

NORTH SEATTLE COMMUNITY COLLEGE

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<http://www.gonorth.org>

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NORTH • WELCOME

*“I am doing well
at North Seattle
Community College
because the classes
are small and
the staff is very
friendly.”*

Marieta Avanesova,
transferring to the
Diagnostic Ultrasound program
at Seattle University



SCOTT AREMAN PHOTO

MISSION

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



ABOUT THE COLLEGE

North is located five miles north of downtown Seattle on 62 acres that includes 11 acres of environmentally sensitive wetlands used for instruction. A new, world-class High Technology Learning Center (HTLC) is equipped for the cutting edge of high-tech education and provides a simulated industry environment. The HTLC also houses one of 12 CISCO Training Academies in the country.

North's nine campus buildings also include a new Child Care facility that provides a resource to students who have children and places the college at the forefront of child education in the area.

Students "go North" for award-winning professional/technical programs in IT/Electronics/Engineering technologies, as well as Business, Health/Medical, and Culinary Arts. They also take the first two years of their four-year degrees: Students from North generally earn a greater than 3.0 grade point average when they transfer to baccalaureate institutions.

Students and the community turn out to cheer the "Storm" intercollegiate basketball teams. The men's and women's teams play in the state-of-the-art PE/Wellness Center and compete in the 33-member Northwest Athletic Association of Community Colleges.

1998-1999 Academic Year Statistics +

STUDENTS:	
Headcount	17,998
Median Age ++	31
Male/Female	43 / 57%
Full-time/Part-time	39 / 61%
Diversity Rate	32.3%
Distance Education	985
International	390
Running Start	270
Worker Retraining*	319



STUDENT SERVICES AT NORTH

Academic Advising	(206) 527-3658
Admission	(206) 527-3664
Career Information	(206) 527-3676
Counseling	(206) 527-3676
Financial Aid	(206) 527-3688
Registration	(206) 527-3664
Testing Services	(206) 527-3674
TDD	(206) 526-0079

+ Source: Washington Community and Technical Colleges Academic Year Report 1998-1999, SBCTC
 ++ Fall 1999 State Supported; Source: SBCTC Student MIS:SR1102, Version 3
 * Includes Dislocated Natural Resource Workers

Student Services

ACADEMIC & CAREER RESOURCES

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 Western United States.

Center for Deaf Students

(206) 587-4183

The Center for Deaf Students at the Seattle Community Colleges is based at Seattle Central Community College. Being one of the most successful deaf programs in the nation, The Center for Deaf Students has more than 35 part time and full time interpreters working throughout the district at six area campuses. The Center for Deaf Students works to assist deaf and hard-of-hearing students with interpreting, counseling and social growth. Each student receiving support services from the Center works with a counselor, and may receive interpreting and note-taking services for classes, tutoring and school related activities.

Deaf or hard-of-hearing individuals may also access North Seattle Community College by calling the Washington State TTY Relay Services. The numbers are:

Voice	.....	1-800-833-6384
TTY	.....	1-800-833-6388
Telebraille	.....	1-800-833-6385
OSD	.....	1-800-855-1155
(VCO)	.....	1-800-833-6388

A TTY for student use is located in the Educational Access Center. The North Seattle Community College TTY can be reached at (206) 526-0079.

Cooperative Education & Career Services

(206) 527-3685

This office provides students with full- and part-time job listings, as well as consultation on job-related problems, workshops on cover letters, resume writing, employment interviewing, and job search skills.

Cooperative Education provides credit for relevant work experience both on- and off-campus, to augment classroom learning. The program allows students to apply skills and knowledge learned in the classroom to paid workplace situations and is available in nearly all college departments.

Instructional Computing Facilities

(206) 527-3617

The Instructional Computing Facilities are available to all North students.

Students have access to IBM, Macintosh, and Hewlett-Packard equipment. Several of the computer classrooms are networked using Novell Netware. Students are required to purchase a computer access card and a diskette to use the open lab. For more information, call Instructional Computing Facilities.

Learning Center & Tutoring Services

(206) 526-0078

Tutoring services provide new or returning students with added skills needed to excel in the classroom.

Tutoring and learning assistance are available in English, writing, spelling, reading, English as a Second Language, and computer-related topics.

The Media Center

(206) 527-3611

Located on the second floor of the Library, the Media Center provides audio and visual materials and services which support classroom instruction.

Materials and equipment such as audio and video tapes, video cameras and players, audio cassette and CD players, closed-circuit television, and slide projectors are available in the Media Center. 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

(206) 527-3674

New students seeking 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.

Transfer Assistance Center

(206) 527-3698

The Transfer Assistance Center assists students in transferring from North Seattle Community College to a four-year school by providing opportunities for educational planning and advising, and for meeting with four-year college/university representatives.

CAMPUS LIFE

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 a textbook buy-back service the last five to six days of each school quarter.

Hours

Monday - Thursday 7:30 a.m. - 7:00 p.m.
Friday 7:30 a.m. - 4:30 p.m.

Child Care Center

(206) 527-3644

This state-certified child care 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 operates Monday through Friday, 7:30 a.m. - 4:00 p.m. Call for specific fee information.

Copy Center

(206) 527-3616

Supplemental course materials may be purchased at the copy center. Printing is also done by Copy Center staff, and on a self-service copier. Various sizes and colors of paper, including resumé-quality, are available. Transparencies for classroom presentations are another service offered in the Copy Center, located in Room AS1524.

Food Services

(206) 527-3779

North Seattle 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 7 a.m. - 8:30 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

(206) 527-3779

(special events only)

Housing

On-campus housing is not available. However, a bulletin board lists various accommodations available in the local area.

Metro Bus Service

(206) 553-3000

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

Parking Services

(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 m.p.h..

REFUNDS

Parking is refundable only upon complete withdrawal from school and return of the student's parking permit. Amount of the refund is determined by the date of withdrawal:

Prior to first day of the quarter	100%
<i>(less \$5 processing fee)</i>	
First seven days of quarter	80%
8th - 20th calendar day of quarter	50%
After 20th calendar day of quarter	None

Physical Education/Wellness Center

(206) 528-4591

The Physical Education/Wellness Center is a new 44,000-square foot facility which 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, center membership and physical education courses. Memberships are available to the general public.

Safety

(206) 527-3636

The well-being and safety of our students are of utmost importance to us. It is vital that students follow strict safety procedures recommended in vocational classes. In the event of an on-campus accident or injury, students should report the accident to the Campus 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.

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 campus Security Office, as well as other locations around campus.

POLICY ON DRUGS

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 6 or more credits. The District-wide 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, elected by the student body, 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 staff, should contact the *Polaris* office.

Student Sports / The Seattle C.C. "Storm"

(206) 528-4591

The Seattle Community Colleges men's and women's intermural basketball teams, the Seattle Community Colleges *Storm*, compete in the 33-member Northwest Athletic Association of Community Colleges league.

Students from all three Seattle Community Colleges are eligible to play on the teams, which are based at the PE/Wellness Center at North. Athletic scholarships are available to qualified students.

BEYOND THE CAMPUS

North Seattle Community College Foundation (206) 527-3604

The North Seattle Community College Foundation was established in 1986 to enhance the educational environment and opportunities for students and faculty through private support.

As a non-profit corporation guided by a board of business and community leaders, the Foundation raises funds for many programs, including scholarships, equipment, library books, and faculty and staff professional development.

Last year, 60 scholarships were made available through private gifts, ranging from real estate awards to scholarships in accounting and technical fields. In addition, the foundation awarded more than 25 mini-grants to faculty, staff, and administrators for a variety of programs and projects that directly benefit the college community.

The work of the Foundation is critical to the continuing success of North. The Foundation is a bridge between the college and the community in approaching private citizens and companies to donate funds on behalf of the students, as well as helping the institution undertake special projects outside its basic operating budget.

Special Programs & Services

Educational Access Center

(206) 527-3697

North Seattle Community College Educational Access Center was created to establish a campus environment that is inclusive of students with disabilities.

Educational Access Center sponsors awareness workshops, faculty training and awareness of disability issues. Students who have a disability are encouraged to meet with staff of the Educational Access Center during the admissions process to discuss appropriate academic accommodations.

International Student Programs

(206) 527-3672

FAX (206) 527-3794

isp@sccd.ctc.edu

International Student Programs (ISP) oversees admissions, activities and services for students who have non-resident visas. Services include:

ADMISSIONS & ADVISING

(206) 527-3672

This office 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 11 for more information.

ACTIVITIES & SPECIAL PROGRAMS

(206) 527-3672

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.

North Seattle Institute of English (NSIE)

(206) 527-3795

NSIE is the college's intensive English program for international students and visitors. NSIE helps prepare non-native speakers of English to enter American colleges and universities and also provides English classes for non-university bound students, such as business and technical professionals, spouses of students, summer quarter students, and other visitors on non-student visas.

Special short-term English language and American culture programs are also available for groups.

In NSIE quarterly courses, students are placed into one of six levels according to their English proficiency. Classes develop skills in conversation, listening, reading, basic writing, grammar, study skills, note-taking, academic paper writing, and vocabulary and idioms. Additional classes are offered in computer applications. A computerized language laboratory is available. Successful completion of the NSIE program enables students who plan to become North Seattle Community College students to enter one of the college's academic or technical programs without a TOEFL requirement.

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 and earn high school credit at the same time.

For more information, students should contact their high school counselor or the Running Start office on campus.

Upward Bound

(206) 527-3691

This federally funded program serves 50 high school students from four high schools: Franklin, Roosevelt, Summit Alternative, and Indian Heritage.

The Upward Bound program provides personalized instruction in basic academic skills, science, foreign language, and other arts and academic disciplines; personal counseling, academic advising; social and cultural activities; and assistance in applying to colleges and applying for financial aid and scholarships. Upward Bound students also spend six weeks on the North Seattle Community College campus during the summer for an intensive academic and activities program.

The goal of Upward Bound is to maximize students' potential for graduation from high school and subsequent college enrollment. North's Upward Bound program works closely with students, parents, and the high schools to help guide each student in developing a strong sense of self and in acquiring the tools necessary for a successful college experience.

Veterans' Affairs

(206) 527-3699

FINANCIAL ASSISTANCE FOR VETERANS

The Veterans' Affairs office helps veterans and eligible dependents 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 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 any changes in address, program, dependents, 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 dependents.

Veterans and eligible dependents 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 development opportunities for students
- assistance for women interested in studying and finding employment in the fields of computing, engineering, science and math

College Transfer Programs

COLLEGE TRANSFER AT NORTH

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 test scores indicate a need for additional preparation may be required to complete preliminary work in the college preparatory program.

College transfer courses are offered in several disciplines, including:

American Ethnic Studies	Health
Anthropology	Humanities
Art	International Studies
Astronomy	Journalism
Biology	Languages and Literature
Botany	Mathematics
Chemistry	Meteorology
Communications (Speech)	Music
Computer Science	Nutrition
Drama	Oceanography
Earth Science	Philosophy
Economics	Physics
Engineering	Political Science
English	Science
Environmental Science	Social Science
Geography	Sociology
Geology	Women Studies
Global Studies	Zoology

These fields of study are grouped into three Areas of Knowledge (p. 17) and are included throughout the A.A. degree curriculum.

For Science Pre-Majors

Refer to the College Transfer Section of this catalog (p. 16) for a list of science pre-major programs that can be taken in the first two years of a four-year program.

For Engineering Pre-Majors

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.

Associate of Pre-Professional Studies in Engineering

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

TECHNICAL SPECIALTY COURSES

26 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	5
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		15

NOTE: Students must choose 15 credits from the fields of Visual, Literary & Performing Arts, and Individuals & Society.

ASSOCIATE OF FINE ARTS DEGREE & CERTIFICATE OF FINE ARTS

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 30 of their total credits at NSCC.

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.)		35
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	Business of Art	5

ADDITIONAL REQUIRED ART COURSES (MIN.)	24
GROUP I (12 credits min.)	
ART 121 Printmaking	4
ART 122 Printmaking	4
ART 123 Printmaking	4
ART 201 Painting	4
ART 202 Painting	4
ART 203 Painting	4
ART 205 Watercolor	4
ART 206 Watercolor	4
ART 207 Watercolor	4
ART 210 Computer Art	4
GROUP II (12 credits min.)	
ART 211 Sculpture	4
ART 212 Sculpture	4
ART 213 Sculpture	4
ART 221 Ceramic Art	4
ART 222 Ceramic Art	4
ART 223 Ceramic Art	4
ART 281 Jewelry Design	4
ART 282 Jewelry Design	4
ART 283 Jewelry Design	4

ADDITIONAL REQUIREMENTS	
Mathematics/Quantitative Reasoning	5
<i>Choose one from MAT 107, MAT 110, BUS 116, BUS 152, ACC 132.</i>	

ART ELECTIVES	
ART 100 Intro to ART	5
ART 254 Art of the Pacific NW	5
ART 255 Art History of Asia	5
ART 299 Special Problems	1-12
<i>Portfolio Presentation Required</i>	

TOTAL CREDITS	75
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Art
Associate of Fine Arts

REQUIRED ART COURSES	35
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 Business of Art	5

ADDITIONAL REQUIRED ART COURSES (MIN.)	20
GROUP I (4-16 credits)	
ART 121 Printmaking	4
ART 122 Printmaking	4
ART 123 Printmaking	4
ART 201 Painting	4
ART 202 Painting	4
ART 203 Painting	4
ART 205 Watercolor	4
ART 206 Watercolor	4
ART 207 Watercolor	4
ART 210 Computer Art	4
GROUP II (4-16 credits)	
ART 211 Sculpture	4
ART 212 Sculpture	4
ART 213 Sculpture	4
ART 221 Ceramic Art	4
ART 222 Ceramic Art	4
ART 223 Ceramic Art	4
ART 281 Jewelry Design	4
ART 282 Jewelry Design	4

GENERAL EDUCATION REQUIREMENTS	35
ENG 101 Composition	5
ENG 102 Composition	5
Mathematics/Quantitative Reasoning	5
<i>MAT 107, BUS 116, BUS 152, or ACC 132.</i>	

U.S. Cultures or Global Studies	5
<i>Choose any one course from the two columns in A.A. degree Areas of Knowledge</i>	

Areas of Knowledge	15
<i>Choose one course from Visual, Literary, and Performing Arts (excluding arts courses), one from Individuals, Cultures and Society, and one from The Natural World</i>	
<i>Portfolio Presentation Required</i>	

TOTAL CREDITS	93
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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 Associate Dean.

REQUIRED DRAMA COURSES	40
DRA 100 Intro to Theatre	5
DRA 121 Beginning Acting	5
DRA 122 Intermediate Acting	5
DRA 123 Intermediate Acting II	5
DRA 221 Advanced Acting	5
DRA 222 Advanced Acting II	5
DRA 223 Advanced Acting III	5
DRA 298 Special Projects	5
GENERAL EDUCATION REQUIREMENTS (MIN.)	15
<i>Students must choose one course in Computation, one course in Communication, and one course in Human Relations.</i>	
TECHNICAL THEATER ELECTIVES (MIN.)	15
<i>NOTE: Selected from the following.</i>	
DRA 131 (Not currently offered at North)	
DRA 211 Theater Management	
DRA 224 Production and Stage Management	
DRA 231 Props and Sound	
DRA 241 Costume	
DRA 251 Stage Scenery	
DRA 261 Stage Lighting	
RELATED ELECTIVES (MIN.)	20
<i>NOTE: Selected from the following.</i>	
ART 100 Intro to Art	
ART 104 Modern American Art	
ART 105 Survey of American Art	
ART 251, 252, 253 Art History	
DRA 108, 109, 110 Rehearsal & Performance	
DRA 115 Acting for the Camera	
DRA 200, 201, 202 Special Projects in Drama	
DRA 271, 272, 273 Independent Study in Acting	
DRA 291, 292, 293 Theatrical Internship	
DRA 298 Special Topics in Theater	
ENG 133 Intro to Dramatic Literature	
ENG 141, 142 Shakespeare	
ENG 211, 212, 213 British Literature	
ENG 221, 222, 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, 122, 123 Piano	
MUS 140 College Chorale	
MUS 142 Community Chorale	
MUS 143 Vocal Jazz Ensemble	
MUS 230 Performance Workshop	
PHI 100 Intro to Philosophy	

TOTAL CREDITS 90

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	54
MUS 101 1st Year Theory/Ear Training	5
MUS 102 1st 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 Applied Music	6
<i>(Should be taken in major and minor instrument each quarter of residency.)</i>	
REQUIRED PERFORMANCE COURSES	18
<i>(minimum 1 per quarter):</i>	
MUS 140, 142, 143, 151, 153, 154, 150	
ADDITIONAL MUSIC COURSES	3-5
<i>Choose any additional music course</i>	
GENERAL EDUCATION REQUIREMENTS	35
ENG 101 Composition	5
ENG 102 Composition	5
Mathematics/Quantitative Reasoning	5
<i>MAT 107, MAT 110, BUS 116, BUS 152, or ACC 132.</i>	
U.S. Cultures or Global Studies	5
<i>Choose any one course from the two columns in A.A. degree Areas of Knowledge</i>	
Areas of Knowledge	15
<i>Choose one course from Visual, Literary, and Performing Arts (excluding arts courses), one from Individuals, Cultures and Society, and one from The Natural World.</i>	
<i>Final performance/project approved by faculty.</i>	
TOTAL CREDITS	92-94

Basic Studies Programs

ARTS, HUMANITIES, & ADULT BASIC EDUCATION DIVISION

(206) 527-3709

Basic studies programs provide instruction for those who want to improve basic verbal and math skills or to earn a high school diploma in order to get better jobs, continue their education, and improve their lives.

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 through one of two options.

PRE-COLLEGE ENGLISH, MATHEMATICS AND HUMAN DEVELOPMENT CLASSES help college-bound students gain the skills necessary for college-level work.

Adult Basic Education

Adult basic education classes, corresponding with elementary and junior high school achievement levels in reading, writing, spelling and arithmetic, are offered each quarter at no cost. For a student to be eligible for free GED classes, he or she must be a U.S. citizen, have a green card, or be a refugee or immigrant. Students may start at any time during the quarter on a space-available basis. The program includes:

ABE 010	Level 1
ABE 014	Computer Assisted ABE, Level 1
ABE 020	Level 2A
ABE 024	Computer Assisted ABE, Level 2A
ABE 030	Level 2B
ABE 031	(LEP) Adult Basic Education Math
ABE 034	Computer Assisted ABE, Level 2B
ABE 040	Level 3A
ABE 044	Computer Assisted ABE, Level 3A
ABE 050	Level 3B
ABE 054	Computer Assisted ABE, Level 3B
ABE 060	Level 4
ABE 061	GED Prep 1
ABE 062	GED Prep 2
ABE 040	Distance Learning Adult Basic Education

NOTE: The Adult Basic Education courses are currently under revision. Students should contact the department or an advisor for more information.

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.

BEGINNERS

Classes are free for beginners (pre-literate to intermediate levels). For a student to be eligible for free ESL classes, he or she must be a U.S. citizen, have a green card, or be a refugee or immigrant. Emphasis is on improving listening comprehension, pronunciation, vocabulary development, and English structure. (See course descriptions under English as a Second Language, page 245.) Students may begin at any time during the quarter as space becomes available. Courses include:

ESL 010	Pre-Literacy - Level 1
ESL 011	Pre-Literacy - Level 2
ESL 012	Literacy - Level 1
ESL 013	Literacy - Level 2
ESL 020	English as a Second Language Level II
ESL 030	English as a Second Language Level III

PRE-COLLEGE

Pre-college level courses require payment of tuition. These courses are designed for students preparing for vocational or academic study at U.S. colleges. These classes will help the non-native speaker develop better speaking, reading, and writing skills needed for college-level study. Beginning with grammar and vocabulary skills, the courses advance to note-taking, composition, oral presentation and class discussion skills at a more advanced level. An ESL skills lab provides additional practice in pronunciation, listening, and conversation outside of the classroom. Sequenced reading and writing materials are also available.

Courses at this level are described under "English for Non-Native Speakers" on page 246 of the course description section. They include the following:

ESL 020	Level 1
ESL 021	Level 1A
ESL 022	Level 1B
ESL 023	Level 1C
ESL 024	Level 1D
ESL 025	Level 1, Reading and Writing Skills
ESL 026	Level 1, Speaking and Listening Skills
ESL 027	Level 1, Multiple Skills Lab
ESL 028	Level 1, Workplace Literacy
ESL 029	Level 1, VESL
ESL 030	Level 2
ESL 031	Level 2A
ESL 032	Level 2B
ESL 033	Level 2C
ESL 034	Level 2D
ESL 035	Level 2, Reading and Writing Skills
ESL 036	Level 2, Speaking and Listening Skills

ESL 037	Level 2, Multiple Skills Lab
ESL 038	Level 2, Workplace Literacy
ESL 039	Level 2, VESL
ESL 040	Level 3
ESL 041	Level 3A
ESL 042	Level 3B
ESL 043	Level 3C
ESL 044	Level 3D
ESL 045	Level 3, Reading and Writing Skills
ESL 046	Level 3, Speaking and Listening Skills
ESL 047	Level 3, Multiple Skills Lab
ESL 048	Level 3, Workplace Literacy
ESL 049	Level 3, VESL
ESL 050	Pronunciation, Level 1
ESL 051	Pronunciation, Level 2
ESL 052	Pronunciation, Level 3

General Education Development Preparation

GED 060 GED Test Preparation (0)
 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 a course which covers the subjects tested, such as reading, writing, mathematics, science and social studies. This class stresses math for practical problem-solving, English usage, reading comprehension and test-taking skills.

No tuition is charged for this class 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: Ability to read at or above ninth-grade level or completion of ABE 030. 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.

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

(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 NSCC 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 High School 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
HIS 037	Wash. State History (or satisfaction of requirement)	3-5
POL 022	Contemporary World Problems, World History or World Geography	5
MAT 080	Pre-Algebra, Algebra I Series (or math class at student's placement level)	10
	<i>It is strongly recommended that at least one course be algebra if the student is college-bound.</i>	
	Science	10
	<i>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.</i>	
	Occupational Education	5
	<i>(any vocational class)</i>	

TOTAL REQUIRED CREDITS	58-60
TOTAL ELECTIVE CREDITS	30-32
TOTAL CREDITS	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	5
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, mathematics and human development.

For more information about Basic Studies programs, please contact the program advisor, (206) 527-7303.

Continuing Education

CONTINUING EDUCATION DIVISION AT NORTH

(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. Hundreds more attend contracted programs for customized skill upgrades in computers and management topics.

The programs are short, intensive, and hands-on whenever appropriate. They are designed to expand outreach by developing training and classes that respond to community and business needs. Many area businesses, government agencies and non-profit agencies request programs for their employees.

Continuing Education also co-sponsors classes and conferences with area agencies. This allows integration of expertise and an expanded audience 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 23.

Occupational Programs

ACCOUNTING

Business Division (206) 527-3730
 Advising Center (206) 527-3658

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 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

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

TECHNICAL SPECIALTY COURSES

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 252	Intermediate Accounting II - OR -	
ACC 131	Small Business Recordkeeping: Quickbooks	5
ACC 253	Intermediate Accounting III - OR -	
ACC 262	MAS 90 Accounting	5
ACC 255	Federal Income Tax I	5
ACC 256	Federal Income Tax II	5
ACC 257	Business Tax Accounting	5
ACC 260	Peachtree Accounting	5
CWE 100	Work Experience	2

ALLIED SUPPORT COURSES

BUS 124	Excel for Business	2
BUS 131	Integrated Communications I	5
BUS 169	Using Computers in Business - OR -	
CIS 101	Microcomputer Applications	5
BUS 200	Intro to Law - OR -	
BUS 250	Business Law	5
BUS 210	Business & Economic Statistics	5
BUS 235	Oral Communication in Business	5
CIS 102	Information Systems Concepts	3

GENERAL EDUCATION COURSES

BUS 140	Customer Relations	5
	Electives	10
	<i>Must be selected from a list of approved general education courses.</i>	

TOTAL CREDITS 97

Accounting Technician (Bookkeeping)

Certificate

Preparation for bookkeeping careers and general office employment. The program normally can be completed in three quarters. ACC 110, Introduction to Accounting/Bookkeeping, is strongly recommended for students who have not previously taken a bookkeeping or accounting course.

TECHNICAL SPECIALTY COURSES

ACC 131	Small Business Recordkeeping - Quickbooks	5
ACC 210	Financial Accounting Fundamentals I	5
ACC 220	Financial Accounting Fundamentals II	5
ACC 255	Federal Income Tax I - OR -	
ACC 256	Federal Income Tax II - OR -	
ACC 257	Business Tax Accounting	5

ALLIED SUPPORT COURSES

BUS 116	Business Math/Spreadsheets	5
BUS 124	Excel for Business	2
BUS 131	Integrated Communications I	5
BUS 230	Business Communications	5
BUS 200	Intro to Law - OR -	
BUS 250	Business Law	5
BUS 169	Using Computers in Business - OR -	
CIS 101	Microcomputer Applications	5

GENERAL EDUCATION ELECTIVES 5

Must be selected from a list of approved general education courses.

TOTAL CREDITS 52

Computerized Accounting Technology

Certificate

REQUIRED COURSES

ACC 131	Small Business Recordkeeping - Quickbooks	5
ACC 210	Financial Accounting I	5
ACC 220	Financial Accounting II	5
ACC 230	Fundamentals of Managerial Accounting - OR -	
CWE 100	Cooperative Education Work Experience	5
ACC 260	Peachtree Accounting	5
ACC 262	MAS 90 Accounting	5
BUS 124	Excel for Business	2
BUS 140	Customer Relations	5
BUS 169	Using Computers in Business - OR -	
CIS 101	Microcomputer Applications	5
CIS 102	Information System Concepts	3
CIS 111	Intro to the Internet and the World Wide Web	5

TOTAL CREDITS 50

Students for whom English is a second language must obtain 70% on the CELT Listening and Structure Tests and must present test scores to the instructor on the first day of class.

Tax Practitioner

Certificate

This program provides the technical training necessary for persons intending to enter the tax preparation field. It also trains students for the Special Enrollment Examination given by the IRS and offers refresher training for those who have had experience in the tax field.

TECHNICAL SPECIALTY COURSES

ACC 210	Financial Accounting Fundamentals I	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 SUPPORT COURSES

ACC 131	Small Business Recordkeeping – Quickbooks -OR-	
ACC 260	Peachtree Accounting	5
BUS 140	Customer Relations	5
BUS 169	Using Computers in Business	5
BUS 200	Intro to Law – OR –	
BUS 250	Business Law	5

GENERAL EDUCATION ELECTIVES		5
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Must be selected from a list of approved general education courses.

TOTAL CREDITS		50
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ALLIED HEALTH SCIENCES

Health/Medical Division

(206) 527-3790

Associate of Applied Science Degree

North offers an 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 MEDICAL ASSISTING, PHARMACY TECHNICIAN & PRACTICAL NURSING:

- a. 45 (minimum) - 60 (maximum) vocational-technical credits.
- b. Minimum 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.

BIOMEDICAL EQUIPMENT TECHNOLOGY

Electronics & Engineering Information
Technologies Division (206) 527-3757

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. The Biomedical Equipment Technology program is currently undergoing substantial reorganization. Please contact the division office for current information.

BUSINESS

Business Division (206) 527-3730
Advising Center (206) 527-3658

This program prepares students to enter business in management trainee positions. It encompasses most of the activities that fit within the realm of management responsibilities.

General Business

Associate of Applied Science Degree

TECHNICAL SPECIALTY COURSES

ACC 210	Financial Accounting Fundamentals I	5
ACC 220	Financial Accounting Fundamentals II	5
BUS 101	Intro to Business	5
BUS 111	Marketing to a Diverse Society	5
BUS 131*	Integrated Communications I	5
BUS 175	Applied Business Statistics – OR –	
BUS 210	Business & Economic Statistics	5
BUS 200**	Intro to Law – OR –	
BUS 250†	Business Law	5
BUS 201	Supervision & Employee Relations	5
BUS 215	Intro to International Business	5
BUS 216	Professional Development	5
BUS 230	Business Communications	5
BUS 235	Oral Communication in Business	5
BUS 275	Business Finance & Economics	5
CIS 101	Microcomputer Applications	5

GENERAL EDUCATION COURSES

Electives 10
Selections must be made from a list of approved general education courses.

Take 10 credits from the following lists: 10
At least 5 credits must be from "A" list.

"A" LIST

ACC 260, BUS 170, CIS 124, CIS 129

"B" LIST

ACC 230, ACC 255, BUS 116, ECO 200, ECO 201, BUS 182, RES 125, CWE 100 or BUS 299

Credits must be selected from a list of approved general education courses. Must include 10 credits in behavioral science for students transferring to a four-year college.

* Prerequisite: satisfactory score on English placement exam.

** BUS 200 Transfers to University of Washington.

† BUS 250 Transfers to most 4-year colleges/universities.

BUS 250 taken after 1991 does not transfer to University of Washington.

TOTAL CREDIT

90

BUSINESS INFORMATION TECHNOLOGY

Business Division (206) 527-3730
 Advising Center (206) 527-3658

This program prepares students for employment as specialists in information processing and office administrative assistant positions requiring computer literacy in word processing, spreadsheet, and database applications.

Accounts Payable/Receivable Clerk

Certificate

TECHNICAL SPECIALTY COURSES

ACC 110	Intro to Accounting/Bookkeeping I	5
ACC 131	Quickbooks Pro	3
	- OR -	
ACC 260	Peachtree	4
BUS 115	Computational Skillbuilding	2
BUS 116	Business Math/Spreadsheets	5
BUS 131	Integrated Communications I	5
BUS 140	Customer Relations	5
BUS 170	Information Technology I	4
BUS 197	Work Experience: Business	3-5

TOTAL CREDIT 32-35

Certificate

TECHNICAL SPECIALTY COURSES

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
BUS 140	Customer Relations	5
BUS 170	Information Technology I	4
BUS 171	Information Technology II	4
BUS 172	Information Technology III	4
BUS 182	Information & Database Management	5
BUS 197	Work Experience: Business	3-5
BUS 216	Professional Development Occupations	5

TOTAL CREDIT 48-52

Associate of Applied Science Degree

COMPLETION OF CERTIFICATE REQUIREMENTS 48-52

ALLIED SUPPORT COURSES

BUS 101	Intro to Business	5
BUS 142	Machine Transcription I	4
BUS 175	Applied Business Statistics	5
BUS 180	Advanced MS Office	5
BUS 201	Supervision & Employee Relations	5
BUS 204	Office Procedures	5
BUS 230	Business Communications	5
CIS 128	DOS	2

GENERAL EDUCATION COURSES 10

Selections must be made from a list of approved general education courses.

TOTAL CREDIT 94-98

Customer Service

Certificate

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

TECHNICAL SPECIALTY COURSES

BUS 106*	Skillbuilding	3
BUS 131	Integrated Communications I	5
BUS 140	Customer Relations	5
BUS 170**	Information Technology I	4
BUS 197	Work Experience: Business	3

* Course may be repeated up to two times to build required speed.

** Prerequisite: accurate touch typing of 25 wpm to enter program.

TOTAL CREDIT 20

Advanced Customer Service

Certificate

TECHNICAL SPECIALTY COURSES

BUS 112	Multicultural Issues in the American Workplace	5
	- OR -	
BUS 113	Diversity Issues in Business	3
BUS 106*	Skillbuilding	3
BUS 131	Integrated Communications I	5
BUS 132	Integrated Communications II	5
BUS 140	Customer Relations	5
BUS 170**	Information Technology I	4
BUS 171	Information Technology II	4
BUS 197	Work Experience: Business	3-5

* Course may be repeated up to two times to build required speed.

** Prerequisite: accurate touch typing of 25 wpm.

TOTAL CREDIT 32-36

Legal Secretary

Associate of Applied Science Degree

This program combines secretarial courses with subjects in the field of law. Legal terminology, business law, legal transcription, and legal office procedures prepare students for positions in law offices or legal departments.

TECHNICAL SPECIALTY COURSES

ACC 110	Intro to Accounting/Bookkeeping	5
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
BUS 140	Customer Relations	5
BUS 141	The Legal Secretary - An Introduction	5
BUS 142	Machine Transcription	4
BUS 143	Legal Typing	4
BUS 145	Legal Machine Transcription	4
BUS 170	Information Technology I	4
BUS 171	Information Technology II	4
BUS 172	Information Technology III	4
BUS 180	Advanced MS Office	5
BUS 182	Information & Database Management	5
BUS 197	Work Experience: Business	3-5
BUS 206	Legal Secretarial Procedures	5
BUS 216	Professional Development	5
BUS 230	Business Communications	5
BUS 250	Business Law	5

GENERAL EDUCATION COURSES 10

Selections must be made from a list of approved general education courses.

TOTAL CREDIT 100-104

COMPUTER INFORMATION SYSTEMS

Advising Center (206) 527-7305
 Computer Information Systems (206) 527-3731

This is an in-depth study in the field of computer information systems. The computer programming certificate and associate of applied science programs provide training for such positions as business programmer or systems analyst.

The one-year certificate in computer programming is an accelerated program for those who have completed the distribution requirements in humanities, natural sciences and social sciences for the A.A. degree or have equivalent college course work. One year of related industry experience may substitute for these distribution requirements.

Programming

Certificate

CIS 114	Problem Solving & Structured Programming	5
CIS 136	Unix Operating Systems	5
CIS 137	Intro to Data Communications	5
CIS 142	C Programming for Business	5
CIS 172	Visual Basic I	5
CIS 236	Database Management	5
CIS 242	Advanced C Programming for Business -OR-	
CIS 244	Intro to Object Oriented Programming: C++ - OR -	
CIS 272	Visual Basic II	5
CIS 255	Systems Analysis & Design	5
CIS 264*	Computer Information Systems Lab	1-3
	Elective	5

**Lab may be repeated each quarter.*

TOTAL CREDITS 46-48

Programming

Associate of Applied Science Degree

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.

CIS 114	Problem Solving & Structured Programming	5
CIS 136	Unix Operating Systems	5
CIS 137	Intro to Data Communications	5
CIS 142	C Programming for Business	5
CIS 172	Visual Basic I	5
CIS 236	Database Management	5
CIS 242	Advanced C Programming for Business (on demand) -OR-	
CIS 244	Intro to Object Oriented Programming: C++ - OR -	
CIS 272	Visual Basic II	5
CIS 255	Systems Analysis & Design	5
CIS 264*	Computer Information Systems Lab	1-3
	CIS Elective	5

ALLIED SUPPORT COURSES

ACC 210	Financial Accounting Fundamentals I	5
ACC 220	Financial Accounting Fundamentals II	5
BUS 101	Intro to Business	5
BUS 131	Integrated Communications I	5
BUS 175	Applied Business Statistics: A Decision Making Process – OR –	
BUS 210	Business and Economic Statistics	5
BUS 230	Business Communications	5
PSY 110	General Psychology	5
GENERAL EDUCATION COURSES		10

**Lab may be repeated each quarter*

TOTAL CREDITS 91-93

Software Testing Specialist Option

Certificate

Prepares students for entry-level positions in software testing. Graduates normally find jobs as software testers in a program development environment.

CIS 115	Problem-solving & Structured Programming Principles Using C++	5
CIS 150	Software Testing I	5
CIS 172	Visual Basic I	5
CIS 201	Advanced Microcomputer Applications	5
CIS 244	Intro to Object Oriented Programming: C++	5
CIS 248	Windows Programming in C++	5
CIS 250	Software Testing II	5
CIS 251	Software Testing III	5
CIS 264*	Computer Information Systems Lab	1-3
CIS Elective	.....	5

** Lab may be repeated each quarter*

TOTAL CREDITS 46-48

Software Testing Specialist Option

Associate of Applied Science Degree

Prepares students for positions in software testing. Graduates normally find jobs as a software tester in a program development environment.

CIS 115	Problem-Solving & Structured Programming Using C++	5
CIS 150	Software Testing I	5
CIS 172	Visual Basic I	5
CIS 201	Advanced Microcomputer Applications	5
CIS 244	Intro to Object Oriented Programming: C++	5
CIS 248	Windows Programming in C++	5
CIS 250	Software Testing II	5
CIS 251	Software Testing III	5
CIS 264*	Computer Information Systems Lab	1-3
CIS Elective	.....	5

ALLIED SUPPORT COURSES 35

ACC 210	Financial Accounting Fundamentals I	5
ACC 220	Financial Accounting Fundamentals II	5
BUS 101	Intro to Business	5
BUS 131	Integrated Communications I	5

BUS 175 Applied Business Statistics: A Decision Making Process

– OR –

BUS 210	Business & Economic Statistics	5
BUS 230	Business Communications	5
PSY 110	General Psychology	5

GENERAL EDUCATION COURSES 10

SSC 10	Workplace Communications/Internship	3-5
	General Education Requirements	5-7

Remaining credits must be selected from the list of general education courses.

**Lab may be repeated each quarter.*

TOTAL CREDITS 91-93

Technical Support Specialist Option

Certificate

Prepares students for entry-level positions in the computer field as technical support specialists.

CIS 101	Microcomputer Applications	5
CIS 128	DOS	2
CIS 137	Intro to Data Communications	5
CIS 197	Help Desk Internship	3-5
CIS 201	Advanced Microcomputer Applications	5
CIS 215	Information Resources/Technical Writing	5
CIS 228	Advanced DOS	3
CIS 230	Software Installation & Configuration	5
CIS 237	Local Area Networks	5
NET 129	Computer Hardware Technology	5
SSC 103	Human Dimensions of Work/Internship	3-5

TOTAL CREDITS 46-50

Web Software Developer Option

Certificate

Prepares students for entry-level positions in web software development. Graduates normally find jobs developing and maintaining websites for a wide range of businesses.

CIS 112	Intro to Web Development	2
CIS 115	Problem-Solving & Structured Programming Using C++	5
CIS 136	UNIX Operating System	5
CIS 137	Intro to Data Communication	5
CIS 138	UNIX for Network Administration	5
CIS 162	Intro to Java Programming	5
CIS 211	HTML for Website Design	5
CIS 212	Web Scripting	5
CIS 213	Website Design & Development	5
CIS 264	Computer Info Systems Lab	1-3
CIS Elective	.....	5

TOTAL CREDITS 48-50

Web Software Developer Option

Associate of Applied Science Degree

Prepares students for positions in web software development. Graduates normally find jobs developing and maintaining web sites.

CIS 112	Intro to Web Development	2
CIS 115	Problem-Solving & Structured Programming Using C++	5
CIS 136	UNIX Operating System	5
CIS 137	Intro to Data Communication	5
CIS 138	UNIX Network Administration	5
CIS 162	Intro to Java Programming	5
CIS 211	HTML for Website Design	5
CIS 212	Web Scripting	5
CIS 213	Website Design & Development	5
CIS 264	Computer Info Systems Lab	1-3
	CIS Elective	5

ALLIED SUPPORT COURSES

ART 210	Computer Art	4
BUS 240	Internet Law	5
CIS 215	Information Resources/Technical Writing	5
MMT 110	Intro to Multimedia Design	3
MMT 210	Intro to Information Design	3
MMT 215	Multimedia for the Web	5
NET 123	Human Relation Skills in the Workplace	3
SPE 150	Small Group Discussion -OR-	
BUS 235	Oral Communications in Business	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.

TOTAL CREDITS 91-93

CIS ELECTIVES

BUS 235	Oral Communications in Business	5
BUS 240	Internet Law	5
CIS 150	Software Testing I	5
CIS 172	Visual Basic I	5
CIS 215	Info Resources/Technical Writing	5
CIS 230	Software Installation & Configuration	5
CIS 236	Database Management	5
CIS 237	Local Area Networks	5
CIS 250	Software Testing II	5
CIS 251	Software Testing III	5
CIS 255	System Analysis & Design	5
CIS 262	Advanced Java Programming	5
CIS 272	Visual Basic II	5
CIS 280	Server Side Development	5
CIS 282	Client Side Development	5
CIS 290	Independent or Internship Studies	2 - 5
CIS 291	CIS Work Experience	2
CWE 100	Coop. Education: Work Experience	2 - 5
MMT 110	Intro to Multimedia Design	3
MMT 210	Intro to Info Design	3
NET 122	Network Communications I - LAN	6
NET 123	Human Relations Skills in the Workplace	3

CONSTRUCTION & DESIGN DRAFTING WITH CAD

Electronics & Engineering Information Technologies Division

(206) 527-3757

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. Course work 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 SUPPORT COURSES

SSC 103**	Human Dimension of Work	3-5
MAT 106**	Applied Algebra & Trigonometry I	5
ENG 101†	Composition	5

*May be repeated each quarter

**May be substituted by any 100-level approved human relations/math course.

†May be substituted with ENG 105 and a 5 credit general education course.

TOTAL CREDITS 46-48

Associate of Applied Science Degree

COMPLETION OF CERTIFICATE REQUIREMENTS 46-48

TECHNICAL SPECIALTY COURSES

TDR 109*	Construction & Design Drafting Lab	1-2
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
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GENERAL EDUCATION COURSES 5

General education requirements 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.*

TOTAL CREDITS 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 Engineers & Architects 4
- TDR 175 Intermediate CAD for Engineers & Architects 4
- TDR 176 Advanced AutoCAD for Architectural & Engineering Drafting . 4

GENERAL EDUCATION COURSES

- ENG 101 Composition 5
 - MAT 106 Applied Algebra & Trigonometry I 5
 - Electives 5
- (Contact the Advising Center for a list of acceptable courses.)*

**May be repeated each quarter.*

Cooperative Work Experience (2-4 credits) is recommended.

TOTAL CREDITS 48-50

**DIGITAL COMPUTER ELECTRONICS
(COMPUTER HARDWARE)**

Electronics & Engineering Technologies Division
(206) 527-3757

Associate of Applied Science Degree

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

EARLY CHILDHOOD EDUCATION

Child & Family Education Division (206) 527-3783

North offers A.A.S. degrees in early childhood education and early childhood special education. Certificate opportunities are also available in early childhood education, family day care provider, and habilitation specialist and specialty certificates in child care director and paraeducator (next page).

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.

Child Care Director

Certificate

TECHNICAL SPECIALTY COURSES

CCE 212	Directing in a Diverse 21 st Century	3
CCE 215	Project Class	3
CCE 232	Parent Involvement in Early Childhood Education	4
CCE 234	Staff Relationships	4

COMPLETE TWO CLASSES FROM THE FOLLOWING:

CCE 210	Essential Elements of Directing	3
CCE 211	Money Matters in Programs for Young Children	3
CCE 213	Leadership, Personnel & Supervision	3

ALLIED SUPPORT COURSES*

CCE 101	Human Development	5
CCE 125	Program Planning	5
CCE 135	Infants & Toddlers	5
CCE 265	Building Verbal Expression	5
PSY 260	Applied Behavioral Psychology	5

TOTAL CREDITS 25

* Certification requires only one class from the Allied Support Courses.

Early Childhood Education

Certificate

TECHNICAL SPECIALTY COURSES

CCE 106	Art for Children	3
CCE 120	Lab Participation	6
CCE 121	Field Participation	6
CCE 125	Program Planning	5
CCE 135	Infants & Toddlers	5
CCE 245	Music for Young Children	5

ALLIED SUPPORT COURSES

AME 150	America's Ethnic History – OR –	
AME 151	Societies & Cultures of the U.S.	5
BUS 116	Business Math/Spreadsheets	5
CCE 101	Human Development	5
CCE 240	Anti-Bias Curriculum	3
PSY 260	Applied Behavioral Psychology	5

TOTAL CREDITS 53

English proficiency at the 101 level is required for graduation.

Family Day Care Provider

Certificate

TECHNICAL SPECIALTY COURSES

CCE 106	Art for Children	3
CCE 111*	Intro to Family Day Care	3
CCE 125	Program Planning	5
CCE 135	Infants & Toddlers	5
CCE 245	Music for Young Children	5
CCE 253**	Family Child Care Practicum I & II	7

ALLIED SUPPORT COURSES

AME 150	America's Ethnic History – OR –	
AME 151	Societies & Cultures of the U.S.	5
ENG 101	Composition	5
CCE 101	Human Development	5
PSY 260	Applied Behavioral Psychology	5

TOTAL CREDITS 48

* FAM 181, 182, 183 will substitute for CCE 111 and 253.

** CCE 253 is a two-quarter course.

Habilitation Specialist

Certificate

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
RFW 267	Community Based Curriculum for Adults w/Disabilities	5

ALLIED SUPPORT COURSES

EDH 113	Survey of Exceptionalities	4
	– OR –	
PSY 260	Applied Behavioral Psychology	5
ENG 101	Composition	5

RELATED INSTRUCTION

		20
CCE 101	Human Development	5
CCE 234	Staff Relationships	3-4
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

TOTAL CREDITS 45-46

Paraeducator Certificate

TECHNICAL SPECIALTY COURSES

CCE 150	Teaching Exceptional Learners	3
CCE 153	Creating Inclusive School Communities	3
CCE 154	Field Learning Experience	6
EDH 113	Survey of Exceptionalities	4

ALLIED SUPPORT COURSES*

CCE 101	Human Development	5
CCE 234	Staff Relationships	4
PSY 260	Applied Behavioral Psychology	5

TOTAL CREDITS 25-26

* Only 8 to 10 credits are required from Allied Support Courses.

Early Childhood Education

Associate of Applied Science Degree

TECHNICAL SPECIALTY COURSES

CCE 106	Art for Children	3
CCE 120	Lab Participation	6
CCE 121	Field Participation	6
CCE 125	Program Planning	5
CCE 135	Infants & Toddlers	5
CCE 245	Music for Young Children	5
CCE 265	Building Verbal Expression	5
CCE 285	Enriching the Curriculum	5
CCE 290	Lab Practice Teaching	12

ALLIED SUPPORT COURSES

AME 150	America's Ethnic History – OR –	
AME 151	Societies & Cultures of the U.S.	5
BUS 116	Business Math/Spreadsheets	5
CCE 101	Human Development	5
CCE 102	Issues & Trends in Early Childhood Education	2
CCE 232	Parent Involvement in Early Childhood Education	4
CCE 234	Staff Relationships	3-4
CCE 240	Anti-Bias Curriculum	3
EDH 113	Survey of Exceptionalities	4
ENG 101	Composition	5
PSY 260	Applied Behavioral Psychology	5

GENERAL EDUCATION COURSES 5

See advisor for a list of approved general education courses.

TOTAL CREDITS 98-99

Early Childhood Special Education Associate of Applied Science Degree

TECHNICAL SPECIALTY COURSES

CCE 106	Art for Children	3
CCE 120	Lab Participation	6
CCE 121	Field Participation	6
CCE 125	Program Planning	5
CCE 135	Infants & Toddlers	5
CCE 245	Music for Young Children	5
CCE 265	Building Verbal Expression	5
CCE 290	Lab Practice Teaching	12
CCE 291	Field Practice Teaching	8

ALLIED SUPPORT COURSES

AME 150	America's Ethnic History – OR –	
AME 151	Societies & Cultures of the U.S.	5
BUS 116	Business Math/Spreadsheets	5
CCE 101	Human Development	5
CCE 102	Issues & Trends in Early Childhood Education	2
CCE 232	Parent Involvement in Early Childhood Education	4
CCE 234	Staff Relationships	4
CCE 240	Anti-Bias Curriculum	3
EDH 113	Survey of Exceptionalities	4
ENG 101	Composition	5
PSY 260	Applied Behavioral Psychology	5

GENERAL EDUCATION COURSES 5

See advisor for a list of approved general education courses.

TOTAL CREDITS 102

ENGINEERING DESIGN TECHNOLOGY - MECHANICAL DESIGN SPECIALIZATION

Electronics & Engineering Information Technologies Division (206) 527-3757

Program requirements and course offerings are revised periodically to reflect changes in the industry. New courses in parametric solid modeling using Pro-Engineer 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 breakdown and scheduling. 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

GENERAL EDUCATION COURSES 5

Contact the Advising Center for a list of these categories and acceptable courses.

TOTAL CREDITS 78

Associate of Applied Science Degree

COMPLETION OF CERTIFICATE REQUIREMENTS 78

TECHNICAL SPECIALTY COURSES

EDR 264	Advanced Pro-Engineer & Parametric Solid Modeling	
	- OR -	
EDR 265	Advanced SolidWorks & Parametric Solid Modeling	4
EDR 271	Drafting & Design for Polymers & Other Materials	11
EDR 273	Product Design Applications	7

COMMUNICATIONS COURSES

EGR 231	Technical Writing	3
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GENERAL EDUCATION COURSES 10

Contact the Advising Center for a list of general education requirements to be selected from specific categories.

TOTAL CREDITS 113

Electronic Emphasis

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

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
	(see advisor for suggestions)	

ALLIED SUPPORT COURSES

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 COURSES 5

Contact the Advising Center for a list of general education requirements to be selected from specific categories.

* EET 161 may be substituted for EET 100 and MAT 105 for MAT 109.

TOTAL CREDITS 105

ELECTRONICS

Electronics & Engineering Information
Technologies Division (206) 527-3757

Electronics and associated technologies taught at North prepare students for a successful career 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 information that is pertinent to it. 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, 527-3757, or Advising Center, 527-3658, before enrolling. Courses and programs are transferable to certain four-year institutions.

ELECTRONIC COMMUNICATIONS

Electronics & Engineering Information
Technologies Division (206) 527-3757

Associate of Applied Science Degree

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.

ELECTRONICS ENGINEERING TECHNOLOGY

Electronics & Engineering Technologies Division
(206) 527-3757

Associate of Applied Science Degree

This program is under significant revision. The changes include the redesign of the curriculum to reflect the American Electronics Association Standards of a high performance worker. Further, the programs will have included in them more choices for specialized study in the form of small credit modules of learning. While this curriculum reform is ongoing, these programs will continue to provide high-skill 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. This program also provides students with an excellent foundation in applied engineering if they wish to enter the workforce immediately.

Because of the complexity of the program regarding allied support courses, course sequence and prerequisites, prospective students should seek advanced planning assistance with an advisor.

TECHNICAL SPECIALTY COURSES

EET 100	DC Principles of Electronics	8
EET 105	Intro to Technology	3
EET 110	AC Principles of Electronics	8
EET 111	Solid State Electronics	8
EET 210	Digital Electronics	8
EET 211	Analog Circuits & Devices	8
EET 212	Industrial Applications	8
EET 220	Circuit Analysis & Applications	5
EET 251	Microprocessor Fundamentals I	5

ALLIED SUPPORT COURSES

	Approved Computer Programming Course	5
MAT 120	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
SPE 120	Intro to Public Speaking	5

GENERAL EDUCATION COURSES 10

General education requirements must be selected from specific general education categories. Contact the advising center for a list of these categories and acceptable courses.

TOTAL CREDITS

119

ELECTRONICS TECHNOLOGY

Electronics & Engineering Technologies Division
(206) 527-3757

Certificate

This newly updated program reflects the American Electronics Association (AEA) Standards for a technician in a high performance workplace. The program provides a solid 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 test equipment operation; prototype testing and assembly; specialized electronically controlled equipment; and other support positions.

TECHNICAL SPECIALTY COURSES

EET 102	Introduction to Measurement	3
EET 105	Intro to Technology	3
EET 107	Principles of Electronics	8
EET 117	Electronic Devices	4
EET 118	Electronic Devices Lab	2
EET 119	Intro to Troubleshooting	5
EET 127	Intro to Digital & Analog Circuits	4
EET 128	Intro to Digital & Analog Circuits Lab	2

ALLIED SUPPORT COURSES

CSC 110	Intro to Computer Programming	5
MAT 118	Applied Algebra & Trig II	5
NET 123*	Human Relations Skills in the Workplace	3
SCI 101	Intro to Physics & Chemistry	5
	Written & Oral Communications**	3

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

** May be substituted by the following: HUM/ISP 105, ISP 110, ISP/POL 112, ISP/SOC 101, SOC 110, SSC 103.*

*** At least 3 credits must be taken from ENG 101, EGR 231, SPE 100, SPE 104, SPE 120, and SPE 150.*

TOTAL CREDITS

52

Associate of Applied Science Degree

TECHNICAL SPECIALTY COURSES

EET 102	Intro to Measurement	3
EET 105	Intro to Technology	3
EET 107	Principles of Electronics	8
EET 112	Fundamentals of Fluid Power & Electromechanical Systems	6
EET 117	Electronic Devices	4
EET 118	Electronic Devices Lab	2
EET 119	Introduction to Troubleshooting	5
EET 127	Intro to Digital & Analog Circuits	4
EET 128	Intro to Digital & Analog Circuits Lab	2
EET 207	Advanced Principles of Electronics	4
EET 208	Advanced Principles of Electronics Lab	2
EET 217	Digital & Analog Circuits II	4
EET 218	Digital & Analog Circuits II, Lab	2
EET 219	Digital Systems Troubleshooting	5
EET 251	Microprocessor Fundamentals I	5
EET 271	Advanced Technical Modules in Electronics Technology	5
-OR-		
EET 276	Advanced Technical Modules in Power & Industrial Control	5
EET 285	Electronics Technology Project	3

ALLIED SUPPORT COURSES

CSC 110	Intro to Computer Programming	5
EDR 150*	Electronics Drafting & CAD Applications	4
MAT 118**	Applied Algebra & Trig II	5
MAT 245	Intro to Statistics & Quality Control	5
MSC 101	Intro to Material Sciences	3
PHY 118	Technical Physics for Electronics	5
SCI 101	Intro to Physics & Chemistry	5

COMMUNICATIONS COURSES

ENG 101	Composition	5
†	Human Relations Course	5

GENERAL EDUCATION COURSES

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

* May be substituted by EDR 163.

** May be substituted by MAT 120.

† or NET 123 may be substituted by the following: HUM/ISP 105, ISP 110, ISP/POL 112, ISP/SOC 101, SOC 110, SSC 103.

TOTAL CREDITS	119
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ELECTRONICS, GENERAL (EVENING PROGRAM)

Electronics & Engineering information Technologies Division (206) 527-3757
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	Solid State Electronics I	5
EET 164	Solid State 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

Contact the Advising Center for a list of general education requirements to be selected from specific categories.

TOTAL CREDITS	50
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Associate of Applied Science Degree

COMPLETION OF CERTIFICATE REQUIREMENTS	50
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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	Microprocessor Fundamentals I	5
EET 252	Microprocessor Fundamentals II	5

ALLIED SUPPORT COURSES

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

GENERAL EDUCATION COURSES

Contact the Advising Center for a list of general education requirements to be selected from specific categories.

TOTAL CREDITS	100
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SUBSTITUTIONS

The following college transfer courses may be substituted to meet communications and mathematics requirements:

COMMUNICATIONS

ENG 101	Composition - AND -	
ENG 102	Composition - OR -	
SPE 100	Person to Person: Fundamentals of Human Communication	5
	(or SPE 120 or SPE 150)	

MATHEMATICS

MAT 120	Pre-Calculus	5
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EMERGENCY MEDICAL TECHNICIAN (EMT)

Health/Medical Division (206) 527-3790

The Department of Social and Health Services specifies the levels of EMT knowledge and skills required to qualify as an Emergency Medical Technician. In addition, a number of policies have been adopted by the faculty and administration at North 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, Washington State Department of Health in Olympia.

Students need to contact the Health/Medical Division to obtain specific requirements for 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

ENTREPRENEURSHIPBusiness Division (206) 527-3730
 Advising Center (206) 527-3658

The Entrepreneurial Training Program is a three-quarter certificate program designed for individuals who wish to start their own business. The program provides potential entrepreneurs with the training and skills needed for long-term business success.

Certificate

REQUIRED COURSES

ACC 131	Small Business Recordkeeping - Quickbooks	5
ACC 132	Small Business Budgeting & Financial Management	5
BUS 151	Intro to Entrepreneurship	3
	- AND -	
BUS 155	Independent Study - Developing a Feasibility Plan	2
	- OR -	
BUS 154	Exploring Entrepreneurship	5
BUS 152	Entrepreneurship I: Marketing & Selling Strategies for a Small Business	5
BUS 153	Entrepreneurship II: Planning, Financing, & Operating a Small Business	5
BUS 169	Using Computers in Business	- OR -
CIS 101	Microcomputer Applications	5
BUS 216	Professional Development	- OR -
	Business Elective	5
BUS 235	Oral Communications in Business	5
CIS 111	Intro to Internet	5

NOTE: Students for whom English is a second language must obtain 70 percent on the CELT Listening and Structure tests and must present test scores to the instructor on the first day of class.

TOTAL CREDITS

45

HEATING, AIR CONDITIONING, & REFRIGERATION DESIGN TECHNOLOGY/HVAC

Electronics Engineering & Information Technologies Division (206) 527-3757

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.

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.

Associate of Applied Science Degree

TECHNICAL SPECIALTY COURSES

ECT 101	Heating Theory, Equip. & Applications	10
ECT 102	Basic Refrigeration & Air Conditioning	10
ECT 103	Residential Applications	10
ECT 106	Electrical Fundamentals	2
ECT 110	Blueprint Reading & Bldg. Construction	2
ECT 111	Hydronic System Design	2
ECT 206	Computers in Engineering Application	2
ECT 208	HVAC Marketing & Sales	2
ECT 209	Computerized HVAC Systems	2
ECT 211	System Design & Application I	10
ECT 212	System Design & Application II	10
ECT 213	System Design & Application III	10
TDR 191	Basic HVAC Drafting	4
TDR 192	Drafting & CAD for HVAC Systems	4
TDR 193	Design Applications & Project Management	4

ALLIED SUPPORT COURSES

MAT 116	Application of Math to Management, Life & Social Sciences	5
MAT 117	Elements of Calculus	5
PHY 115	Technical Physics/Mechanics	5
PHY 116	Technical Physics	5

COMMUNICATIONS COURSES

ENG 101	Composition	5
EGR 231	Technical Writing	3
SPE 104	Oral Communication in the Workplace	4

GENERAL EDUCATION COURSES

5

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

TOTAL CREDITS

121

SUBSTITUTIONS

Students who wish to meet the English, speech, and mathematics requirements for this program by taking college transfer courses may do so by completing the following courses:

COMMUNICATIONS

ENG 101	Composition – AND –	
ENG 102	Composition – OR –	
SPE 100	Person to Person: Fundamentals of Human Communication – OR –	
SPE 120	Intro to Public Speaking – OR –	
SPE 150	Small Group Discussion	5

MATHEMATICS

MAT 098	Intermediate Algebra	5
MAT 104	Trigonometry	3

HOSPITALITY/FOOD SERVICE/CULINARY ARTS

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 A.A.S. 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 to be selected from specific general education categories - contact division for acceptable courses.

Safety/Sanitation/Industrial Hygiene is emphasized throughout the curriculum in lectures and actual demonstrations of safe laboratory techniques.

Commercial Cooking

Certificate

This program prepares graduates for employment as fry cooks, pantry workers, cafeteria cooks, 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
TOTAL CREDITS		29.5

Advanced Commercial Cooking

Certificate

COMPLETION OF COMMERCIAL COOKING CERTIFICATE		29.5
HFS 154	Commercial Cooking III	13
HFS 155	Commercial Cooking Externship (Clinical)	2
TOTAL CREDITS		44.5

Dining Room Service

Certificate

This program emphasizes hands-on training and work experience in an integrated approach between classroom and actual experience. Work situations include dining room service, banquets, catering, cashiering, dining room management and menu study. This program is a prerequisite for the Restaurant Cooking 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 I	2
HFS 193	Dining Room Theory II	2
HOS 110	Principles of Sanitation	3
TOTAL CREDITS		29

Advanced Dining Room

Certificate

COMPLETION OF DINING ROOM SERVICE CERTIFICATE		29
CWE	Coop-Education	2
HFS 166	Fine Dining Supervisor	2.5
HFS 167	Fine Dining Management	2.5
TOTAL CREDITS		36

Restaurant Cooking

Certificate

Graduates of this program are employed as commercial dinner cooks, such as broiler cooks, saute cooks, lead cooks and sous chefs. The program may be completed in two quarters and includes extensive, practical experience cooking in a modern kitchen for North's full-service restaurant, banquets and some catering. Prereq: Commercial Cooking and Dining Room Service Certificate(s).

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 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	2
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

TOTAL CREDITS 83

The following optional course provides an opportunity for students to specialize in a given cooking station(s) or to gain additional supervisory and work experience.

HFS 147	Special Topics	4-24
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Restaurant Management

Certificate

This program is designed for those interested in restaurant management or enrolled in food service courses. The courses are designed to augment successful restaurant work experience and prepare students for entry-level supervisory or management positions.

ACC 110	Intro to Accounting/Bookkeeping	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

COMPLETION OF RESTAURANT COOKING CERTIFICATE REQUIREMENTS 83

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	Business Math/Spreadsheets	5
CWE	Coop-Ed Externship	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 Electives

General Education requirements must be selected from specific general education categories; contact division for acceptable courses.

TOTAL CREDITS 122-123

INDUSTRIAL POWER & CONTROL TECHNOLOGY

Electronics & Engineering Technologies Division
(206) 527-3757

This 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 companies and 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 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

TECHNICAL SPECIALTY COURSES

EDR 150	Intro to Drafting/CAD Applications	4
EET 100	DC Principles of Electronics	8
EET 105	Intro to Technology	3
EET 110	AC Principles of Electronics	8
EET 111	Solid State Fundamentals	8
EET 251	Microprocessor Fundamentals I	5
EPT 112	Fluid Power & Mechanics	5
EPT 220	AC & DC Rotating Machinery	9
EPT 221	Motor Controls & PLC's	9
EPT 222	Variable Speed Drives & Servosystems	9
EPT 230	Industrial Electronics - Digital	5
EPT 231	Industrial Electronics - Analog	5
EPT 252	Digital & Data Communications	5

ALLIED SUPPORT COURSES

CSC 109	Technical Computer Applications	5
MAT 109	Technical Math for Electronics	5
PHY 118	Technical Physics for Electronics	5

** Course being deleted in the academic year 2000-2001.
Contact Division for substitution*

COMMUNICATIONS COURSES

EGR 231	Technical Writing	3
ENG 105	Applied Composition	3
SPE 104	Oral Communications in the Workplace	4

GENERAL EDUCATION COURSES 10

Contact the Advising Center for a list of these categories and acceptable courses.

TOTAL CREDITS 118

Certificate (Evening)

TECHNICAL SPECIALTY COURSES

EEL 201	Industrial Transformers & Motors	5
EEL 202	Industrial Motor Controls	5
EEL 203	Industrial Motor Drives	5
EET 161	DC Principles of Electronics	5
EET 162	AC Principles of Electronics	5
EET 163	Solid State Electronics I	5
EET 170	Digital Circuits I	5

ALLIED SUPPORT COURSES

CSC 109	Technical Computer Applications*	5
MAT 109	Technical Math for Electronics	5

GENERAL EDUCATION COURSES

		5
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TOTAL CREDITS		50
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* Course being deleted in the academic year 2000-2001.
Contact Division for substitution

Associate of Applied Science Degree (Evening)

COMPLETION OF CERTIFICATE REQUIREMENTS		50
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TECHNICAL SPECIALTY COURSES

EDR 150	Intro to Drafting/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
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COMMUNICATIONS COURSES

EGR 231	Technical Writing	3
ENG 105	Applied Composition	3
SPE 104	Oral Communications in the Workplace	4

GENERAL EDUCATION COURSES

		5
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General education requirements must be selected from specific general education categories. Contact the Advising Center for a list of these categories and acceptable courses.

TOTAL CREDITS		104
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SUBSTITUTIONS

The following college transfer courses may be substituted to meet communications and mathematics requirements:

COMMUNICATIONS

ENG 101	Composition – AND –	
ENG 102	Composition – OR –	
SPE 100	Basic Speech – OR –	
SPE 120	Intro to Public Speaking – OR –	
SPE 150	Small Group Discussion	5

MATHEMATICS

MAT 120	Pre-Calculus	5
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INTERNATIONAL BUSINESS

International Business Coordinator (206) 528-4576
Certificate

International trade education consists of an intensive program emphasizing hands-on learning in the intricacies of conducting business across international borders. Courses stress operational, financial, and cultural challenges in purchasing and marketing products internationally. For individuals and entrepreneurs seeking to develop skills necessary for success in the emerging global marketplace.

TECHNICAL SPECIALTY COURSES

BUS 215	Intro to International Business	5
CHI 104	Chinese for International Business	3
CWE 100*	Cooperative Education/Work Experience	2-5
IBN 203	Fundamentals of International Trade & Logistics: Export	3
IBN 205	Fundamentals of International Trade & Logistics: Import	3
IBN 207	International Marketing	3
IBN 208	Cultural Imperatives in International Business: The Americas ..	3
IBN 209	Cultural Imperatives in International Business: Europe	3
IBN 210	Cultural Imperatives in International Business: Asia	3
IBN 211	International Trade Finance	3
IBN 212	International Tourism	2
IBN 213	International Transportation	3
IBN 215	International Trade Geography	3
IBN 220	Global Quality Management	3
IBN 221	International Operations	3
IBN 223	Import/Export Applications	3
IBN 225	Global Logistics	3
IBN 230	Taiwan Business Practices	3
IBN 231	Hong Kong Business Practices	2
IBN 232	The Globalization of Business	5
IBN 298*	Internship	2-6
IBN 299	International Legal Lecture Series	2

*A maximum of 2 credits total from IBN 298 and CWE 100 can be applied to the 30 credit requirement for the certificate.

**A total of 30 credits from the above list is required to earn a Certificate of International Trade.

Students for whom English is a second language must obtain 70% on the CELT Listening & Structure tests and must present test scores to the instructor on the first day of class.

TOTAL CREDITS		30**
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MEDICAL ASSISTING

Health/Medical Division (206) 527-3790

Medical assistants aid physicians in office or other medical settings. In addition to medical administrative duties, training includes assisting with examinations and treatments, taking medical histories, giving medications and skin tests (under supervision), drawing blood, performing diagnostic tests, performing office laboratory procedures and sterilizing instruments and equipment.

A new class of students is accepted for fall quarter each year, however, entry in other quarters is possible. The program offers full- and part-time options. The program is CAAHEP accredited and provides graduates the opportunity to take the national Certified Medical Assistant (CMA) examination. Graduates of this program have consistently averaged in the top 10 percent of medical assistants certified annually.

NOTE: Applicants are advised to contact the Health/Medical Division for current program and course information including program entry approval requirements.

Certificate

Course topics include: applied composition, math, medical orientation, law and ethics, medical terminology, medical transcription, medical office procedures, lab techniques, examining room procedures, staff relationships, anatomy and physiology, computers in the medical office, keyboarding, and basic medical billing and coding.

PREREQUISITE

MAT 100 Math for Health Careers 3

TECHNICAL SPECIALTY COURSES

AHE 110	Medical Orientation, Law & Ethics	4
AHE 165	Medical Terminology I - OR -	
AHI 100	Intro to Medical Vocabulary	3
AHE 166	Medical Terminology II	3
AHE 201	Medical Transcription	2
AHE 210	Medical Office Practice	4
AHE 211	Administrative Procedures/Insurance Billing & Coding	7
AHE 245	Medical Lab Techniques	7
AHE 250	Examining Room Procedures I	4
AHE 251	Examining Room Procedures II	5
AHE 290	Medical Assistant Externship	7
AHE 296	Clinical Seminar	2
ANP/ZOO 128	Survey of Human Anatomy & Physiology - OR -	
NUR 124	Fundamentals of Anatomy & Physiology	5
BUS 170	Information Technology I	4
CCE 234	Staff Relationships	3
	- OR -	
HUM 105	Intercultural Communications	5
	- OR -	
SPE 104	Oral Communication in the Workplace	4
ENG 105	Applied Composition	3
	- OR -	
ENG 101	Composition	5

TOTAL CREDITS 63-67

NETWORK MULTIMEDIA

Electronics, Engineering & Information Technologies (206) 527-3757

This program prepares students for entry-level positions in the field of multimedia. This interdisciplinary field reflects the convergence of computing, electronic media, corporate and educational communications, and telephone and information retrieval service. In order to become marketable in this field, students must be trained to use and program computers to create and display audiovisual and graphic information. Graduates' job skills will include: object oriented programming, experience with multimedia software and peripherals, tagging and entering data for hypermedia manipulation, and testing interactive programs. This dynamic field requires critical thinking, systems analysis, and group process concepts to advance in a rapidly changing environment.

Certificate

TECHNICAL SPECIALTY COURSES

MMT 101	Intro to Multimedia	5
MMT 105	Digital Imaging	5
MMT 107	Multimedia Authoring & Animation	5
MMT 205	Digital Media Techniques & Technology	5
MMT 207	Multimedia Production	5
NET 120	Network Essentials	5
NET 122	Network Operating Systems I	5
NET 124	Network Operating Systems II	5
NET 126	Network Operating Systems III	5

ALLIED SUPPORT COURSES

ART 210	Computer Art	4
CIS 101	Microcomputer Applications	5
EET 130	Computer Basics - A Plus Certification	9
NET 123	Human Relation Skills in the Workplace	3

TOTAL CREDIT 66

** Students who wish to meet English, speech, and math requirements by taking college transfer courses may do so by completing SPE 100 or SPE 120 or by contacting an advisor.*

Associate of Applied Science Degree

COMPLETION OF CERTIFICATE REQUIREMENTS 66

ALLIED SUPPORT COURSES

CSC 110	Computer Programming, BASIC	5
EGR 231	Technical Writing	3
MAT 122	Pre-Calculus I	5
SPE 100	Basic Speech	5
SPE 150	Small Group Discussion	5

GENERAL EDUCATION COURSES 5

Selections must be made from a list of approved general education courses.

TOTAL CREDIT 94

NETWORK ADMINISTRATION

Electronics, Engineering & Information Technologies Division (206) 527-3757

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.

Placement tests for ENG 101 and MAT 097, or equivalent, are required for entering this program.

Network Administration

Certificate

TECHNICAL SPECIALTY COURSES

CIS 101	Windows 95 Applications	5
EET 130	Computer Basics - A Plus Certification	9
NET 120	Network Essentials	5
NET 122	Network Operating Systems I	5
NET 123	Human Relation Skills in the Workplace	3
NET 124	Network Operating Systems II	5
NET 126	Network Operating Systems III	5
NET 128	Network Operating Systems IV	5
NET 134	Network Communications - TCP/IP	5
NET/CIS 138	UNIX for Network Administration	5
3 Electives	.....	12-15

TOTAL CREDITS 64-67

Associate of Applied Science Degree

COMPLETION OF CERTIFICATE REQUIREMENTS 64-67

ALLIED SUPPORT COURSES

CSC 110	Computer Programming, BASIC	5
EGR 231	Technical Writing	3
MAT 122	Pre-Calculus I	5
SPE 100	Basic Speech	5
SPE 150	Small Group Discussion	5

GENERAL EDUCATION COURSES 5

Selections must be made from a list of approved general education courses.

TOTAL CREDITS 92-95

Network Administration - Cisco

Certificate

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 for entering this program.

TECHNICAL SPECIALTY COURSES

CIS 101	Microcomputer Applications	5
EET 130	Computer Basics - A Plus Certification	9
NET 120	Network Essentials	5
NET 122	Network Operating Systems I	5
NET 123	Human Relation Skills in the Workplace	3
NET 124	Network Operating Systems II	5
NET 126	Network Operating Systems III	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 198	Special Projects in Network Technology	2

TOTAL CREDITS 64

Associate of Applied Science Degree

COMPLETION OF CERTIFICATE REQUIREMENTS 64

ALLIED SUPPORT COURSES

CSC 110	Computer Programming, BASIC	5
EGR 231	Technical Writing	3
MAT 122	Precalculus I	5
SPE 100	Basic Speech	5
SPE 150	Small Group Discussion	5

GENERAL EDUCATION COURSES 5

Selections must be made from a list of approved general education courses.

TOTAL CREDITS 92

NURSING ASSISTANT

Health/Medical Division (206) 527-3790
Certificate

A minimum of 8 credits with a 2.0 minimum grade point average are required for the certificate. This one-quarter program consists of two courses:

NUR 107	Orientation to Nursing Practice	6
NUR 109	Nursing Assistant - Clinical Experience	2

Contact the Health/Medical Division for further information and enrollment requirements.

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 general hospitals, nursing homes, doctors' offices and clinics and other health service agencies.

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 fall and spring quarters. Contact the Health/Medical division for entry requirements and information on approval procedures and schedules. An interview with the nursing faculty advisor is required prior to enrollment.

PREREQUISITES:

AHI 100	Intro to Medical Vocabulary	3
ENG 101	English Composition - OR -	
CMN 100	Person to Person: Fundamentals of Human Communication	5
MAT 100	Math for Health Careers	3

TOTAL PREREQUISITES 11

Certificate

NUR 116	Nursing Fundamentals	6
NUR 117	Nursing Fundamentals Lab	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 I	5-6
NUR 128*	Medical/Surgical Nursing II	7-8
NUR 131	Clinical Nursing Practice I	4.5
NUR 132	Nursing Process I	2
NUR 133	Maternal/Newborn Theory	3
NUR 134	Maternal/Newborn Clinical	2
NUR 137	Selected Services	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	Nutrition & Health	3
NUR 151	Pharmacology I	3
NUR 152	Pharmacology II	3
NUR 153	Administration of Medications	1
PSY 160	Psycho-Physical Development	5

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

TOTAL CREDITS 70-72

PARENT EDUCATION

Child & Family Education Division (206) 527-3783

Parent education programs are offered at North. Classes are held on and off campus during fall, winter and spring quarters. Also, parents may utilize online classes that are offered every quarter.

Parents who enroll in "Parent Education Child Study Laboratory" participate once a week with their child in a parent-operated cooperative preschool, pre-3, toddler or infant education program.

They also attend parenting classes and learn decision-making and group management skills as officers or committee members in the cooperative.

The program gives parents the opportunity to:

- study child development and behavior.
- learn new ways to interact with children.
- share ideas and experiences with other adults.
- share in their child's early development and group experiences.

PHARMACY TECHNICIAN

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 regarding enrollment and current information about the program. The program begins fall and spring quarters.

Certificate

AHI 100	Intro to Medical Vocabulary	3
PHA 112	Pharmacy Law	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

TOTAL CREDITS 49

REAL ESTATE CERTIFICATES

Advising Center (206) 527-3658
 Business Division (206) 527-3730
 Real Estate Department (206) 528-4533

Real Estate General Appraisal

Degree

TECHNICAL SPECIALTY COURSES

RES 180	Principles of Real Estate Appraisal	3
RES 181	Standards of Professional Practice in Real Estate Appraisal	1.5
RES 183	Real Estate Appraisal Procedures	3
RES 280	Commercial Real Estate: Analysis of Markets & Income	3
RES 281	Principles of Capitalization in Appraising	3
RES 282	General Appraisal Applications	3

ALLIED SUPPORT COURSES

RES 125	Real Estate Math	2
RES 170	Real Estate Law	3
RES 200	Seminar in Current Real Estate Issues – OR –	
CWE 100	Cooperative Education Work Experience	5
RES 220	Real Estate Economics	3

ALLIED SUPPORT BUSINESS COURSES

BUS 230	Business Communications	5
BUS 169	Using Computers in Business - OR –	
CIS 101	Microcomputer Applications	5

TOTAL CREDITS 39.5
Real Estate Residential Appraisal

Certificate

TECHNICAL SPECIALTY COURSES

RES 180	Principles of Real Estate Appraisal	3
RES 181	Standards of Professional Practice in Appraisal	1.5
RES 183	Real Estate Appraisal Procedures	3
RES 220	Real Estate Economics	3
RES 240	Real Estate Appraisal/Residential	3
RES 242	Advanced Residential Appraisal Methods	3
RES 243	Uniform Residential Appraisal Report	1.5

ALLIED SUPPORT COURSES

BUS 205	Seminar in Current Real Estate Issues – OR –	
CWE 100	Cooperative Education Work Experience	5
RES 125	Real Estate Math	1.5
RES 170	Real Estate Law	3

TOTAL CREDITS 27.5
Real Estate Brokerage

Certificate

RES 150	Real Estate Sales & Leasing Documentation	1.5
RES 160	Real Estate Finance/Residential – OR –	
RES 165	Real Estate Loan Officer	3
	– OR –	
RES 166	Real Estate Loan Processing	4
	– OR –	
RES 260	Real Estate Finance/Commercial	3
RES 170	Real Estate Law	3
RES 180	Principles of Real Estate Appraisal	3
RES 190	Real Estate Escrow I	3
RES 230	Real Estate Brokerage Management	5
	Electives	10.5
	<i>Select from RES, CWE, CIS, BUS or ACC.</i>	

TOTAL CREDITS 29-30
Real Estate Escrow

Certificate

RES 100	Real Estate Fundamentals	5
	– OR –	
RES 105	Real Estate Fundamentals	6
	– OR –	
RES 130	Real Estate Principles	5
RES 160	Real Estate Finance/Residential – OR –	
RES 165	Real Estate Loan Officer	3
	– OR –	
RES 166	Real Estate Loan Processing	4
	– OR –	
RES 260	Real Estate Finance/Commercial	3
RES 170	Real Estate Law	3
RES 175	Intro to Title	3
RES 190	Real Estate Escrow I	3
RES 195	Real Estate Escrow II	3
RES 200	Seminar in Current Real Estate – OR –	
CWE 100	Cooperative Education Work Experience	5

TOTAL CREDITS 25-27

Real Estate Loan Officer

Certificate

RES 100	Real Estate Fundamentals	5
	- OR -	
RES 105	Real Estate Fundamentals – Self Paced	6
	- OR -	
RES 130	Real Estate Principles	5
RES 125	Real Estate Math	2
RES 165	Real Estate Loan Officer	3
RES 180	Principles of Real Estate Appraisal	3
RES 266	Real Estate Loan Underwriter	3
	Approved Electives	6

TOTAL CREDITS 22-23

Real Estate Investment & Commercial Sales

Certificate

RES 140	Real Estate Sales Practice	3
RES 141	Land Use Principles & Practice	3
RES 150	Residential Sales & Leasing	1.5
RES 170	Real Estate Law	3
RES 180	Principles of Real Estate Appraisal	3
RES 210	Principles of Real Estate Investment & Commercial Sales	3
RES 220	Real Estate Economics	3
RES 260	Real Estate Finance/Commercial	3
	Approved Electives	6

TOTAL CREDITS 28.5

Real Estate Loan Processor

Certificate

RES 100	Real Estate Fundamentals – OR –	5
RES 130	Real Estate Principles	5
RES 125	Real Estate Math	2
RES 166	Real Estate Loan Processing	4
RES 167	Loan Processing Software	1.5
RES 175	Intro to Title	3
RES 180	Principles of Real Estate Appraisal	3
RES 266	Real Estate Loan Underwriter	3

TOTAL CREDITS 21.5

Real Estate Property Management

Certificate

CIS 101	Microcomputer Applications	5
RES 100	Real Estate Fundamentals	5
	- OR -	
RES 105	Real Estate Fundamentals – Self Paced	6
	- OR -	
BUS 130	Real Estate Principles	5
RES 170	Real Estate Law	3
RES 200	Seminar in Current Real Estate Issues – OR –	5
CWE 100	Cooperative Education: Work Experience	5
RES 120	Real Estate Principles of Maintenance & Repair	1.5
RES 201	Principles of Real Estate Management	3
RES 202	Residential Property Management	3
RES 203	Commercial Property Management	3
RES 220	Real Estate Economics	3

TOTAL CREDITS 32.5

Real Estate Sales

Certificate

RES 100	Real Estate Fundamentals	5
	- OR -	
RES 105	Real Estate Fundamentals – Self Paced	6
	- OR -	
RES 130	Real Estate Principles	5
RES 125*	Real Estate Math	2
RES 140	Real Estate Sales Practice – OR –	3
RES 145	Real Estate Practice (Fast Start)	3
RES 150	Residential Sales & Leasing Documentation	1.5
RES 160	Real Estate Finance/Residential – OR –	3
RES 165	Real Estate Loan Officer	3
	- OR -	
RES 166	Real Estate Loan Processing	4
	- OR -	
RES 260	Real Estate Finance - Commercial	3
RES 170	Real Estate Law	3

TOTAL CREDITS 17.5-19.5

*Students may challenge RES 125 by passing the RES 125 challenge test.

Advanced Real Estate Sales

Certificate

RES 100	Real Estate Fundamentals	5
	- OR -	
RES 105	Real Estate Fundamentals - Self Paced	6
	- OR -	
RES 130	Real Estate Principles	5
RES 125*	Real Estate Math	2
RES 140	Real Estate Sales Practice - OR -	
RES 145	Real Estate Practice (Fast Start)	3
RES 150	Washington Real Estate Documentation	1.5
RES 160	Real Estate Finance - Residential - OR -	
RES 165	Real Estate Loan Officer	3
	- OR -	
RES 166	Real Estate Loan Processing	4
	- OR -	
RES 260	Real Estate Finance - Commercial	3
RES 170	Real Estate Law	3
RES 180	Principles of Real Estate Appraisal	3
	Electives	8
	<i>Select from RES, CWE, CIS or BUS.</i>	

TOTAL CREDITS 28.5-30.5

**Students may challenge RES 125, Real Estate Math, by passing the RES 125 challenge test.*

Washington State Real Estate Certificate & North Seattle Community College Certificate

Certificate in Real Estate

This certificate program provides a strong basic background in real estate. The completion of six or seven real estate courses entitles the student to a certificate in real estate issued by the Department of Licensing and by the college.

RES 100	Real Estate Fundamentals	5
	- OR -	
RES 105	Real Estate Fundamentals - Self Paced	6
	- OR -	
RES 130	Real Estate Principles	5
RES 160	Real Estate Finance/Residential - OR -	
RES 165	Real Estate Loan Officer	3
	- OR -	
RES 166	Real Estate Loan Processor	4
	- OR -	
RES 260	Real Estate Finance/Commercial	3
RES 170	Real Estate Law	3
RES 180	Principles of Real Estate Appraisal	3
	Electives	6
	<i>Select from approved real estate electives.</i>	

TOTAL CREDITS 20-22

Real Estate

Associate of Applied Science Degree

This program provides a broad base of knowledge and training in the real estate field. Graduates are prepared to enter the field in brokerage management, property management, appraisal, sales, land acquisition and development, title insurance, real estate loans, and/or escrow.

TECHNICAL SPECIALTY COURSES

RES 100	Real Estate Fundamentals	5
	- OR -	
RES 105	Real Estate Fundamentals - Self Paced	6
	- OR -	
RES 130	Real Estate Principles	5
RES 200	Seminar in Current Real Estate Issues - OR -	
CWE 100	Cooperative Education: Work Experience	5
RES 125*	Real Estate Math	2
RES 160	Real Estate Finance/Residential - OR -	
RES 165	Real Estate Loan Officer	3
	- OR -	
RES 166	Real Estate Loan Processing	4
	- OR -	
RES 260	Real Estate Finance/Commercial	3
RES 170	Real Estate Law	3
RES 180	Principles of Real Estate Appraisal	3
RES 220	Real Estate Economics	3
	Real Estate Electives	26

ALLIED SUPPORT COURSES

ACC 210	Financial Accounting Fundamentals I	5
BUS 111	Marketing to a Diverse Society	5
BUS 140	Customer Relations	5
BUS 230	Business Communications - OR -	
BUS 235	Oral Communication in Business	5
BUS 250	Business Law	5
	Electives	5
	<i>Select from ACC, BUS, CIS, or IBN.</i>	

GENERAL EDUCATION COURSES 10

Credits must be selected from a list of approved general education courses.

**Students may challenge RES 125 by passing the RES 125 challenge test.*

TOTAL CREDITS 90-92

SENIOR ADULT EDUCATION

Child & Family Division (206) 527-3783

North Seattle Community College has a genuine commitment to serving the total community and believes that learning is a lifelong process.

To meet the growing demand for lifelong learning opportunities, we offer 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 Adult Tuition Waiver 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 this 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.

WATCH & CLOCK TECHNOLOGY

Electronics & Engineering Information Technologies Division (206) 527-3757

This occupational program provides training for the profession of watch and clock repairer based on the principle of practical training (workshop 75%) and theoretical training (lecture 25%). This program is in accordance with the WOSTEP (Watchmakers of Switzerland Training and Educational Program) curriculum. Training is provided in grinding, filing, toolmaking, lathe work, and gear cutting and the repair of different types of clocks and watches. Basic jewelry repair is also part of the program. Please contact the division for current information.

Certificate

TECHNICAL SPECIALTY COURSES

ART 281	Jewelry Design I	4
HIN 111	Intro to Watch & Clock Technology I	5
HIN 112	Watch & Clock Technology I	5
HIN 113	Watch & Clock Technology: Practicum	5
HIN 121	Repairing Clock Works: Theory & Overview	5
HIN 122	Basic Mechanics of Clocks	5
HIN 123	Clock Repair: Practicum	5
HIN 143	Watch & Clock Technology III	15
HIN 144	Watch & Clock Technology IV	15
HIN 145	Watch & Clock Technology V	15
HIN 146	Watch & Clock Technology VI	15

TOTAL CREDITS 94

Associate of Applied Science Degree

Satisfactory completion of the two-year Watch & Clock Technology certificate program plus the courses indicated below qualifies a student for the associate of applied science degree.

COMPLETION OF CERTIFICATE REQUIREMENTS 94

ALLIED SUPPORT COURSES

ACC 110	Intro to Accounting - Bookkeeping	5
BUS 101	Intro to Business	5
EGR 231	Technical Writing	3
ENG 101	Composition	3
SPE 104	Oral Communication in the Workplace	4
	General Education Requirements	10
	<i>General education requirements must be selected from specific general education categories. Contact advising center for a list of these categories and acceptable courses.</i>	

TOTAL CREDITS 124

Students can enroll in the following classes which are optional and not required for the certificate or degree:

HIN 197	Special Topics in Watch & Clock Repair	2-10
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(WOSTEP CURRICULUM)

ART 282	Jewelry Design	4
ART 283	Jewelry Design	4

WORK EXPERIENCE/ COOPERATIVE EDUCATION

Coop 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

Institutional Support Services

KATHLEEN NOBLE, President: B.S., M.S., University of Akron; Ed.D., Florida Atlantic University.

DAVID CUNNINGHAM, Coordinator of Strategic Planning: B.S., University of Glasgow, Scotland, UK; M.Ed., University of Washington.

ERIC DAVIS, Director, Multicultural and Diversity Services: B.A., University of California, Los Angeles; M.Ed., Seattle University.

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

KARLA MARKEN, Human Resources Representative: B.A., Hamline University; M.A., Seattle University.

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

DOUGLAS KHAM PHONSAVANH, Manager, Financial Operations: B.A., University of Aix-Marseille, France.

JEANNE RICKEY, Director, Marketing and Public Information: B.A., University of Washington.

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

LISA SCHUBERT, ABE Program Manager, Arts, Humanities and Adult Basic Education: B.A., University of Minnesota; M.A., M.Ed., Ph.C., University of Washington.

NANCY VERHEYDEN, Associate Dean, Education and Community Relations: B.A., Kent State University; M.B.A., Seattle University; graduate studies: The Sorbonne, University of Washington.

Office of Instruction

MARY O'NEIL-GARRETT, Vice President for Instruction: B.A., M.A., Mills College; Ph.D., University of Dayton.

CONNIE BAKKER, Associate Dean, Instructional and Information Support Services: B.A., M.A., Post-Graduate Certificate, University of Wisconsin.

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

WILLARD BILL, Associate Dean, Social Science, International and Integrated Studies: B.Ed., Central Washington State College; M.Ed., Pacific Lutheran University; Ph.D., University of Washington.

TOM BRAZIUNAS, Director, Distance Learning: B.A., University of Chicago, M.S., State University of New York; Ph.D., University of Washington.

ANDREAS BROCKHAUS, Manager, Teaching and Learning Center: B.A., Western Washington University; M.A., University of Washington.

PATRICIA CHEADLE, Associate Dean, Business: B.A., California State University; M.A., M.P.A., University of California at Berkeley.

KAREN DEMETRE, Associate Dean, Child and Family, Health/Medical and Physical Education: B.S., M.Ed., University of Washington.

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

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

N. DAVID GRONBECK, Manager, Media Services: B.A., University of Minnesota.

CAROLYN LORD, 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.

DARRELL MIHARA, Associate Dean, Professional Technical Education, Culinary Arts and Hospitality: B.A., University of Washington; Community College Vocational Certificate.

SU NELSON, Director, Workforce Development: B.A., University of Portland; M.Ed., Seattle University.

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

KATHERINE RILEY, Associate Dean, Continuing Education and Extended Learning: B.A., M.Ed., University of Washington.

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

LISA SHUBERT, Manager, ABE Program, Arts, Humanities and Adult Basic Education: B.A., University of Minnesota; M.S., M.Ed., Ph.C., University of Washington.

MARK WEN, Director, International Trade Institute; Director, International Education: B.S., Harbin Poly-Tech University, China; M.B.A., Gonzaga University.

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

Student Development Services

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

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

CATHERINE CHUN, Manager, Women's Center: B.A., M.Ed., University of Washington.

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

SUZANNE FITZSIMMONS, Director, Advising Center: B.A., Washington State University.

ALICE MELLING, Manager, High School Relations/Running Start: B.A., Pacific Lutheran University; M.Ed., University of Washington.

MARCI J. MYER, Director, Admissions, Records & Registration: B.S., M.S., University of North Dakota.

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

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

JUNE STACEY-CLEMONS, Associate Dean, Enrollment Services: B.A., University of Kentucky; M.A., Western Washington University.

CHERIE WEBER, Manager, Bookstore.

Faculty

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

ABULHOSN, SAMI, Accounting: B.S., East Tennessee State University; M.A., University of Washington; Community College Vocational Certificate.

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

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

ANDRILLA, HOLLY, Math: B.S., M.S., University of Washington.

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

BATCHELOR, SUSAN, ABE/ESL, NSIE: B.A., M.A.T., 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., Allied Health, North Seattle Community College; Certified Medical Assistant.

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

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

BENJAMIN, JUDITH, NSIE: B.A., Mills College of Education; M.A., University of Washington; ESL Teaching 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.

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

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

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

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

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

CAULDWELL, ELEANOR E., Human Biology and Nutrition: B.A., Mills College; M.S., University of California at Los Angeles.

CHASE, DALE, Librarian: B.A., M.L.S., University of Washington.

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., Stanford 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.

CLARK, TONIA, English: B.A., M.A., University of Washington.

COOK, DALE W., 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 Washington University.

COSKO, PAULA, ABE/ESL: B.A., Teaching Certificate, Seattle University.

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

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

DUCE, RICHARD E., Real Estate, General Business: B.A., University of Washington; graduate study, Eastern and Central Washington State Colleges; Real Estate Broker; WREC, GRI.

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

DYER, BARBARA, Math: B.S., Immaculate Heart College; M.S., University of Notre Dame.

EDELMAN, FRED A., CAD for Industrial Applications: Industry Professional; A.A., Skagit Valley College; Community College Vocational Certificate.

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

EYRES, DAVENE, Technical Physics and Mathematics: B.S., M.S., graduate study in engineering, University of Washington; C.P.A.

FIGENBAUM, TIMOTHY, Electronics and Engineering: M.A., Webster University, Computer and Information Resources, BTE; technical education.

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

GARCIA, FRANK, Math: 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

GRAHAM, TOM, ABE/ESL: B.A., University of Minnesota; M.A., Seattle University.

GREEN, DEBORAH, English: B.A., Wellesley College; M.A.T., University of Washington.

GREEN, JANE, Business Information Technology
HAERTEL, HARRIS, Geography/History: B.S., Arizona State University; B.F.T., 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, LARRY W., Psychology: B.A., M.S., Western Washington University.

HAMILTON, CAROL ANN, 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; Russian Language Study, Defense Language Institute, Monterey.

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

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

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

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- HOSTETLER, DIANE, Drama: B.A., Russell Sage University; M.F.A., Temple University.
- HOTTINGER, SUSAN, ABE/ESL: B.A., University of Washington.
- HUGHES, DENISE, NSIE: B.A., California State University at Fullerton; M.A., University of Washington.
- HULL, LYNNE, Art: B.F.A., University of Washington; M.F.A., School for American Craftsmen.
- JALALYAR, MIR, Accounting and Business: B.S., Kabul University; B.A., University of Puget Sound; M.S., Ph.D., Washington State University.
- JAMES, KAREN, NSIE: B.A., Western Washington University; M.A., TESOL Certification, The American University.
- JENKINS, CHRISTINE, Institute of English: B.A., Central Washington University; M.A.T., School for International Training.
- JENNE, RALPH W., Mathematics: B.A., University of Colorado; M.A., Ph.D., University of Washington.
- JEWELL, PHEBE, English: B.A., Simon Fraser University; M.A., Ph.C., University of Washington.
- JONES, BEN J., Mathematics: B.S., University of Washington; M.S., Ph.D., University of Oregon.
- JUMP, FRANK E., Electronics: B.S., U.S. Merchant Marine Academy; Community College Vocational Certificate.
- KELLER, ALICE, Adult Education: B.A., M.A., Indiana University; M.A.T., University of Washington.
- KENT, JEAN, Computer Information Systems: B.A., M.L.S., University of Washington; Community College Vocational Certificate.
- KERNS, THOMAS, A., Philosophy: B.A., University of Notre Dame; M.A., Ph.D., Marquette University; post-doctoral studies, The American University of Cairo; enrolled in Masters in Public Health, University of Washington.
- KISCHNER, MICHAEL, English: B.A., Kenyon College; M.A., John Hopkins; Ph.D., post-doctoral studies, University of Washington.
- KITA, SHARON, ESL/Learning Disabilities: B.S., Illinois State University; M.S., Southern Illinois University.
- KOSS, TERRY, Physics and Astronomy: B.S., University of Washington; M.S., University of British Columbia; Ph.D., University of Washington.
- KOVACS, SHARON, Early Childhood Education: A.A.S., Early Childhood Education, North Seattle Community College; B.A., University of Washington; Community College Vocational Certificate.
- KREFTING, PAUL, ABE/ESL: B.A., California State University; M.A., Ph.C., University of Washington.
- LANDEL, HANS F., Zoology, Biology (Ecology): B.S., University of California at Davis; Ph.D., Purdue University.
- LEVY, GIRARD W., Psychology: B.A., University of Buffalo; M.A., Ph.D., Emory University.
- LI, DEANNA J., Mathematics: B.S., University of the Philippines; M.A., University of Washington; Community College Vocational Certificate.
- LI, HON, Applied Mathematics: B.S., University of Michigan; Ph.D., University of Washington.
- LIMING, SANDRA, Practical Nursing: R.N., A.A.S., Everett Community College; B.S.N., Seattle Pacific University; Ph.C., University of Washington; Community College Vocational Certificate.
- LIPPERT, PAM, Math: B.S., M.S., University of Wisconsin, Milwaukee.
- LORTZ, PETER, Biology: B.A., DePauw University; M.S., Miami University.
- MADER, EVA, German: B.A., Columbia University; M.D., M.A., Ph.D., Johns Hopkins University.
- MCALISTER, DONALD R., Chemistry, Mathematics: B.S., M.S., University of Oregon; Ph.D., California Institute of Technology.
- MCDOWELL, CONNIE, Librarian: B.A., M.L.S., University of Washington.
- MCGUINNESS, MITCH, Botany: B.S., M.S., Ph.C., Ph.D., University of Washington.
- MCKIBBEN, MARGARET C., Librarian: B.A., University of Chicago; M.L.S., University of Washington.
- MCKIM, BRUCE, EMT/CPR: State of Washington Senior EMT-Defibrillation/Retired Firefighter.
- MINATOYA, LYDIA, Counselor: B.A., St. Lawrence University; M.A., George Washington University; Ph.D., University of Maryland.
- MORTENSEN, RICHARD L., Network Technologies: B.S., University of Wisconsin; M.B.A., University of Denver; Principal Instructor, Mortensen & Assoc., Computer City Training Division; Lead Instructor, CompUSA Training Center; State Accredited Vocational School Director.
- MOSCOU, KATHY, Pharmacy Technician: R.Ph., B.S., Pharmacy, University of Washington; Community College Vocational Certificate.
- NORMINTON, NORA, ABE/ESL: B.A., Sonoma State University.
- NAGI, KULDEEP, Electronics and Engineering Technologies: M.S., graduate work, Microcomputer Management Certificate University of Washington; Certificate in Computer Service Technology, North Seattle Community College; Microsoft Certified System Engineer (MCSE), Microsoft Certified Professional and Internet (MCP&I), Microsoft Certified Trainer (MCT).
- NUTTING, MAUREEN, History: B.A., Fordham University; M.A., Ph.D., University of Notre Dame.
- OFFENBACK, VINCE, Electronics: Registered Professional Engineer, State of Washington; B.S.E.E., Drexel University; M.S.E.E., University of Washington; Community College Vocational Certificate.
- OH, JACKIE, Chemistry: B.S., University of Washington; M.S., Community College Instructional Certificate, Western Washington University.
- OLGUIN, ENRIQUE, Ethnic Studies: A.A., Orange Coast Community College; B.A., University of California, Los Angeles; Ph.D., Stanford University.
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- PAZ, MARIA S., Librarian: B.A., M.L.S., University of Washington.
- POOL, RUTH, Math: A.S., Brunswick Junior College; B.S., Georgia Southern College; M.S., Clemson University.
- PURDY, CHRISTINA, ABE/ESL, English, NSIE: B.A., Smith College; M.A., Southern Illinois University.
- PURKEY, LAURA, English: B.A., Western Washington University; M.A., New Mexico State University.
- QUIG, STEVE, Developmental English, English: B.A., M.F.A., University of Washington.
- QUILLINAN, BILL, Heating, Air Conditioning and Refrigeration Design Technology: Industry Professional; B.S.E.E., University of Utah.
- RADKE, FRED, Music: Professional Musician; College of San Mateo.
- RASMUSSEN, SHARON, ABE/ESL: B.A., University of South Dakota; M.O., University of Missouri.
- REID, JIM, Physics/Astronomy: B.A., University of Oxford, England; M.Sc., University of Suffolk, England; Ph.D., University of Calgary, Canada.
- REIS, JANE LISTER, Communication/Speech: B.A., New York University; M.C.M., Seattle Pacific University.
- RIGBY, DAVID W., Technical English: B.A., M.A., Pennsylvania State University; graduate study, University of Washington; Community College Vocational Certificate.
- RIZVI, NAJMA, International/Global Studies: M.A., University of Florida; M.A., University of Colorado; Ph.D., University of California, Los Angeles.
- ROOT, PATRICIA, Physical Education: B.S., M.S., University of Arizona.

ROSS, JOAN STUART, Art: M.A., M.F.A., University of Iowa; Museum School, Boston Museum of Fine Arts.

ROST, D. JOHN, Culinary Arts: Certificate, North Seattle Community College; Community College Vocational Teaching Certificate.

SAMS, CAROL, Music: B.A., University of California; M.A., Mills College; D.M.A., University of Washington.

SANDALL, MARILYN J., Sociology: B.A., M.A., University of Oregon; Ph.D., University of Washington.

SCHAFFER, DENNIS J., Engineering: B.S., Rensselaer Polytechnic Institute; M.S., Case Western Reserve University; Community College Vocational Certificate.

SCHLADOR, SUZANNE, Microbiology: B.S., Loyola Marymount University; M.S., California State University at Long Beach.

SCHLEY, ANNETTE, Office Occupations and General Business: B.A., M.A., Business Education, Wayne State University; Community College Vocational Certificate.

SCHMITT, S. FRAN, Psychology: B.A., Miami University, Ohio; M.A., University of Wisconsin; graduate study, University of Washington.

SCHNEIDER, GERALD, Counselor: B.A., M.A., University of New Mexico; Ed.D., University of Washington.

SCHUESSLER, ROBERT H., Communication/Speech: B.A., College of the Ozarks; M.A., Fairfield University; Ed.D./M.Ed., Columbia University Teachers College.

SEARIGHT, DONNA, Parent Education: B.S., Seattle University; North Seattle Community College, EDE Certification.

SHAKARIAN, ROUPEN, Music: B.A., M.A., University of Washington.

SHARPE, LYNN, ESL: B.A., City College of New York; M.A., Master of Philosophy, Columbia University.

SHIOSAKI, GREGG, Culinary Arts and Hospitality: Restaurant/Hotel Industry Professional; A.A.S., Food Production and Hospitality Management, South Seattle Community College; Professional Culinary Arts Study Tours of Regional France; South Seattle Community College Vocational Certificate.

SHOEMAKER, D.C., Electronics: B.A., University of California at Berkeley; M.B.A., University of Washington.

SIDOINE, KAAREN, ABE/ESL: A.A., Seattle Central Community College; B.A., M.Ed., Seattle University.

SITTERLEY, MARY B., Practical Nursing: R.N., St. Joseph's School for Nursing; B.A., Arizona State University; M.Ed, M.N., University of Washington; Community College Vocational Certificate.

SMITH, MARILYN, English: B.A., Northwestern University; M.A., University of Michigan; graduate study, University of Washington.

SPRINGER, ARLENE, ABE/ESL: B.A., M.A., University of Washington.

STARK, DIANA, Computer Information Systems: B.A., Michigan State University; Community College Vocational Certificate.

STARK, MARILYN, Adult Education: B.A., Marylhurst College; M.A.T., Reed College.

STERN, ROSELLA, English: B.A., Roosevelt University; M.A., Northwestern University; Ph.D., University of Washington.

STICKELMEYER, JAKE, Practical Nursing: R.N., A.D.N., Spokane Community College, B.S.N., Eastern Washington University.

STUHLBREHER, KAREN, Women Studies: B.A., Ithaca College; M.A., University of Washington; doctoral candidate, University of Washington.

SULLIVAN, KATHERINE, Culinary Arts and Hospitality: Restaurant/Hotel Industry Professional; A.A.S., Occupational and Vocational Education, South Seattle Community College.

SWANLJUNG, VERNA, General Business & Office Occupations: B.S., Bennett College; M.B.A., City University; Community College Vocational Certificate.

TENENBAUM, MOLLY, English: B.A., Sonoma State University; B.A., M.F.A., University of Washington.

THOMAS-MURPHY, STEPHANIE, Practical Nursing: R.N., B.S.N., Florida A & M University; M.S.N., Seattle University; Community College Vocational Certificate.

TRAWEEK, JAMES, NSIE: B.A., M.A., South Asian Studies, M.A., Teaching ESL, University of Washington.

TRIMBLE, DONALD, Political Science, Economics: B.A., Central Washington University; M.A., Western Washington University.

TUINSTRAL, SHERRY, ABE/ESL: M.A., Seattle Pacific University.

WALKER, ANDREW L., Mathematics: B.S., M.S., University of Washington.

WALL, JAMES C., Construction Design and Drafting with CAD: Registered Engineer; A.A., Everett Community College; B.A., University of Washington; J.D., University of Puget Sound School of Law; Community College Vocational Certificate.

WASSON, DAVID, Culinary Arts and Hospitality: Restaurant/Hotel Industry Professional; A.A.S., Seattle Central Community College, Certified chef de cuisine, Certified Culinary Educator.

WATTS, HARRY L., Mathematics: B.A., Sul Ross University, Texas; M.S., University of New Mexico.

WEGLIN, JIM M., Accounting, General Business: B.S., Seattle University; M.B.A., California State University at San Jose; C.P.A.; Community College Vocational Certificate.

WHITE LEBLANC, JUDITH, Parent Education: B.S., University of Washington.

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