECHNICAL SPECIALTY COURSES
BUS 101 Intro to Business ............................................................................ 5
BUS 131* Integrated CommunicationsI ............................................... 5
BUS 156** Intro to e-Business/Commerce ............................................... 5
BUS 157*** Managing Change in e-Business ............................................ 5
BUS $1588^{* * * *}$ e-Research and Consumer Behavior ........................................ 5
BUS 159+ e-Business Case Seminar I ..................................................... 3
BUS 160 e-Business Solutions ........................................................... 5
BUS 162 e-Architecture and Technologies ............................................. 5
BUS 169 Using Computers in Business ................................................ 5
BUS 236 Interpersonal Communications for the Workplace ................... 5
BUS 240 InternetLaw ........................................................................ 5
BUS 197 Work Experience: e-Business ............................................... 3

- OR

BUS 299 Special Topics: e-Business ... 3
ELECTIVES
Select 3-5 credits from:
BUS 161 (5), BUS 163 (5), BUS 298 (3-5)
TOTALCREDITS
59-61

* Eligible for ENG 101 through English placement exam or completion of ENG 097/098.
** BUS 101 or permission of instructor.
*** BUS 131 and BUS 156 or permission of instructor.
**** Eligibility for Math 097, based on the Math Placement Test, or satisfactory completion of MAT 081.
+ BUS 158.


## BUSINESS INFORMATIONTECHNOLOGY

## Business and Engineering Technologies Division (206) 527-3730

The Business Information Technology program prepares students for employment as office support professionals and administrative assistants with computer literacy in information processing, spreadsheets, databases, presentation graphics, and word processing.

## Certificate

## TECHNICAL SPECIALTY COURSES

BUS 106* Keyboarding/Skillbuilding................................................... 3
BUS 112 Multicultural Issues in the American Workplace ...................... 5

- OR -

BUS 113 Diversity Issues in Business ................................................. 3
BUS 116 Business Math/Spreadsheets .................................................. 5
BUS 131** Integrated Communications I ................................................ 5
BUS 132 Integrated Communications II ............................................... 5

- OR -

BUS230 Business Communications ..................................................... 5

BUS 169 Using Computers in Business I ............................................ 5
BUS 269 Using Computers in Business II ............................................. 5
BUS 270 Using Computers In Business III ........................................... 5
BUS 182 Information \& Database Management .................................... 5
BUS 197 Work Experience - Business ................................................ 3-5
BUS216 Professional Development ...................................................... 5
Prerequisite:* BUS 105 or 25 wpm (words per minute) accurate keyboarding by touch or concurrent enrollment in BUS 106. Course may be repeated up to two times to build required speed.
** Eligible for ENG 101 through English Placement Exam, or completion of ENG 097/098.
Associate of Applied Science Degree (A.A.S.)
TECHNICAL SPECIALTY COURSES
BUS 106* Keyboarding/Skillbuilding ..... 3
BUS 112 Multicultural Issues in the American Workplace ..... 5
BUS 116 Business Math/Spreadsheets ..... 5
BUS 131** Integrated Communications I ..... 5
BUS 132 Integrated Communications II ..... 5

- OR -
BUS 230 Business Communications ..... 5
BUS 140 Customer Relations ..... 5
BUS 169 Using Computers in Business I ..... 5
BUS 269 Using Computers in Business II ..... 5
BUS 182 Information \& Database Management ..... 5
BUS 197 Work Experience-Business ..... 3-5
BUS216 Professional Development ..... 5
Prerequisite: * Demonstrated ability to keyboard at 25 cwpm(correct words per minute) or satisfactory completion of BUS104 or BUS 105. BUS 106 may be waived for studentsdemonstrating ability to keyboard at 40 cwpm.** Eligible for ENG 101 through English Placement Examor completion of ENG 097/098.
ALLIED SUPPORTCOURSES
BUS 101 Intro to Business ..... 5
BUS 124 Excel for Business ..... 3
BUS 156 Intro toe-Business/Commerce ..... 5
BUS 201 Human Resource Management ..... 5
BUS 204 Office Procedures .....  5
BUS 236 Interpersonal Communications for the Workplace ..... 5
BUS 270 Using Computers in Business III ..... 5
GENERAL EDUCATION COURSESTen general education requirement credits must be selectedfrom specific general education categories. Contact theAdvising Center for a list of these categories and acceptablecourses.
TOTALCREDITS ..... 92-96
Accounts Payable/Receivable Clerk
Certificate
TECHNICAL SPECIALTY COURSES
ACC 110 Intro to Accounting/Bookkeeping I ..... 5
ACC 131 Small Business Recordkeeping-QuickBooks ..... 5
ACC 260 Peachtree Accounting ..... 5
BUS 115 Computational Skillbuilding ..... 2
BUS 116 Business Math/Spreadsheets ..... 5
BUS 131** Integrated Communications I ..... 5
BUS 140 Customer Relations ..... 5
BUS 169 Using Computers in Business I .....  5
BUS 197 Work Experience: Business ..... 3-5
TOTALCREDITS ..... 34-37
** Eligible for ENG 101 through English Placement Exam
or completion of ENG 097/098.


## Customer Service Certificate

These certificates combine office support training in communications, customer relations, information technology, skill building, and on-the-job work experi-ence-all designed to prepare students for entry-level positions as customer service representatives.

## TECHNICAL SPECIALTY COURSES

BUS 106* Keyboarding/Skillbuilding..................................................... 3
BUS 131** Integrated CommunicationsI ................................................ 5
BUS 140 Customer Relations ............................................................. 5
BUS 169 Using Computers in Business I ............................................ 5
BUS 197 Work Experience: Business ........................................................ 3
Prerequisite: * BUS 105 or 25 wpm accurate keyboarding by touch or concurrent enrollment in BUS 106. Course may be repeated up to two times to build required speed.
** Eligible for ENG 101 through English Placement Exam or completion of ENG 097/098.

TOTALCREDITS
21-23

## Advanced Customer Service

## Certificate

## TECHNICAL SPECIALTY COURSES

BUS 106* Keyboarding/Skillbuilding.................................................... 3
BUS 112 Multicultural Issues in the American Workplace ...................... 5

- OR -

BUS 113 Diversity Issues in Business ................................................ 3
BUS 131** Integrated CommunicationsI ............................................... 5
BUS 132 Integrated Communications II .................................................. 5

- OR -

BUS230 Business Communications ................................................... 5
BUS 140 Customer Relations ............................................................. 5
BUS 169 Using Computers in Business I ............................................ 5
BUS 269 Using Computers in Business II ........................................... 5
BUS 197 Work Experience: Business ............................................... 3-5
Prerequisite: *BUS 105 or 25 wpm accurate keyboarding by touch or concurrent enrollment in BUS 106. Course may be repeated up to two times to build required speed.
** Eligible for ENG 101 through English Placement Test or satisfactory completion of ENG 097/098.

TOTALCREDITS
34-38

## COMPUTERINFORMATION SYSTEMS

## Business and Engineering Technologies Division (206) 527-3730

This program prepares students for entry-level positions in the computer field. Graduates normally find jobs as business programmers, systems analysts, or computer operators.
In order to earn a Programming Certificate, students must have completed 45 credits of non-technical general education coursework. A two-year degree from an accredited college or university will satisfy this requirement.

Program Prerequisites: CIS 101, CIS 106 (3.0 or higher), and CIS 111.

## Programming <br> Certificate

CIS 115 Problem-Solving \& Structured Programming Using C++ ........ 5
CIS 120 Using Structured Query Language (SQL) .................................. 3
CIS 136 Unix Operating Systems ........................................................... 5
CIS 137 Intro to Data Communications ................................................ 5
CIS 172 Visual Basic I ............................................................................ 5
CIS 236 DatabaseManagement .............................................................. 5
CIS 162* Intro to Object-Oriented Programming:JAVA .......................... 5

- OR -

CIS 125 Object-Oriented Programming Using C++ ............................... 5
CIS 262 AdvancedJava ....................................................................... 5

- OR -

CIS 272 Visual Basic II
.. 5
CIS 255 Systems Analysis \& Design ..................................................... 5
CIS 264** Computer Information Systems Lab .................................... 2-3 Elective ................................................................................... 5

* Students should take CIS 162 if they plan to take CIS 262 as their advanced level programming course.
**Lab may be repeated each quarter.
TOTALCREDITS


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

This program prepares students for entry-level positions in the computer field and includes technical computer information system, business, and college transfer courses. Graduates normally find jobs as business programmers or systems analysts.
Program Prerequisites:
General: CIS 101, CIS 106 (3.0 or higher), and CIS 111.
English: English Placement Test Score of ENG 098 or above.
Math: Math Placement Test Score of MAT 122 or above, or completion of MAT 098.

## TECHNICAL SPECIALTY COURSES

CIS 115 Problem-Solving \& Structured Programming Using C++ ........ 5
CIS 120 Using Structured Query Language (SQL) ............................... 3
CIS 136 Unix Operating Systems ...................................................... 5
CIS 137 Intro to Data Communications .............................................. 5
CIS 172 Visual Basic I ..................................................................... 5
CIS 236 Database Management .......................................................... 5
CIS 162* Intro to Object-Oriented Programming:JAVA ........................... 5

- OR -

CIS 125 Object-Oriented Programming Using C++ .............................. 5
CIS 262 AdvancedJava ............................................................................ 5

- OR -

CIS 272 Visual Basic II .................................................................... 5
CIS 255 Systems Analysis \& Design .................................................... 5
CIS 264** Computer Information Systems Lab ................................... 2-3
Elective ............................................................................ 5

* Students should take CIS 162 if they plan to take CIS 262
as their advanced level programming course.
**Lab may be repeated each quarter.


## ALLIED SUPPORTCOURSES

ACC 210 Financial Accounting FundamentalsI ......................................... 5
BUS 101 Intro to Business ................................................................. 5
MAT 240 Elementary Statistics .......................................................... 5

- OR -

BUS210 Business and Economic Statistics ............................................ 5
BUS 131 Integrated CommunicationsI .............................................. 5
BUS236 Interpersonal Communications for the Workplace .................... 5
MAT 122 Pre-Calculus ...................................................................... 5
ECO 200 Principles of Economics: Macroeconomics .............................................................................
GENERAL EDUCATION COURSES
Select 10 credits from approved list for the AA Degree.
Select 5 credits from U.S. Cultures or Global Studies course list and five from the remaining areas.
Contact the Advising Center for a list of these categories and acceptable courses.

## Web Development

## Certificate

The Web Development certificate program prepares students for entry-level positions in Web development. Graduates normally find jobs developing and maintaining Web sites for a wide range of organizations.
In order to earn a Web Development Certificate, students must have completed 45 credits of non-technical general education coursework. A two-year or fouryear degree from an accredited college or university will satisfy this requirement.

## Program Prerequisites:

General: CIS 101, CIS 106 ( 3.0 or higher), and CIS 111.
English: Eligibility for ENG 093/094 is recommended.
Math: Math Placement Test Score of MAT 122 or above, or completion of MAT 098.

## TECHNICAL SPECIALTY COURSES

CIS 115 Problem-Solving \& Structured Programming Using C++ ........ 5
CIS 136 UNIX Operating System ......................................................... 5
CIS 137 Intro to Data Communication ................................................. 5
NET 140 Network Mgmt - UNIX Shell Scripts ...................................... 5
EGR 231 Technical Writing ..................................................................... 3
CIS 162 Intro to Object-Oriented Programming:JAVA ........................... 5
CIS 168 Graphics for the Web ............................................................... 5
CIS 211 HTML and Java Script for Website Design ............................... 5
CIS 212 WebScripting .......................................................................... 5
CIS 213 AdvancedWebDevelopment .................................................... 5
CIS 264 Computer Info Systems Lab ................................................. 1-3
TOTAL CREDITS 49-51

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

This program prepares students for entry-level positions in Web development. The degree includes technical and supporting courses in computer information systems and Web design, as well as training in the business relations skills needed to function effectively as a Web developer. Graduates normally find jobs developing and maintaining Web sites for a wide range of organizations.
Program Prerequisites:
General: CIS 101, CIS 106 (3.0 or higher), and CIS 111.
English: Eligibility for ENG 093/094 is recommended.
Math: Math Placement Test Score of MAT 122 or above, or completion of MAT 098.

## TECHNICAL SPECIALTY COURSES

CIS 115 Problem-Solving \& Structured Programming Using C++ ........ 5
CIS 136 UNIX Operating System ........................................................ 5
CIS 137 Intro to Data Communication ............................................... 5
NET 140 Network Management-UNIX Shell Scripts ............................ 5
CIS 162 Intro to Object Oriented Programming: Java ......................... 5
CIS 168 Graphics for the Web ............................................................ 5
CIS 211 HTML \& Java Script for Website Design .................................. 5
CIS 212 WebScripting ..................................................................... 5
CIS 213 Advanced Web Development ................................................... 5
CIS 236 DatabaseManagement ......................................................... 5
CIS 264 Computer Info Systems Lab .............................................. 1-3
CISElective .5

## ALLIED SUPPORTCOURSES

ART 210 Computer Art ..... 4
BUS 101 Intro to Business .....  5
BUS240 InternetLaw .....  5
CIS 260 Audio/MIDI for the Web .....  5
EGR 231 Technical Writing ..... 3
MAT 122 Pre-Calculus ..... 5
CISElective .....  5
GENERAL EDUCATION COURSES ..... 10 Remaining credits must be selected from the list of general
education courses. 5 credits must be from Global Studies, and the other 5 from any field except Global Studies.
TOTALCREDITS ..... 93-95
CIS ELECTIVES
CIS 150 Software Testing I ..... 5
CIS 172 Visual Basic I .....  5
CIS 244 Intro to C++ ..... 5
CIS 255 System Analysis \& Design .....  5
CIS 261 Streaming Web Media \& Digital Video Editing . .....  5
CIS 262 AdvancedJava .....  5
CIS 269 Web Essentials .....  1
CIS 272 Visual Basic II .....  5
CIS 273 Interactive Web Media \& Animation .....  5
CIS 274 Flash Actionscript .....  5
CIS 275 Flash with Generator ..... 5
CIS 279 3D Modeling and VRML .....  5
CIS 285 Web Authoring \& Design Studio I .....  5
CIS 286 Web Authoring \& Design Studio II .....  5
CIS 290 Independent or Internship Studies . ..... 2-5
CIS 291 CIS Work Experience .....  2
CIS 298 Advanced Programming Project ..... 2-5
CWE 100 Coop. Education: Work Experience ..... 2-5
NET 122 Network OS 1-Win2K Professional . ..... 6

## CONSTRUCTION \&

## DESIGN DRAFIING WITHCAD

50

## Business and EngineeringTechnologies Division (206) 527-3730

Training provided in this program is directed toward the construction and design industry, and prepares students for a growing number of entry-level jobs in engineering, construction firms and public agencies. Coursework includes both computer drafting and conventional hand drafting, as well as basic applied mechanics, cost estimating, shop drawing preparation and construction materials and processes. The two-year sequence leads to an Associate of Applied Science Degree. A one-year certificate is also offered. The program includes general education requirements, providing a well-rounded educational experience.

## Certificate

## TECHNICAL SPECIALTY COURSES

TDR 109* Construction \& Design Drafting Lab .................................. 1-3
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 \& Methods of Construction ...................................... 5
TDR 144 Design \& Construction Environment .................................... 5
TDR 164 Systems in Buildings .......................................................... 5
ALLIED SUPPORTCOURSES
ENG $101 \dagger$ Composition ....................................................................... 5
MAT 106**Applied Algebra \& Trigonometry I ............................................ 5
SSC 103** Human Dimension of Work .................................................. 5

* May be repeated each quarter.
** May be substituted by any 100-level approved human relations/math course.
$\dagger$ May be substituted with ENG 105 and a 5-credit general education course.

TOTALCREDITS
46-48
Associate of Applied Science Degree (A.A.S.)46-48
TECHNICAL SPECIALTY COURSES
TDR 109* Construction \& Design Drafting Lab ..... 1
TDR 261 Contract Drawing Preparation I ..... 5
TDR 262 Contract Drawing Preparation II ..... 5
TDR 265 Structural Detailing ..... 5
TDR 270 Construction Estimating ..... 5
TDR 271 Advanced Estimating ..... 5
MTC 160 Applied Mechanics I ..... 5
MTC 161 Applied Mechanics II ..... 5
CIS Computer Skill Classes** ..... 5
COMMUNICATIONS COURSES
EGR 231 Technical Writing ..... 3
GENERALEDUCATION COURSES ..... 5
Five general education requirement credits, which must be selected from specific general education categories. Contact the Advising Center for a list of these categories and acceptable courses.
*May be repeated each quarter.
**A minimum of 5 credits in computer skill classes required.
TOTALCREDITS ..... 96-98
Certificate (evening program)
TECHNICAL SPECIALTY COURSES
TDR 109* Construction \& Design Drafting Lab ..... 1-3
TDR 113 Basic Drafting .....  5
TDR 124 Materials \& Methods of Construction ..... 5
TDR 144 Design \& Construction Environment ..... 5
TDR 164 Systems in Buildings ..... 5
TDR 174 Intro to CAD for Architectural and Engineering Drafting ..... 4
TDR 175 Intermediate CAD for Engineers \& Architects ..... 4
TDR 176 Advanced AutoCAD for Architectural \& Engineering Drafting . .....  4
GENERALEDUCATION COURSES
ENG 101 Composition ..... 5
MAT 106 Applied Algebra \& Trigonometry I ..... 5
ElectivesContact the Advising Center for a list of acceptable courses.*May be repeated each quarter.
Cooperative Work Experience ( $2-4$ credits) is recommended.
TOTALCREDITS48-50

## DIGITALCOMPUTER ELECTRONICS (COMPUTER HARDWARE)

## Business and Engineering Technologies Division (206) 527-3730

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

The Digital Computer Electronics program is not currently active. Please refer to the Network Technology and Electronics Technology programs for related opportunities

## EARLYCHILDHOOD EDUCATION

## Child \& Family Education Division (206) 527-3783

North offers an Associate of Applied Science degree in early childhood education and early childhood special education. Certificate opportunities are also available in early childhood education. Specialty certificates are available in habilitation and paraeducator.
The A.A.S. degree in early childhood education 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 instructional assistant in special education classrooms.

## Early Childhood Education Certificate and Associate of Applied Science Degree (A.A.S.) GENERAL EDUCATION

 Select five credits from each of the following categories (for a total of 20 credits). Contact the Advising Office for a list of approved courses:Communication (written or oral)
Computation/Quantitative Reasoning

- US Cultures or Global Studies

Vis.Lit.Perf.Arts or Natural World
RELATED INSTRUCTION
Professional Practice with Young Children
CCE 160D-Connecting to Children (2-credit modules):
D1 Expressing Warmth to Children ........................................................ 2
D2 Playing Responsively ....................................................................... 2
D3 Talking Informatively ..................................................................... 2
D4 Initiative, Cooperation, Perseverance ................................................. 2
CCE 292B-Classroom Research ............................................................. 12
REQUIRED COURSES
CCE 102 Issues and Trends in Early Childhood Education ..................... 3
CCE 113 Human Exceptionalities ................................................................. 3
CCE 125 Program Planning .............................................................. 5
CCE 135 Foundations of Early Learning ............................................. 5
CCE 166* Cultivating Conversation ............................................................ 3
CCE 159* Behavior Management .......................................................... 4
CCE 232* ParentInvolvement ............................................................ 4
CCE 234* Staff Relationships .................................................................... 3

* Human Relations included in these required CCE courses.


## ELECTIVE COURSES

Select a minimum of 20 credits from the following courses:
CCE 101 HumanDevelopment .................................................................... 5
CCE 136 Signing with Young Children ................................................ 2
CCE 145 Music and Creative Expression ............................................. 4
CCE 165 UnderstandingLiteracy ........................................................ 3
CCE 175 Mathematics and Design ............................................................... 3
CCE 180 Professional Development ................................................ 1-6
CCE 185 Physical Education in Early Childhood ..... 3
CCE 195 Art for Young Children ..... 3
CCE 266 Building Thoughtful Expression .....  3
CCE 261 Readings in Early Childhood Education ..... 1-6
CCE 285 The Project Approach ..... 5
CCE 170C-Creating the Conditions for Learning ..... 2-18
H
C2 Process Activities
C3 Construction ..... 2 ..... 2
(2-credit modules)
2C4 Drama Area$C 4$
$C 5$ 2
C5 Writing and Enactment .....  2
C6 Science Center ..... 2
C7 Making Center .....  2
C8 Cleaning and Restoration .....  2
C9 Songs and Games at Music ..... 2
Cl0 Creative Dance .....  2
Cll Book Center ..... 2
Cl2 Books and Oral Stories ..... 2
$\mathrm{Cl3}$ Workstation Activities .....  2
Cl4 Cooperative Games and Computers ..... 2
C15 Physical Play Spaces .....  2
Cl6 OutdoorGames ..... 2
C17 Painting and Clay ..... 2
C18 Drawing to Learn .....  2
C19 Supporting Children with Behavior Difficulties .....  2
C20 Teaching Children with Special Needs ..... 2
TOTALCREDITS ..... 90-116
Modular Equivalents:CCE 125 = three of C1-C8
CCE $145=$ C9 \& C10
CCE $165=$ Cl1 \& Cl2
CCE $175=$ Cl3 \& C14
CCE 185 = C15 \& C16

## Habilitation Specialist

## Certificate

The Habilitation Specialist certificate is currently under revision. Please contact the division office at (206) 527-3783 for additional information.
Habilitation Specialists teach and care for individuals with developmental disabilities in group home or institutional settings. This certificate program is designed for persons already employed in a residential facility. For individuals employed as direct-care staff at Fircrest School, courses within this program apply toward assignment pay and the ATS series.

## TECHNICAL SPECIALTY COURSES

RFW 150 Resident Care ..................................................................... 3
RFW 166 Intro to Habilitation ............................................................ 3
RFW 167 Teaching \& Supporting Adults w/Disabilities .......................... 5
ALLIED SUPPORTCOURSES
CCE 113 Human Exceptionalities............................................................. 3
-OR -
CCE 159 BehaviorManagement .......................................................... 4
ENG 101 Composition ....................................................................... 5
RFW 267 Community-Based Curriculum for Adults w/Disabilities ......... 5
RELATED INSTRUCTION
CCE 101 HumanDevelopment .......................................................... 5
CCE 234 Staff Relationships ............................................................... 3
PSY 110 General Psychology ............................................................ 5
PSY 215 Abnormal Psychology .......................................................... 5
RFW 170 Manual Communication ...................................................... 2
RFW 180 Special Topics ................................................................. 1-5
SOC 102 Intro to American Culture .................................................... 5
SOC 110 Survey of Sociology ........................................................... 5
SOC 150 Race \& Ethnic Relations in the U.S. ....................................... 5
TOTALCREDITS 44-45
Early Childhood Education
Assistant Certificate
TECHNICAL SPECIALTY COURSES
CCE 160 Connecting to Children (2-credit modules):
D1 - Expressing Warmth to Children ..... 2
D2-Playing Responsively ..... 2
D3-Talking Informatively ..... 2
D4-Initiative, Cooperation, Perseverance ..... 2
TOTALCREDITS ..... 8
Certificate
REQUIRED COURSES
CCE 160C-Connecting to Children:
D1-Expressing Warmth to Children ..... 2
D2-Playing Responsively ..... 2
D3-Talking Informatively ..... 2
D4-Initiative, Cooperation, Perseverance ..... 2
CCE 125 ProgramPlanning ..... 5

- OR -
CCE 170* Creating the Conditions for Learning (from Cl to C8) ..... 6
CCE 145 Music and Creative Expression ..... 4
- OR -
CCE 170 Creating the Conditions for Learning ( C 9 and C 10 ) ..... 4
CCE 165 UnderstandingLiteracy ..... 3
- OR-
CCE 170 Creating the Conditions for Learning (C11 and C12) ..... 4
CCE 175 Mathematics and Design ..... 3
- OR-
CCE 170 Creating the Conditions for Learning (C13 and C14) ..... 4
CCE 185 Physical Education in Early Childhood Education ..... 3
- OR -
CCE 170 Creating the Conditions for Learning (C15 and C16) ..... 4
CCE 195 Art for Young Children ..... 3
OR-
CCE 170 Creating the Conditions for Learning (C17 and C18) ..... 4
ELECTIVECOURSES
Select a minimum of 3 credits from the following courses:
CCE 101 Human Development ..... 5
CCE 135 Foundations of Early Learning ..... 5
CCE 136 Signing with Young Children ..... 2
CCE 166 Cultivating Conversations ..... 3
CCE 159 Behavior Management ..... 4
CCE 165 UnderstandingLiteracy ..... 3
CCE 234 Staff Relationships ..... 3
CCE 266 Building Thoughtful Expression ..... 3
CCE 285 The Project Approach ..... 5
TOTAL CREDITS ..... 32-37


## CCE 170 C-2 credit Modules

Cl Exploration Activities
C2 Process Activities
C3Construction
C4Drama Area
C5 Writing and Enactment
C6Science Center
C7Making Center
C8 Cleaning and Restoration
C9 Songs and Games at Music
Cl0 Creative Dance
Cll Book Center
Cl2 Books and Stories
Cl3Workstation Activities
C14 Cooperative Games and Computers 汇
C15 Physical Play Spaces
Cl6OutdoorGames
C17 Painting and Clay
C18 Drawing to Learn

## Paraeducator

Certificate
The Paraeducator Certificate is currently under revision. Please contact the division office at (206) 527-3783 for additional information.

## TECHNICAL SPECIALTY COURSES

CCE 150 Teaching Exceptional Learners ............................................... 3
CCE 153 Creating Inclusive School Communities ................................. 3
CCE 154 Field Learning Experience .................................................. 6
CCE 113 Human Exceptionalities ........................................................ 3
ALLIED SUPPORTCOURSES
Only 8 to 10 credits are required from Allied Support Courses.
CCE 101 HumanDevelopment .5
CCE 234 Staff Relationships ............................................................... 3
CCE 159 Behavior Management ........................................................... 4
TOTALCREDITS 23-25

## ENGINEERING DESIGNTECHNOLOGY

## Business and Engineering Technologies Division (206) 527-3730

The Engineering Design Technology certificate program includes the study of the importance of a responsible and professional work ethic. Factors leading to such a work ethic are identified and discussed. Instruction is also provided in effective leadership and how it enhances the work environment. Input from this program's industrial committee is essential to curriculum content pertaining to the work ethic and leadership as well as the technically oriented curriculum.

## Certificate

## TECHNICAL SPECIALTY COURSES

EDR 151 Intro to Engineering Graphics I11
EDR 152 Engineering Graphics for Mechanical Design II ..... 11
EDR 153 Statics \& Strengths of Materials for Mechanical Design ..... 11
EDR 274 Geometric Dimensioning \& Tolerancing ..... 4
EDR 163 Intro to AutoCAD for Mechanical Design ..... 4
EDR 164 Intro to Pro/Engineer ..... 4

- OR -EDR 165 Intro to SolidWorks \& Parametric Solid Modeling 4
EDR 261 Advanced AutoCAD for Mechanical Design ..... 4
- OR -
EDR 281 AutoCAD for Mechanical Applications ..... 4
EDR 251 Schematic Drafting \& Basic PCB Design ..... 10
- OR -EDR 272 Mechanical Design Applications11
- OR -EDR 271Drafting and Design for Polymers and Other Materials 4
-AND-EDR 275 Drafting and Design for Polymers and OtherMaterialsLab7
ALLIED SUPPORTCOURSES
BUS 236 Interpersonal Communications for the Workplace ..... 3-5
BUS 169 Using Computers in Business I ..... 5
- OR -
CIS 101 Microcomputer Applications ..... 5
ENG 101 Composition .....  5
MAT 098 Intermediate Algebra ..... 5
TOTALCREDITS ..... $77-80$


## ENGINEERING DESIGNTECHNOLOGY/ MECHANICALDESIGN SPECIALIZATION

## Business and Engineering Technologies Division (206) 527-3730

Program requirements and course offerings are revised periodically to reflect changes in the industry. New courses in parametric solid modeling using ProEngineer and SolidWorks software are being developed and offered. Contact the division office for the latest information. This program provides training in electromechanical drafting and a foundation in chassis design for the electronics and other manufacturing related industries. Covers study of materials for metal and plastics drafting and design, industrial design, principles of design layout, costing, manufacturing breakdownandscheduling. Includes math, communication skills, CAD, machining fundamentals and CNC operations. It is recommended that students wishing to transfer to a four-year college also take MAT 122, EGR 210 and EGR 220.

## Certificate

## TECHNICAL SPECIALTY COURSES

EDR 151 Intro to Engineering Graphics I ..... 11
EDR 152 Engineering Graphics for Mechanical Design II ..... 11
EDR 153 Statics \& Strengths of Materials for Mechanical Design ..... 11
EDR 163 Intro to AutoCAD for Mechanical Design .....  4
EDR 164 Intro to Pro/Engineer \& Parametric Solid Modeling ..... 4
-OR -
EDR 165 Intro to SolidWorks \& Parametric Solid Modeling ..... 4
EDR 261 Advanced AutoCAD for Mechanical Design ..... 4
EDR 272 Mechanical Design Applications ..... 11
EDR 274 Geometric Dimensioning \& Tolerancing ..... 4
ALLIED SUPPORT COURSES
ENG 101 Applied Composition ..... 5
MAT 106 Applied Algebra \& Trig I ..... 5
NET 123 Human Relations in the Workplace ..... 3
GENERALEDUCATION COURSES

Select 5 general education requirement credits. Contact the Advising Center for a list of these categories and acceptable courses.
Associate of Applied Science Degree (A.A.S.)Program Prerequisites: ENG 097, MAT 098, CIS 101 or BUS 169.
TECHNICAL SPECIALTY COURSES
EDR 151 Intro to Engineering Graphics I ..... 11
EDR 163 Intro to AutoCAD for Mechanical Design ..... 4
EDR 152 Engineering Graphics for Mechanical Design II ..... 11
EDR 153 Statics \& Strengths of Materials for Mechanical Design ..... 11
EDR 261 Advanced AutoCAD for Mechanical Design ..... 4
EDR 274 Geometric Dimensioning \& Tolerancing ..... 4
EDR 264 Advanced Pro-Engineer ..... 4

- OR -
EDR 265 Advanced SolidWorks \& Parametric Solid Modeling ..... 4
EDR 271 Drafting \& Design for Polymers \& Other Materials ..... 11
- AND -EDR 275 Drafting and Design for Polymers and OtherMaterialsLab7
EDR 273 Mechanical Product Design Applications ..... 7
ALLIED SUPPORTCOURSES
BUS 236 Interpersonal Communications for the Workplace . ..... 3-5
EGR231 Technical Writing ..... 3
MAT 122 Pre-Calculus ..... 5
GENERAL EDUCATION COURSESFifteen general education requirement credits must be selectedfrom specific general education categories. Five credits of the10 must be taken from the Global Studies or US Culturesclasses. Contact the Advising Center for a list of thesecategories and acceptable courses.
TOTALCREDITS113


## ENGINEERING DESIGNTECHNOLOGY/ CAD FOR INDUSTRIALAPPLICATIONSELECTRONICEMPHASIS

## Business and Engineering Technologies Division (206)527-3730

Program requirements and course offerings are revised periodically to reflect changes in the industry. Please contact the division office for the latest information. This program provides training in all elements of electromechanical drafting and advanced studies in design of printed wiring boards and related technologies. Advanced classes provide analog and digital circuit PWB design, documentation, and fabrication processes. Emphasis on design for EMI, RFI, high-density, surface-mounted devices. Covers photo-tooling. Includes math, communication skills, CAD, electronics theory and programming.

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

## TECHNICAL SPECIALTY COURSES

EDR 151 Electro-Mechanical Drafting I ................................................ 11
EDR 152 Electro-Mechanical Drafting II ..... 11
EDR 153 Electro-Mechanical Drafting III ..... 11
EDR 163 Intro to AutoCAD for Electro-Mechanical Drafting ..... 4
EDR 251 Schematic CAD Drafting \& PCB Design ..... 10
EDR 252 Advanced PCB Design ..... 10
EDR 253 Database Applications \& Production Design ..... 7
EDR 261 AutoCAD for 2-D Applications .....  4
EDR 274 Geometric Dimensioning \& Tolerancing .....  4
Technical Elective .....  5
ALLIED SUPPORTCOURSES
CIS 101 Microcomputer Applications .....  5
EET 161* DC Principles of Electronics ..... 5
EGR 231 Technical Writing .....  3
ENG 101 Composition .....  5
MAT 120** Pre-Calculus ..... 5
GENERAL EDUCATION COURSESFive general education requirement credits must be selectedfrom specific general education categories. Contact theAdvising Center for a list of these categories and acceptablecourses.

* EET 100 may be substituted for EET 161.
** Contact the Advising Center for MAT substitutions.


## ELECTRONICS

## Business and Engineering Technologies Division (206) 527-3730

Electronics and associated technologies taught 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. Extensive research has resulted in a series of program offerings that meet the interests of students as well as industry demands. 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:

Biomedical Equipment Technology ......................................................... D
CAD for Industrial Applications .............................................................. D
CAD for Industrial Applications, Certificate ................................................. D
Digital Computer Electronics ................................................................. D
Electronic Communications ..................................................................... D
Electronics Engineering Technology ....................................................... DE
Electronics Technology .......................................................................... D
General Electronic Technology .............................................................. E
Industrial Power \& Control Technology ................................................ DE
Industrial Power \& Control Technology, Certificate ................................. DE

## Note to Electronics Technology Majors:

Students interested in this field should contact the program advisor at (206) 527-3757, or the Advising Center at (206) 527-3658 before enrolling. Courses and programs are transferable to certain four-year institutions.

## ELECTRONICCOMMUNICATIONS

## Business and Engineering Technologies Division (206) 527-3730

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

North Seattle Community College has offered a comprehensive program in Electronic Communication Technology for more than ten years, with courses from the Electronics Technology program serving as a strong foundation. This program is currently undergoing substantial reorganization. Please contact the division office for current information.

## ELECTRONICSENGINEERING TECHNOLOGY

## Business and Engineering Technologies Division (206) $527-3730$

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

The Electronics Engineering Technology program is being significantly revised to reflect the American Electronics Association standards of a high-performance worker. The programs will include more choices for specialized study in the form of small credit modules of learning. During the revision, these programs will continue to provide skilled learning opportunities, including professional certification and Associate of Applied Science degrees.
This program provides a solid framework for advanced training in electronic engineering at a polytechnic or four-year institution. It also provides an excellent foundation in applied engineering for students who wish to enter the workforce immediately.
Because of the complexity regarding course sequence and prerequisites,students should seek advanced planning assistance with an advisor

## TECHNICAL SPECIALTY COURSES

EET 105 Intro to Technology .................................................................. 3
EET 107 Principles of Electronics .......................................................... 4
EET 108 Principles of Electronics Lab .................................................. 4
EET 117 Electronic Devices .................................................................... 4
EET 118 Electronic Devices Lab ............................................................. 4
EET 127 Intro to Digital and Analog Circuits ........................................ 4
EET 128 Intro to Digital and Analog Circuits, Lab ................................. 4
EET 207 Advanced Principles of Electronics .......................................... 4
EET 208 Advanced Principles of Electronics, Lab ................................... 4
EET 217 Digital and Analog Circuits, II ............................................... 4
EET 218 Digital and Analog Circuits II, Lab .......................................... 4
EET 251 Microprocessor FundamentalsI ............................................... 5
EET 285 Electronics Technology Project ................................................. 3

## ALLIED SUPPORTCOURSES

EGR/CSC 142 Computer Programming for Engineers ................................ 5
MAT 123 Pre-Calculus ............................................................................ 5
MAT 124 Calculus w/Analytic Geometry ................................................ 5
MAT 125 Calculus w/Analytic Geometry ................................................. 5
PHY 101 General Physics I .................................................................... 5
PHY 102 General Physics II .................................................................. 5
PHY 103 General Physics III ................................................................. 5
COMMUNICATIONS COURSES
EGR 231 Technical Writing ................................................................... 3
ENG 101 Composition ......................................................................... 5
CMN 135 Effective Presentations .............................................................. 5
GENERALEDUCATION COURSES
Ten general education requirement credits must be selected from specific general education categories. Contact the Advising Center for a list of these categories and courses.

## TECHNICALELECTIVES

Select 8-10 technical electives. Contact the Advising Center for a list of acceptable courses.

## ELECTRONICSTECHNOLOGY

## Business and Engineering Technologies Division (206) 527-3730

## Certificate

This newly updated program reflects the American Electronics Association (AEA) standards for a technician in a high- performance workplace. The program provides asolid concept base for students who seek specialized training in electronics, and leads to a certificate or Associate of Applied Science degree. The certificate program provides basic entry-level training for a variety of electronic job positions such as: production testing and service; technician assistance; automatic testequipment operation; prototype testing and assembly; specialized electronically controlled equipment; and other support positions.

## TECHNICAL SPECIALTY COURSES

EET 105 Intro to Technology
EET 106 Soldering and Safety in the Workplace ................................... 2
EET 107 Principles of Electronics ...................................................... 4
EET 108 Principles of Electronics Laboratory ......................................... 4
EET 109* Mathematical Applications for Circuit Analysis ...................... 5
EET 114** Applied Physics .................................................................. 5
EET 117 Electronic Devices ................................................................ 4
EET 118 Electronic Devices Lab ......................................................... 4
EET 127 Intro to Digital \& Analog Circuits ........................................ 4
EET 128 Intro to Digital \& Analog Circuits Lab ................................... 4
EET 130 Computer Basics-A+Certification ...................................... 9
GENERAL EDUCATION COURSES
Nine additional credits required-3 from approved Communications courses; 3 from approved Human Relations courses; 3 from an approved Computing course. See the Advising Center for an approved list of courses.

* MAT 122 may be substituted for EET 109.
** PHY 101, 102 may be substituted for EET 114.


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

## TECHNICAL SPECIALTY COURSES

EET 105 Intro to Technology3
EET 106 Soldering and Schematics ..... 2
EET 107 Principles of Electronics ..... 4
EET 108 Principles of Electronics Laboratory .....  4
EET 109* Mathematical Applications for Circuit Analysis ..... 5
EET 112 Fundamentals of Fluid Power and Electromechanical Systems .....  6
EET 114** Applied Physics ..... 5
EET 117 Electronic Devices ..... 4
EET 118 Electronic Devices Lab ..... 4
EET 127 Intro to Digital \& Analog Circuits ..... 4
EET 128 Intro to Digital \& Analog Circuits Lab ..... 4
EET 130 Computer Basics -A+ Certification ..... 9
EET 207 Advanced Principles of Electronics ..... 4
EET 208 Advanced Principles of Electronics Laboratory ..... 4
EET 217 Digital and Analog Circuits II ..... 4
EET 218 Digital and Analog Circuits II, Laboratory . ..... 4
EET 251 Microprocessor Fundamentals 1 ..... 5
EET 271 Advanced Technical Modules in Electronics Technology ..... 5
EET 285 Electronics Technology Project ..... 3
COMMUNICATIONS COURSES
ENG 101 Composition ..... 5
ALLIED SUPPORTCOURSES
CSC 110 Intro to Computer Programming .....  5
TECHNICAL ELECTIVES ..... 15
Contact the Advising Center for a list of acceptable courses.10
General education requirements must be selected from specificgeneral education categories. Contact the Advising Center fora list of these categories and acceptable courses.

* MAT 122 may be substituted for EET 109.
** PHY 101, 102 may be substituted for EET 114.


## ELECTRONICS, GENERAL

## (evening program)

## Business and Engineering Technologies Division (206)527-3730

## Certificate

This program provides theoretical and practical background in electronics for maintenance and repair technicians.
EET 161 DC Principles of Electronics ............................................... 5
EET 162 AC Principles of Electronics ................................................. 5
EET 163 SolidState Electronics I ....................................................... 5
EET 164 SolidState Electronics II ....................................................... 5
EET 165 Analog Circuits \& Devices I .................................................. 5
EET 170 Digital Circuits I .............................................................. 5
EET 171 Digital Circuits II .............................................................. 5
MAT 109 Technical Math for Electronics ............................................. 5
Approved Computer Course ................................................. 5
GENERAL EDUCATION COURSE
Five credits must be selected from specific general education categories. Contact the Advising Center for a list of these categories and acceptable courses.
Associate of Applied Science Degree (A.A.S.)
COMPLETION OF CERTIFICATE REQUIREMENTS ..... 50
TECHNICAL SPECIALTY COURSES
EET 166 Analog Circuits \& Devices II ..... 5
EET 167 Basic Electronic Systems ..... 5
EET 168 Electronic Systems \& Industrial Application ..... 5
EET 251 MicroprocessorFundamentals I ..... 5
EET 252 Microprocessor Fundamentals II ..... 5
ALLIED SUPPORTCOURSES
PHY 118 Technical Physics for Electronics ..... 5
Elective (Approved Technical Course) ..... 5
COMMUNICATIONS COURSES
ENG 105 Applied Composition ..... 3
EGR 231 Technical Writing ..... 3
SPE 104 Oral Communication in the Workplace ..... 4
GENERALEDUCATION COURSESFive credits, which must be selected from specific generaleducation categories. Contact the Advising Center for a listof these categories and acceptable courses.
TOTALCREDITS ..... 100
SUBSTITUTIONS
The following college transfer courses may be substituted to meet communica-tions and mathematics requirements:
Communications
ENG 101 Composition ..... 5
-AND-
ENG 102 Composition ..... 5
-OR-
CMN 105 Perspectives on Communication (Formerly CMN/SPE 100) (orCMN 135 or CMN 165)5
Mathematics
MAT 120 Pre-Calculus ..... 5

## EMERGENCYMEDICALTECHNICIAN(EMT)

## Health/Medical Division (206) 527-3790

The Department of Social and Health Services specifies the EmergencyMedical Technician (EMT) knowledge and skills required to qualify as an EMT. In addition, a number of policies have been adopted by the faculty and administration at North Seattle Community College to fulfill the needs of the program's graduates and employers and to maintain accreditation with the Office of Emergency Medical Services for King County and the State Office of Emergency Medical Services, WashingtonState Department of Health in Olympia.
Students need to contact the Health/Medical Division office to obtain specific requirementsfor enrollment in this course. A written entrance exam is required for enrollment.
AHE 190 Emergency Medical Technician (EMT) .................................... 8
AHE 191 EMT Continuing Education .............................................. 2-5

## HEATING, AIR CONDITIONING, \& REFRIGERATION DESIGNTECHNOLOGY/HVAC

## Business and Engineering Technologies Division (206) 527-3730 <br> Students work in a large laboratory equipped specifically for heating, air conditioning and refrigeration instruction. Training includes demonstrations, assorted tools and functional test devices. The program covers use of computers for engineering calculation. Core technical courses are supplemented with courses in drafting, mathematics, physics and communication skills. <br> Graduates are prepared for employment as systems applications specialists, manufacturers' representatives, or engineering aides.

The degree program provides employment in many entry-level positions in the industry.

## Certificate

## TECHNICAL SPECIALTY COURSES

ECT 101 Heating Theory, Equipment and Application ........................... 12
ECT 102 Basic Refrigeration and Air-Conditioning ............................... 12
ECT 103 Residential Applications ......................................................... 12
ECT 211 System Design and Application ............................................... 12
ECT 212 System Design and Application II ............................................ 12
ECT 213 System Design and Application III .......................................... 12
ALLIED SUPPORTCOURSES
CIS 101 Microcomputer Applications ................................................... 5
EGR 231 TechnicalWriting ................................................................... 3
MAT 106 Applied Algebra \& Trig I ........................................................ 5
NET 123 Human Relations Skills in the Workplace ............................... 3
TDR 174 Intro to CAD for Architectural and Engineering Drafting ....... 4
TOTALCREDITS 92

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

COMPLETION OF CERTIFICATE REQUIREMENTS

92

TECHNICAL SPECIALTY COURSES
CMN 105 Perspectives on Communication (Formerly CMN/SPE 100) .... 5
SCI 100 Intro to Science 5
GENERAL EDUCATION COURSES
Five credits must be selected from specific general education categories. Contact the Advising Center for a list of these categories and acceptable courses.

# HOSPITALITY/FOOD SERVICE/CULINARYARTS 

## Culinary Arts \& Hospitality Division (206) 527-3779

Programs conducted by the Culinary Arts and Hospitality Division at North are designed to help students learn the skills needed for employment in a variety of hospitality industry careers. Under the direction of experienced industry professionals, the comprehensive program gives students the practical skills, knowledge and hands-on experience necessary for rapid advancement in an industry filled with opportunities for skilled workers.
The curriculum at North is flexible enough to provide training for a wide variety of people - those without hospitality industry experience and those with an extensive background.
Certificate programs include: commercial cooking, dining room service, restaurant cooking and restaurant management. An Associate of Applied Science degree in culinary arts can be earned with the addition of business and general education courses. Students may enter the program at the beginning of fall, winter or spring quarters.
A minimum 2.0 grade point average must be achieved in each Culinary Arts and Hospitality class. General education requirements are to be selected from specific general education categories. Contact the division office for acceptable courses.
Safety/sanitation/industrial hygiene is emphasized throughout the curriculum in lectures and actual demonstrations of safe laboratory techniques.

## Commercial Cooking <br> Certificate

This program prepares graduates for employment as pantry workers and fast food and cafeteria counter workers. Training includes actual food preparation and cafeteria/fast food window service in the college cafeteria and kitchen. Work experience includes volume food preparation and cafeteria food merchandising. The program is a prerequisite for the restaurant cooking certificate program.
CUL 101 Intro to Professional Cooking: Theory ..... 8
CUL 111 Intro to Professional Cooking: Practicum ..... 3
HFS 152 Commercial Cooking I ..... 6.5
HFS 153 Commercial Cooking II .....  5
HFS 182 Commercial Theory I ..... 2
HFS 183 Commercial Theory II .....  2
HOS 110 Principles of Sanitation ..... 3
TOTALCREDITS ..... 29.5
Advanced Commercial Cooking Certificate

Prepares students for positions in hospitals, long-term care facilities, catering and other volume operations.
COMPLETION OF COMMERCIAL COOKING CERTIFICATE ..... 29.5
HFS 154 Commercial Cooking III ..... 13
HFS 155 Commercial Foodservice Externship (Clinical) ..... 2
Dining Room Service
Certificate
This program emphasizes hands-on training and work experience in an inte-grated approach between classroom and actual experience. Work situationsinclude dining room service, banquets, catering, cashiering, dining roommanagement and menu study. This program is a prerequisite for the RestaurantCooking certificate program.
CUL 101 Intro to Professional Cooking: Theory .....  8
HFS 162 Intro to Dining Service ..... 6.5
HFS 163 Fine Dining Service I ..... 2.5
HFS 164 Fine Dining Service II ..... 2.5
HFS 165 Fine Dining Service III ..... 2.5
HFS 192 Dining Room Theory 1 .....  2
HFS 193 Dining Room Theory II ..... 2
HOS 110 Principles of Sanitation ..... 3
TOTALCREDITS ..... 29
Advanced Dining Room Certificate
COMPLETION OF DINING ROOM SERVICE CERTIFICATE ..... 29
CWE 100 Coop-Education .....  2
HFS 166 Fine Dining Supervisor ..... 2.5
HFS 167 Fine Dining Management ..... 2.5
TOTALCREDITS ..... 36
Restaurant Cooking CertificateGraduates of this program are employed as commercial dinner cooks, such asbroiler cooks, sauté cooks, lead cooks and sous chefs. The program may becompleted in two quarters and includes extensive, practical experience cookingin a modern kitchen for North's full-service restaurant, banquets and somecatering. Prereq: Commercial Cooking and Dining RoomService Certificate(s).
CUL 101 Intro to Professional Cooking: Theory ..... 8
CUL111 Intro to Professional Cooking: Practicum ..... 3
HFS 152 Commercial Cooking I ..... 6.5
HFS 153 Commercial Cooking II ..... 5
HFS 162 Intro to Dining Service ..... 6.5
HFS 163 Fine Dining Service I ..... 2.5
HFS 164 Fine Dining Service II ..... 2.5
HFS 165 Fine Dining Service III ..... 2.5
HFS 173 Restaurant Cooking I ..... 4.5
HFS 174 Restaurant Cooking II ..... 10.5
HFS 175 Restaurant Cooking III ..... 10.5
HFS 182 Commercial Theory I .....
HFS 183 Commercial Theory II ..... 2
HFS 192 Dining Room Theory I ..... 2
HFS 193 Dining Room Theory II ..... 2
HFS 194 Restaurant Cooking Theory I ..... 2.5
HFS 195 Restaurant Cooking Theory II ..... 2.5
HOS 110 Principles of Sanitation ..... 3
NTR 150 Human Nutrition .....  5
TOTALCREDITS ..... 83The following optional course provides an opportunity forstudents to specialize in a given cooking station(s) or to gainadditional supervisory and work experience.HFS 147 Special Topics4-24
Restaurant Management CertificateThis program is designed for those interested in restaurant management orenrolled in food service courses. The courses are designed to augment successfulrestaurant work experience and prepare students for entry-level supervisory ormanagement positions.
ACC 110 Intro to Accounting/Bookkeeping I .....  5
BUS 101 Intro to Business ..... 5
HOS 161 Principles of Restaurant Management .....  5
HOS 162 Food \& Beverage Service \& Management .....  5
HOS 163 Food \& Beverage Cost Controls .....  5
TOTAL CREDITS ..... 25
Culinary Arts
Associate of Applied Science Degree (A.A.S.)
COMPLETION OF RESTAURANT COOKINGCERTIFICATE REQUIREMENTS83
BUS 112 Multicultural Issues in the American Workplace ..... 5

- OR-
SPE 104 Oral Communications in the Workplace ..... 4
- OR -
BUS 235 Oral Communications in Business ..... 5
BUS 116 BusinessMath/Spreadsheets ..... 5
CWE 100 Coop-EdExternship .....  2
ENG 104 Advanced English Grammar .....  5
HOS 161 Principles of Restaurant Management ..... 5
HOS 162 Food \& Beverage Service \& Management .....  5
HOS 163 Food \& Beverage Cost Control .....  5
PSY 220 Psychology of Human Relations ..... 3
GENERAL EDUCATION ELECTIVESFive credits must be selected from specific general educationcategories. Contact the Advising Center for a list of thesecategories and acceptable courses.
TOTALCREDITS ..... 122-123


# INDUSTRIALPOWER \& CONTROLTECHNOLOGY 

## Business and Engineering Technologies Division (206) 527-3730

The Industrial Power and Control Technology program offers both a two-year course of study leading to an Associate of Applied Science degree and a one-year course of study leading to a certificate. The program prepares students for immediate employment and future advancement in companiesand organizations that manufacture, sell, service, design and support electrical and electronic systems that control machinery, automation and/or processes. Graduates work in areas such as industrial/maintenance electrician, technical sales specialist, field service technician, and substation operator apprentice.
The first year focuses on courses in the Electronics Technology program. Students learn DC fundamentals and circuit analysis, solid-state electronic devices and circuits, and analog and digital circuits. Other areas covered include math, chemistry, physics, computer programming, English and general studies. The second year of the program includes some work from the Electronics Technology program and focuses on industrial power and control technologies. Subjects covered include AC fundamentals and circuits, fundamentals of fluid power and electromechanical systems, DC and AC rotating machinery, transformers, single-phase and three-phase circuits, motor control and programmable logic controllers (PLC's), electric drives, advanced digital and analog circuits, and microprocessor fundamentals. Students will also choose several modules that they wish to study from the list of Advanced Technical Modules in Industrial Power and Control including electronic power devices, transducers, field effect transistors, feedback control systems and other topics.

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

## TECHNICAL SPECIALTY COURSES

EEL 201 Industrial Transformers and Motors ....................................... 5
EEL202 Industrial Motor Controls .................................................... 5
EEL203 Industrial Motor Drives ....................................................... 5
EET 105 Intro to Technology ............................................................. 3
EET 106 Soldering and Safety in the Workplace ................................... 2
EET 107 Principles of Electronics ...................................................... 4
EET 108 Principles of Electronics Laboratory ...................................... 4
EET 109* Mathematical Applications for Circuit Analysis ....................... 5
EET 112 Fundamentals of Fluid Power and Electromechanical Systems . 6
EET 114** Applied Physics .................................................................... 5
EET 117 Electronic Devices ............................................................... 4
EET 118 Electronic Devices Lab ........................................................ 4
EET 127 Intro to Digital \& Analog Circuits ........................................ 4
EET 128 Intro to Digital \& Analog Circuits Lab ................................... 4
EET 130 Computer Basics-A+ Certification ....................................... 9
EET 207 Advanced Principles of Electronics ........................................ 4
EET 208 Advanced Principles of Electronics Laboratory ......................... 4
EET 217 Digital and Analog Circuits II .............................................. 4
EET 218 Digital and Analog Circuits II, Laboratory .............................. 4
EET 251 Microprocessor Fundamentals I ............................................ 5
EET 285 Electronics Technology Project ............................................. 3
COMMUNICATIONS COURSES
ENG 101 Composition ..... 5
ALLIED SUPPORTCOURSES
CSC 109 Technical Computer Applications ..... 5
TECHNICAL ELECTIVES
Five credits. Contact the Advising Center for a list of acceptable courses.
GENERALEDUCATION COURSES
Ten credits must be selected from specific general educationcategories. Contact the Advising Center for a list of thesecategories and acceptable courses.* MAT 122 may be substituted for EET 109.** PHY 101, 102 may be substituted for EET 114.
TOTALCREDITS ..... 118
Associate of Applied Science Degree (A.A.S.) (evening) COMPLETION OF CERTIFICATE REQUIREMENTS ..... 50
TECHNICAL SPECIALTY COURSES
EDR 150 Electronics Drafting with CAD Applications ..... 4
EET 164 Solid State Electronics II ..... 5
EET 165 Analog Circuits \& Devices I ..... 5
EET 166 Analog Circuits \& Devices II ..... 5
EET 171 Digital Circuits II ..... 5
EET 251 Microprocessor Fundamentals I ..... 5
EET 252 Microprocessor Fundamentals II .....  5
ALLIED SUPPORT COURSES
PHY 118 Technical Physics for Electronics ..... 5
COMMUNICATIONS COURSES
EGR 231 Technical Writing ..... 3
ENG 105 Applied Composition ..... 3
SPE 104 Oral Communications in the Workplace ..... 4
GENERAL EDUCATION COURSESFive credits must be selected from specific general educationcategories. Contact the Advising Center for a list of thesecategories and acceptable courses.
TOTALCREDITS ..... 104
SUBSTITUTIONS
The following college transfer courses may be substituted tomeet communications and mathematics requirements:
Communications
ENG 101 Composition ..................................................................... 5 ..... -AND -
ENG 102 Composition ..... 5

- OR -
CMN 105 Perspectives on Communication ..... 5
(or CMN 135 or CMN 165)
Mathematics
MAT 120 Pre-Calculus ..... 5


## INTERNATIONALBUSINESS

North Seattle Community College is currently revising the International Business certificate. It will be offered as an option under the Business degree effective fall quarter 2002. Contact the Business and Engineering Technologies division office at (206) 527-3730 for more information.

## MEDICALASSISTING

## Health/Medical Division <br> (206) $527-3790$

The Medical Assisting program at North Seattle Community College has been revised and is pending state approval. Call the Health/Medical division office at (206) 527-3790 for the latest information on courses available beginning fall 2002. The Modular Assisting program is planned as a self-paced, modular program with both day and evening hours available.
NETWORK MULTIMEDIA

## Business and Engineering Technologies Division (206) 527-3730

North Seattle Community College is currently revising the Network Multimedia Degree. Contact the Business and Engineering Technologies Division for further information.

## NETWORK ADMINISTRATION

## Business and Engineering Technologies Division (206) 527-3730

This four-quarter program prepares students for work in the field of network service, maintenance and administration. The first quarter is a prerequisite study of Windows $95 / 98 / 2000$, computer basics, and workplace communications. The remaining three quarters provide in-depth study in software, hardware, communications and work experience in the field of computer networking systems. Note that while the program can be completed in four consecutive quarters, many students prefer to take five.
The program deals with issues of current technology and, as such, is constantly revised to present the most current technology to students. The following is to be used as a general guide only. Note that not all classes are offered in each quarter. Contact the division office for current information.
Program Prerequisites:

| Technology: | EET 130 or A+Certification; NET 120 or NET + |
| :--- | :--- |
|  | Certification or NET 142; CIS 101 or placement test <br> equivalent or BUS 169. |
|  | English placement test in ENG 101 or equivalent. |
| English: | Math placement test in MAT 098 or equivalent. |

## Certificate

## TECHNICAL SPECIALTY COURSES

NET 122 Network OS 1-Win2K Professional ....................................... 5
NET 124 Network OS 2-Win2K Server ....................................................... 5
NET 126 Network OS3-Win2K Network Infrastructure ...................... 5
NET 128 Network OS 4-Win2K Active Directory ............................... 5
NET 134 Network Communications-TCP/IP ...................................... 5
NET 138 UNIX for Network Administration ........................................ 5
NET 140 Network Management-Unix Shell Scripts .............................. 5
NET 156 Designing Network Security for a Win2K Network ................ 5
NET 228 SQLServer Administration .................................................. 5
ALLIED SUPPORTCOURSES
BUS 236* Interpersonal Communications for the Workplace ................ 3-5
EGR 231 Technical Writing ............................................................... 3
MathElective** ................................................................. 5
General Education*** ........................................................ 5

* The five-credit BUS 236 must be taken for the degree; either the three- or five-credit course will satisfy the certificate requirements.
** Any college-level math class: MAT 100 or greater. BUS 116 and EET 109 will also satisfy this math elective.
*** Not needed for the certificate.
Associate of Applied Science Degree (A.A.S.)
COMPLETION OF CERTIFICATE REQUIREMENTS ..... 58
ALLIED SUPPORTCOURSES
NET 150 NetworkSecurityFundamentals ..... 5
NET 151 Network Defense and Counter Measures .....  5
NET 224 ExchangeServer ..... 5Select at least one of the following 5 credit courses:NET 154, NET 158, NET 218 or NET 298
GENERAL EDUCATION COURSESSelect 15 credits from a list of approved general educationcourses; 5 credits of which are from "US Cultures/GlobalStudies." And 5 credits from one Communications courseBUS 131, BUS 230, DRA 121 or ENG 101. Contact thedivision office for a list of approved courses.
TOTALCREDITS ..... 93-98


## Network Administration - CISCO

The Cisco Certificate program for Network Administration is a full-time program to be completed in four academic quarters.
Placement tests for ENG 101 and MAT 097, or equivalent, are required to enter this program.

## Certificate

## TECHNICAL SPECIALTY COURSES

EET 130 Computer Basics-A+Certification ..... 9
NET 122 Network OS 1-Win2K Professional ..... 5
NET 124 Network OS 2-Win2K Server ..... 5
NET 126 Network OS3-Win2K Network Infrastructure ..... 5
NET 134 Network Communications TCP/IP .....  5
NET 138 UNIX for Network Administration .....  5
NET 140 Network Management-Unix Shell Scripts ..... 5
NET 142 Network Management-Cisco I ..... 5
NET 144 Network Management-Cisco II ..... 5
NET 146 Network Management-Cisco III ..... 5
NET 150 Network Security Fundamentals ..... 5
ALLIED SUPPORTCOURSES
BUS 169 Using Computers in Business I ..... 5

- OR -
CIS 101 Microcomputer Applications .....  5
BUS 236* Interpersonal Communications for the Workplace ..... 3-5
EGR 231 Technical Writing .....  3
Math Elective** ..... 5
* The five-credit BUS 236 must be taken for the degree;either the three- or five-credit course will satisfy the certificaterequirements.
** Any college-level math class: MAT 100 or greater. BUS
116 and EET 109 will also satisfy this math elective.
TOTALCREDITS ..... 75-77
Associate of Applied Science Degree
COMPLETION OF CERTIFICATE REQUIREMENTS ..... 77
ALLIED SUPPORTCOURSES
CSC 110 Intro Computer Programming .....  5
ENG 101 Composition ..... 5
GENERAL EDUCATION COURSES

Select 10 credits from a list of approved general education courses; 5 of which must be from "US Cultures/Global Studies."

## NURSING, PRACTICAL

## Health/Medical Division (206) 527-3790

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 Health/ Medical division office for entry requirements and information on approval procedures and schedules. Attendance at an orientation/advising session is required prior to enrollment.
Applicants are advised to contact the Health/Medical division for current program and course information, including program entry approval requirements.

## Program Prerequisites:

AHI 100 Intro to Medical Vocabulary ................................................. 3
ENG 101 Composition ............................................................................ 5

- OR -

CMN 105 Perspectives on Communication (Formerly CMN/SPE 100) .... 5
MAT 100 Math for Health Careers ....................................................... 3
TOTALPREREQUISITES 11

## Certificate <br> TECHNICAL SPECIALTY COURSES

NUR 116 NursingFundamentals ......................................................... 6
NUR 117 Nursing Fundamentals-Lab and Clinical Practices ................. 3
NUR 118 Clinical Nursing Skills I .................................................. 1-2
NUR 119 Clinical Nursing Skills II .................................................. 1-2
NUR 124 Fundamentals of Anatomy \& Physiology ................................ 5
NUR 125 Community Resources ......................................................... 2
NUR 126 Legal Aspects/Career Opportunities ......................................... 2
NUR 127* Medical/Surgical Nursing-Child/Adult I ............................ 5-6
NUR 128* Medical/Surgical Nursing-Child/Adult II ........................... 7-8
NUR 131 Clinical Nursing Practice I ................................................ 4.5
NUR 132 Nursing Process I .................................................................. 2
NUR 133 Materna/Newborn Theory .................................................... 3
NUR 134 Materna//Newborn Clinical ................................................. 2
NUR 137 SelectedServices ................................................................ 1
NUR 138 Pediatric Nursing ................................................................ 2
NUR 139 Senior Experience ............................................................... 1
NUR 141 Clinical Nursing Practice II ................................................... 4.5
NUR 142 Nursing Process II .............................................................. 2
NUR 150 HumanNutrition ................................................................ 5
NUR 151 Basic Pharmacology I and Pharmacy Calculations ..................... 3
NUR 152 Pharmacology II ................................................................. 3
NUR 153 Administration of Medications ............................................... 1
NUR 154 Intravenous Therapy Skills ................................................... 2
PSY 160 Psycho-Physical Development-The Life Span .......................... 5

* NUR 127 \& 128 taken for combination of 13 credits.


## PARENTEDUCATION

## Child \& Family Education Division (206) 527-3783

North Seattle Community College offers parenteducation programs with classes held on and off campus during fall, winter and spring quarters. In addition, parents may utilize online classes that are offered every quarter.
Parents who enroll in the "Parent Education ChildStudy Laboratory" participate once a week with their child in a parent-operated cooperative preschool, pre-3, toddler or infant education program.
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 childdevelopment and behavior.
- learn new ways to interact with children.
- share ideas and experiences with other adults.
- share in their child's early development and group experiences.


## PHARMACYTECHNICIAN

## Health/Medical Division (206) 527-3790

Pharmacy technicians support pharmacists, who are legally responsible for all prescription orders and drug dispensing. The program emphasizes knowledge and skills associated with the varied responsibilities of the pharmacy technician. Graduates of the program are employed in hospitals and community pharmacies. Employment opportunities have remained strong in this health service occupation since its inception in 1975.
Applicants should contact the Health/Medical division office regarding enrollment and currentinformation about the program. The programbegins in fall and spring quarters.

## Certificate

TECHNICAL SPECIALTY COURSES
AHI 100 Intro to Medical Vocabulary .................................................. 3
PHA 112 PharmacyLaw .................................................................... 2
PHA 115 Orientation to Pharmacy Practice ........................................... 2
PHA 120 Pharmacy Calculations ........................................................ 3
PHA 130 Over-the-Counter Drugs ...................................................... 2
PHA 140 Sterile Products \& Aseptic Technique I .................................. 2
PHA 141 Sterile Products \& Aseptic Technique II ................................. 2
PHA 145 Pharmacy Ethics ................................................................ 1
PHA 150 Pharmacology I .................................................................. 3
PHA 151 Pharmacology II .................................................................. 3
PHA 155 Special Topics ................................................................... 4
PHA 160 Pharmacy Technology I ....................................................... 3
PHA 161 Pharmacy Technology II ...................................................... 2
PHA 170 Pharmacy Records Management ............................................ 4
PHA 190 Pharmacy Technician Externship .......................................... 13
TOTALCREDITS 49

## REALESTATE

## Business and Engineering Technologies Division (206) 527-3730

North Seattle Community Colleges offers classes leading to certification in the following designations:

- Real Estate Agent/Broker
- Real EstateLoan Officer
- Real Estate Appraiser
- Real Estate Property Manager
- Real Estate Title and Escrow Officer

Contact the Business division office for more information.

## WATCHTECHNOLOGYINSTITUTE

## Business and Engineering Technologies Division (206) 527-3730

Beginning fall 2002, the Watch Technology Institute is the only watchmaking school on the West Coast. This program teaches the Watchmakers of Switzerland Training and Educational Program (WOSTEP), which is internationally regarded in the industry. The Watch Technology program consists of 3000 hours of instruction over 8 quarters. Students take the WOSTEP exams for certification. The program accepts 12 students each year. Interested students should contact Elaine Rolf at (206) 526-0169 or e-mail her at erolf@sccd.ctc.edu.

## WORK EXPERIENCE/COOPERATIVEEDUCATION

## Co-op Education/Campus Career Services (206) 527-3685

Cooperative Education offers on-the-job learning for college credit. Business, industry and government work with the college to allow students to gain practical job experience coordinated with the student's major field of study.
This program enriches the educational experience by giving relevance to classroom theory and provides students with the opportunity to explore occupational directions within their chosen fields.
Students will receive college credit for employment relating to their major courses of study. For more information, contact the Advising Center.

## ADMINISTRATION \& FACULTY

## OFFICEOFTHEPRESIDENT

RONALD LAFAYETTE,
President/Vice Chancellor:
B.A.,M.A., Western WashingtonUniversity;Ed.D., Brigham Young University.

JANE NAKAGAWA, Director, Development: B.A., San Jose State University.

DOROTHYDUBIA,
Director, Marketing and Public Relations: B.A., California State University at Fullerton.

JANE LISTER REIS, Coordinator, Strategic Planning: B.A., New York University;M.C.M., Seattle Pacific University.

CINDY ROSE, Executive Assistant, President's Office:
A.A.,Shoreline Community College.

Human Resources Representative: (currently vacant)

## ADMINISTRATIVE SERVICES

ALAN WARD, Vice President of
Administrative Services:
B.S., M.B.A., University of Hartford.

TOM BATES,
Director, Computing Services:
B.A., University of Washington.

WALLY FOSMORE,
Manager, Facilities Operations:
A.A., Shoreline Community College.

PAUL PIECUCH,
Manager, Computing Services:
A.A.S., NorthSeattle Community College.

DENNIS YASUKOCHI,
Manager, Administrative Services:
B.A., University of California; M.B.A., M.P. Acc., University of Washington.

## ECONOMIC DEVELOPMENT AND CONTINUING EDUCATION

KATHERINE RILEY,
Executive Dean, Economic Development and Continuing Education:
B.A.,M.Ed.,University of Washington.

KENDALLHARRIS,
Director, Continuing Education:
B.A., M.A., San Diego State University.

MARK WEN,
Director of International Programs:
E.E., Harbin Electrical College; M.B.A., Gonzaga University.

MACHELLEALLMAN, Manager of International Student Programs: B.A., St. Andrews Presbyterian College; M.A., University of Wyoming.

HENDRIKA BENJAMINS,
Manager of Continuing Education

## STUDENT SERVICES

ROYFLORES,
Vice President for Student Services:
B.A., M.A., Seattle University.

MARCIJ. MYER, Dean,
Student Services/ Director, Admissions, Records \& Registration:
B.S., M.S., University of North Dakota.

ALICE MELLING,
Director, Enrollment Services:
B.A., Pacific Lutheran University; M.Ed., University of Washington.

MARK MITSUI, Director, Retention Services: B.A., Western Washington University; M.Ed., University of Washington (Fall, 2002).

CHRIS MOGADAM,
Director, Wellness Center:
B.A., M.S., San Diego State University.

SUZANNE SCHELDT,
Director, Student Financial Aid Services:
B.S., Northern Michigan University.

SUSAN SHANAHAN,
Director, Student Activities and Programs:
B.A., Western Washington University.

JEFFCALDWELL,
Manager, Safety and Security:
Certificate in Law Enforcement, Highline Community College.

CHERIE WEBER, Manager, Bookstore
ALBERT COSIO, Veterans Program Coordinator and Special Accounts:
B.S., San Jose State University; M.S., Florida Institute of Technology.

## OFFICE OFINSTRUCTION

KAREN DEMETRE, Acting Vice President for Instruction/Interim Executive Dean, Professional/Technical Education: B.S., M.Ed., University of Washington.

Dean, Professional/Technical Education: (currently vacant)

Dean, Instructional and Information Support Services:
(currentlyvacant)
PATRICIA CHEADLE, Dean, Business/ Electronics, Engineering Technologies: B.A., California State University; M.A., M.P.A., University of California at Berkeley.

THOMAS GRIFFITH, Dean, Science and Math, CIS: B.S., Iowa State University; M.S., Idaho State University; Ph.D., OklahomaState University.

DARRELL MIHARA, Dean, Professional Technical Education, Culinary Arts and Hospitality/Acting Dean, Child \& Family, Health/Medical \& Physical Education: B.A., University of Washington; Community College Vocational Certificate; M. Adult Ed., WesternWashingtonUniversity.

EDITH WOLLIN, Dean, Arts, Humanities and Adult Basic Education:
B.A., Pacific Lutheran University; M.S., University of Kansas; MAT, Ph.C., University of Washington.

Director, ABE and WorkFirst :
(currentlyvacant)
TOM BRAZIUNAS,
Director, Distance Learning:
B.A., University of Chicago, M.S., State University of New York; Ph.D., University of Washington.

NANCY FELKE,
Director, Career Link Academy:
B.A., MontanaState University; M.Ed., University of Washington.

CAROLYNLORD,
Director, The Loft Writing Center Plus:
B.A., Boston University; M.A., California State University.

PETER OMAR MANUELIAN, Director, North Seattle Institute of English (NSIE):
B.A., Amherst College; M.A., Rutgers University.

SUNELSON,
Director, Workforce Development:
B.A., University of Portland; M.Ed., Seattle University.
N. DAVID GRONBECK,

Manager, Media Services:
B.A., University of Minnesota.

JOHN ROST, Manager, Food Services:
Certificate, North Seattle Community College; Community College Vocational Teaching Certificate.

## THEFACULTY

ABE, BENJAMIN, Anthropology:
B.A., Carleton College, Minnesota; M.S., WashingtonState University.

ADELSON, NANCYJ.G., Real Estate and Marketing:
B.A.,University of Washington.

AL FAIZ, AMAL,ABE/ESL:
B.A., Carleton College, Minnesota; C.B., Academy of Bordeaux, France; M.Ed, Seattle University.

## ANDERSON, JANICE, ABE/ESL:

B.A., University of Washington; M.Ed., Seattle University.

ANDERSON, STEVEN N.,
Mathematics and Physics:
B.S., M.S., Ph.D., University of Washington.

ATKINS, ROBERTJ., Sociology:
B.A., M.S., California State University; Ph.D., University of Washington.

BEATTY, ERIC,
CAD for Industrial Applications:
M.S., B.S., Bowling Green State University; Certified Solidworks Administrator.

BEDFORD, DEBORAH, Medical Assisting:
A.A.S., North Seattle Community College; Certified Medical Assistant.

## BELL, BARBARA, ABE/ESL:

B.A., University of Oregon; M.A., Portland State University.

BELL, DAVID, Institute of English:
B.A., University of Oregon; M.A T., School for International Training.

BELGACEM, TAMARA, ABE/ESL:
B.A., Fort Wright College; M.A., University of PugetSound.

BENJAMIN, JUDITH, Institute of English: B.S., Mills College of Education; M.Ed., University of Washington; TESL Certificate, Seattle University.

BENNETT, PAULA, English:
B.A., M.A., Ph.D., University of Washington.

BERNHARD, SCOTT, French:
B.A., M.A., Ph.D. candidate, University of Washington.

BIRD, ELIZABETH L., Parent Education: B.A., Pacific Oaks College.

BOARDMAN, JEANE, Music:
B.A., University of Washington.

BOUKER, PATRICK, Accounting:
B.A., M.B.A., Seattle University.

BRADLEY, MYLES, Network Technology: B.S., University of California at Berkeley; M.S, University of Washington.

BRANNAN, DENISE G., Mathematics:
B.A., Dip. Ed., M.A., University of Sydney, Australia.

BRINTON, RUTH, English:
B.A., University of California; M.E.A., University of Washington.

BRODERICK, MARGARET E., General Business and Business Information Technology:
B.A., Seattle University; Community College Vocational Certificate.

BROWN, MARY MARGARET,
Parent Education:
B.S.N., Indiana University; M.S., University of Colorado; Ph.D.,UCLASchool of Education.

BRUBAKER, ROBERT, History: B.A., M.A., Ph.D., University of Washington.

CAMPBELL, M. ELIZABETH, Computer Information Systems:
B.A., University of Washington; Community College Vocational Certificate.

CARLSTROM, NORMAN, Construction Design and Drafting with CAD:
Licensed Architect, Washington state; Industry B. Arch., New York Institute of Technology; Community College Vocational Certificate.

CAULDWELL, ELEANORE., Human Biology and Nutrition:
B.A., Mills College; M.S., University of California at LosAngeles.

CHRISTENSON, ELROY, Art:
B.F.A., San Francisco Art Institute; M.F.A., University of Washington.

CHUNG, TERRI, English:
B.A., Wellesley College; M.A., StanfordUniversity.

CLAPP, J.C., English:
B.A., University of Wyoming; M.A., Utah State University.

CLARK, JULIANNE, Spanish:
B.A.,M.A., Ph.D., University of Washington.

CLARK, PATRICIA,
Computer Information Systems:
B.A., M.P.A., University of Washington.

COOK, DALEW., Heating, Air Conditioning and Refrigeration Design Technology:
Industry Professional, Community College Vocational Certificate.

COOK, THOMAS H., Economics:
B.A., University of Washington; M.A., Western WashingtonUniversity.

COSKO, PAULA, ABE/ESL:
B.A., Teaching Certificate, ESLAdvanced Certification, Seattle University; M.A., Antioch University.

CROLLEY, CAROLINE, Institute of English
DANIEL, NORIS,
Early Childhood Education:
B.S., Colorado State University;M.A., Pacific Oaks College; Community College Vocational Certificate.

DANKEL, REBECCA (BECKY),
Computer Information Systems:
B.A., M.B.A., University of Washington.

DAVIS, GEORGEC.,
Network Administration:
B.S., San Francisco State University.

DJAO, WEI, Global/Asian Studies:
B.A., M.A., Ph.D., University of Toronto.

DONATO, VALERIE, Parent Education:
B.A., Queens College, University of City of New York; M.A., Pacific Oaks College; Community College Vocational Certificate.

DRISCHEL, DAN, Special Education:
B.A., M.Ed., University of Cincinnati.

DRUMMOND, TOM, Early Childhood Special Education: B.A., M.Ed., University of Washington; Community College Vocational Certificate.

DUFFY, RALPH, Computer Information Systems:
B.A., University of Michigan; M.S., Pennsylvania State University.

## DUFFY, RUTH, ABE/ESL:

B.S., University of Maine; M.A., TESL Certificate, Seattle University.

EATON, JAMES, ABE/ESL:
B.A., M.A., California State University at Chico.

EJDE, LINDA E., General Business and Business Information Technology:
B.A., University of Washington; M.B.A., Seattle University; Community College Vocational Certificate.

ENFINGER, FRANK, Network Technologies: A.A.S., Network Technology Certificate, NorthSeattle Community College; Microsoft Certified Trainer; Community College Vocational Cerificate.

EYRES, DAVENE,
Physics and Mathematics:
B.S., M.S., University of Washington; C.P.A.

FIEGENBAUM, TIMOTHY, Electronics and Engineering:
M.A.,Webster University; Computerand Information Resources, BTE; National University; technical education.

FURUTANI, JUSTINE, Chemistry:
B.S., California Institute of Technology; M.S., University of California at Los Angeles.

FURUTANI, TRACYT., Random Science:
B.S., California Institute of Technology; M.S., Stanford University; Ph.D., University of Washington.

## GARCIA, FRANK, Mathematics:

A.A., Seattle Central Community College; B.A., Western Washington University; graduate study, University of Washington.

GERTLER, PESHA, English:
A.A., Mt. Hood Community College; B.A., Reed College; M.A., University of Washington.

GLADDEN, KIM, Physical Education:
B.S., Kent State University; B.F.A., University of Washington; Certified Aerobics Instructor, Certified Personal Trainer, American Council on Exercise.

GOFORTH, JANE, Business/Computer
Information Systems:
A.A.S.D., North Seattle Community College; B.A., University of Washington; completed coursework for M.A., University of the Virgin Islands.

GOLDNER, BARBARA, Computer Science, Computer Information Systems:
B.A., Wellesley College; M.S., Stanford University.

## GREEN, DEBORAH, English:

B.A., Wellesley College; M.A.T., University of Washington.

HAERTEL, HARRIS, Geography/History:
B.S., Arizona State University; B.FT., American Graduate School of International Management, Glendale, Ariz.; M.A.,University of Washington; additional studies, American University in Cairo, Egypt, and Delhi University, Delhi, India.

HAINES, JEANIE, ABE/GED:
B.A., University of Washington.

HALL, LARRYW., Psychology:
B.A., M.S., Western Washington University.

HAMILTON, CAROLANN, English: B.A., M.A., University of Washington.

HAMILTON, EARL W., Mathematics:
B.S., Massachusetts Institute of Technology;M.A., University of Washington; graduate study, Oregon State University.

HARNISH, JAMES, History, Philosophy: B.A., Seattle University; M.A., University of Washington; RussianLanguageStudy, Defense Language Institute, Monterey.

HARRADINE, JANE, English, Drama:
B.A., University of Washington; B.A., Pomona College;M.A., University of Idaho.

HARRIS, DAVID, Art:
B.F.A., M.FA., University of Washington.

HEAVENER, JIM,
Computer Information Systems:
B.S., Colorado School of Mines; M.A., University of Colorado.

HEINLEIN, TRACY, English:
B.A., Tulane University;M.A.,University ofSouthern Mississippi.

HIMES, DAVID, Mathematics:
B.S., University of Washington; M.S., Western WashingtonUniversity.

HOLT, BILL,
Business/Engineering Technologies:
B.S., Washington State University; M.A., Bastyr University; Training Specialist Certificate, TQM Certificate, University of Washington.

## HONG, JACKIE, Chemistry:

B.S., University of Washington; M.S., Western Washington University; Community College Instructional Certificate.

## HOPT, LARRYW.,

Accounting and General Business:
B.A., Boise State University; J.D., University of WashingtonLawSchool; Community College Vocational Certificate.

HOSTETLER, DIANE, Drama, English:
B.A., Russell Sage University;M.F.A., Temple University.

HOTTINGER, SUSAN, ABE/ESL:
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