ACADEMIC PROGRAM GUIDE

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Principles of Community

As members of the WNCC community, we choose to be part of an academic community dedicated to those principles that foster personal and professional integrity, civility, and tolerance.

We strive toward lives of personal integrity and academic excellence—We will encourage in ourselves, and in one another, those responsible actions which lead to lives of productive work, personal enrichment, and useful citizenship in an increasingly interdependent world.

We commit to treat one another with civility—Recognizing that there will be differences of opinion, we will explore the differences in a courteous and forthright manner, always acknowledging individual rights to the freedom of expression and association.

We support tolerance—We encourage those of all cultures, orientations, and backgrounds to understand and respect one another in a safe and supportive educational environment.

STATEMENT OF ETHICS: WNCC is committed to the highest ethical standards in its administration, teaching, scholarships and service, and its treatment of its students, faculty and staff.

Academic Programs

Western Nevada Community College offers associate degrees and academic programs to meet a variety of educational goals. Some students wish to learn occupational skills or work toward career advancement. Others seek credits which will transfer to a four-year college or university.

A number of one-year certificates are also offered in occupational areas. Students are encouraged to read the specific information about each degree or certificate before making their decisions. Counselors and faculty advisors are also available to provide information on the programs available.

To meet the needs of its students, WNCC offers four associate degrees:

- **Associate of Applied Science**
- **Associate of Arts**
- **Associate of General Studies**
- **Associate of Science**

OCCUPATIONAL PROGRAMS AND EMPHASES

WNCC offers two-year occupational programs in many areas, allowing students to gain job training and earn an Associate of Applied Science degree.

One-year occupational programs are also offered in a number of areas, allowing students to achieve a Certificate of Achievement.

Students enrolled in any of these programs will benefit from "hands-on" laboratory experience within their major field. They will enter the job market with specific skills and knowledge useful for employment and advancement.

TRANSFER PROGRAMS AND EMPHASES

WNCC attracts a large number of students who plan to earn a baccalaureate degree from a four-year college or university. They elect to begin their college education at the community college for many reasons, including lower tuition costs, small class sizes, flexible class times and a comfortable learning environment.

Students who plan to transfer can earn the Associate of Arts, Associate of Science, or Associate of General Studies degree. These programs of study can provide the first one or two years of their four-year degrees.

WNCC students have transferred to many four-year schools. Students who plan to transfer should work closely with a WNCC counselor and also keep in contact with the intended transfer institution.

WNCC also offers bachelor's degree partnerships with universities in specified fields, allowing students to complete select bachelor's degree programs in a more convenient manner. See a WNCC counselor for details.

AFFIRMATIVE ACTION POLICY - WNCC is committed to a policy of affirmative action/equal opportunity employer and values diversity in its student population and work force and does not discriminate on the basis of race, creed, color, age, religion, sex, sexual orientation, national origin, disabilities or veteran's status in the programs that are offered, in the activities sponsored, and in employment. The college has procedures to resolve complaints of alleged discrimination.
For additional information, contact the college Affirmative Action Officer.

Academic Programs & Degrees

	Associate of Applied Science Degree	Associate of Arts Degree	Associate of Science Degree	Certificate of Achievement	Transfer Program Courses **	Certification Preparation
Accounting *(Business Emphasis)*	X				X	
Accounting - Applied *(Business Emphasis)*	X				X	
Accounting Technician				X	X	
American Sign Language				X	X	
Automotive Mechanics	X			X		X
Biophysical Sciences *(Associate of Science Emphasis)*			X		X	
Business	X			X	X	
Chemistry *(Associate of Science Emphasis)*			X		X	
Computer Networking Technology	X					
Computer Science *(Associate of Science Emphasis)*			X			
Computer Technology - Cisco Systems				X		X
Computer Technology - Computer Programming				X		
Computer Technology - Microcomputer/Network Technician				X		X
Computer Technology - Network Administration				X		X
Construction Technology - Craft Training *(Construction Tech Emphasis)*	X				X	
Construction Technology - Project Management *(Construction Tech Emphasis)*	X					
Convergence Technology *	X					
Criminal Justice - *(Associate of Arts & Applied Science)*	X	X				X
Criminal Justice - Law Enforcement/Academy *(Criminal Justice Emphasis)*	X			X		X
Criminal Justice - 9-1-1 Dispatch Telecommunications				X		
Deaf Studies *(Associate of Arts Emphasis)*		X			X	
Drafting Technology - Architectural *(Drafting Technology Emphasis)*	X			X	X	
Drafting Technology - Civil *(Drafting Technology Emphasis)*	*X*				*X*	
Drafting Technology - Mechanical *(Drafting Technology Emphasis)*	X			X	X	
Early Childhood Education	X			X	X	
Education					X	
Electronics Technology	X			X		
Engineering Science *(Associate of Science Emphasis)*			X		X	
Fine Arts *(Associate of Arts Emphasis)*		X			X	
Geographic Information Systems	X			X	X	
Geosciences *(Associate of Science Emphasis)*			X		X	
Graphic Communications	X			X	X	
Health Information Technology *	X					
Health Information Technology - Medical Coding				X		
Health Information Technology - Medical Transcription				X		
Health Information Technology - Medical Unit Clerk				X		
Machine Tool Technology	X			X		
Management *(Business Emphasis)*	X				X	
Mathematics *(Associate of Science Emphasis)*			X		X	
Musical Theatre *(Associate of Arts Emphasis)*		X			X	
Nursing	X			X	X	
Office Technology	X				X	
Paralegal Studies	X				X	
Physics *(Associate of Science Emphasis)*			X		X	
Real Estate *(Business Emphasis)*	X					X
Retail Management				X	X	
Surgical Technology				X		X
Web Technology	X				X	
Welding Technology	X			X		X

*Pending final approval by the NSHE Board of Regents.
** Students may take courses in many other academic areas for transfer; see transfer degree section of this catalog and/or a WNCC counselor.

General Education Student Learning Outcomes

All WNCC degrees and certificates include a general education component. The outcomes below will be phased into general education requirements during the upcoming year.

One of the most important improvements to the curriculum of WNCC is the development of a clear mission and student learning outcomes for all degrees and certificates of achievements. The purpose of the new mission and student learning outcomes is to clearly identify the knowledge, skills and attitudes students are expected to have when they complete their programs.

During 2005-2006, WNCC faculty will be reviewing all general education courses to make sure they support the general education mission and outcomes. As students take general education courses they can expect to see details about how each course addresses general education. Changes in the courses required to complete general education will go into effect in the 2006-2007 year. Changes in the courses and in the requirements necessary to complete general education will go into effect in the 2006-2007 academic year.

COMMUNICATION

The first component of general education at WNCC focuses on equipping students with the skills to organize and communicate ideas, concepts, and information in personal and work settings.

STUDENT LEARNING OUTCOMES - Students who complete a degree or certificate of achievement at WNCC are able to demonstrate appropriate:

1. college-level writing skills.
2. oral communication skills.
3. college-level reading skills.

ANALYSIS

The second component of general education at WNCC is to provide students the foundation needed to make effective decisions and solve problems in their professional and personal lives.

STUDENT LEARNING OUTCOMES - Students who complete a degree or certificate of achievement at WNCC are able to:

1. demonstrate knowledge of appropriate critical thinking skills.
2. use appropriate mathematical skills.
3. use appropriate problem solving skills.
4. use appropriate principles of reasoning and decision-making.
5. locate and evaluate information.

General Education - Mission & Outcomes

The mission of general education is to provide students in all program areas with a core of critical life skills: communication, analysis, personal development, and community commitment. The philosophy of general education is to promote the growth and development of knowledge, skills, and attitudes that will benefit students in their personal and professional endeavors.

PERSONAL DEVELOPMENT

The third component of general education at WNCC addresses the development of self-sufficiency and responsibility for effectiveness in personal and professional activities.

STUDENT LEARNING OUTCOMES - Students who complete a degree or certificate of achievement at WNCC are able to:

1. demonstrate knowledge of and ability to use effective and efficient learning skills.
2. develop and implement career and educational plans.
3. engage in meaningful self-assessment.
4. work effectively with others.
5. demonstrate computer skills appropriate to their degree or certificate.
6. develop creative capacities.
7. appreciate and value the importance of ethics in their professional and personal lives.

COMMUNITY COMMITMENT

The last component of general education at WNCC focuses on preparing students to participate in, and value the role of, community and culture.

STUDENT LEARNING OUTCOMES - Students who complete a degree at WNCC are able to demonstrate that they:

1. know the basic principles and processes of government at the local, state, national and international level.
2. have participated in at least one significant endeavor in each of the following:
   a. civic project or activity.
   b. cultural or artistic activity.
   c. activity focused on diversity or multicultural issues.
3. appreciate the value and importance of:
   a. diversity.
   b. public service.
   c. the vital role of the fine arts and humanities in the development of cultural values.

Transfer Degrees

Associate of Arts & Associate of Science

The Associate of Arts and Associate of Science degrees are primarily for the student who plans to transfer from WNCC to a four-year college or university to pursue a baccalaureate degree in liberal arts, sciences, humanities, math or related areas. Every year, large numbers of WNCC students successfully transfer to other schools. Each school has its own specific requirements and recommended electives for its various emphases.

Community college students who plan to transfer to either the University of Nevada, Reno or University of Nevada, Las Vegas and who did not complete the university entrance requirements in high school, must complete a minimum of 12 semester credit hours in general education courses. These credits are required for the Associate of Arts or Associate of Science degree. Students must have a grade point average of at least 2.0 to qualify for admission to the universities.

HOW WNCC COURSES TRANSFER AND MEET DEGREE REQUIREMENTS

All students planning to transfer to a four-year college or university are encouraged to meet with a WNCC counselor to ensure their understanding of current transfer guidelines and to carefully design a transfer program that will best meet their needs.

Courses with numbers 100 to 299 (such as ENG 101) are college level courses which are designed to transfer within the Nevada System of Higher Education, and often to other colleges and universities, including UNR, UNLV, and Nevada State College as either an equivalent, a departmental elective or a general elective.

Courses with a "B" designator after the number (such as MATH 100B) are college level courses which may apply toward a WNCC degree but which may not transfer to UNR or UNLV. In some cases, these courses may transfer to other Nevada community colleges and NSC or to out-of-state college and universities. See a WNCC counselor for the latest transfer information.

Courses with a "C" designator after the number (such as CS 109C) are community education courses which do not apply toward college degrees.

Courses with an "L" designator after the number (such as PHYS 151L) are college level laboratory courses which are designed to transfer.

Courses with numbers below 100 (such as ENG 95) are developmental courses which do not apply toward a WNCC degree and normally do not transfer to a university.

TRANSFER PROGRAMS

WNCC students may select a course of study which enables them to complete some or all of the lower division requirements for a four-year degree in the following emphases at UNR, UNLV, or other schools.

Recent surveys of WNCC students show they have transferred to colleges throughout the country including: UNR; UNLV; California State University, Long Beach; Montana State University, Billings; Sierra Nevada College; St. Leo University, Fla.; Idaho State University; Southern Illinois University and University of California, Davis.

Please contact counselors or faculty advisers for major-to-major transfer agreements for the following programs:

- Accounting
- Agriculture
- Animal Science
- Anatomy
- Anthropology
- Architecture
- Art
- Astronomy
- Atmospheric Sciences
- Biochemistry
- Biology
- Business
- Chemistry
- Chemical Engineering
- Civil Engineering
- Communication Arts
- Communicative Disorders
- Computer Engineering
- Computer Science
- Criminal Justice
- Dance
- Dental Hygiene
- Pre-Dentistry
- Drama
- Early Childhood Education
- Economics
- Education
- Electrical Engineering
- English
- Environmental Science
- Finance
- Fish/Wildlife Management
- Foreign Languages
- General Studies
- Geography
- Geology
- Geological Engineering
- History
- Hotel Administration
- Humanities
- Industrial Arts
- Industrial Education
- Information Systems
- Journalism
- Pre-Law
- Liberal Arts
- Pre-Librarianship
- Literature
- Management
- Marketing
- Mathematics
- Pre-Medicine
- Mechanical Engineering
- Metallurgical Engineering
- Meteorology
- Mining Engineering
- Motion Picture and Cinema
- Multicultural (Ethnic) Studies
- Music
- Natural Resources
- Nursing
- Occupational Therapy
- Oceanography
- Pre-Optometry
- Pre-Pharmacy
- Philosophy
- Physician Assistant
- Physical Education
- Pre-Physical Therapy
- Physiology
- Physics
- Political Science
- Psychology
- Public Administration
- Public Relations
- Radiologic Technology
- Recreation
- Religious Studies
- Social Science
- Social Welfare/ Social Work
- Sociology
- Special Education
- Speech Communication
- Theatre Arts
- Urban Planning
- Pre-Veterinary Medicine
- Vocational Education
- Zoology

Associate of Arts Degree and Associate of Science Degree - Mission & Outcomes

MISSION - The purpose of the Associate of Arts and Associate of Science degrees is to provide the academic knowledge and skills for successful transfer to meet higher educational goals.

STUDENT LEARNING OUTCOMES - Students who complete either an AA or an AS degree are expected to demonstrate that they -

1. know the subject matter appropriate to the emphasis of the degree.
2. are able to do the following:
   a. write papers which demonstrate research, reading, and critical thinking skills.
   b. develop effective oral communication skills.
   c. apply mathematical and analytical problem-solving skills.
   d. succeed at their transfer institutions.
3. have developed an appreciation of the following:
   a. the importance of ethics, cultural traditions and diversity, the natural world, and the arts.
   b. the importance of participation in civic affairs.

Associate of Arts

A Transfer Degree

The Associate of Arts degree is primarily for students planning to transfer with junior standing to a four-year college or university for a baccalaureate degree. If the University of Nevada, Reno is the intended transfer school, choose ONLY those courses that are printed in **BOLD/UNDERLINED** from the list below. Satisfactory completion of an AA degree with UNR designated courses (those in bold) guarantees completion of the UNR lower division general education requirements. Students intending to transfer to other schools should see a counselor or follow the catalog of the transfer school.

Courses with a "B" after the course number (such as MATH 100B or CS 109C) and courses with a number under 100 (such as ENG 95) are not applicable toward the Associate of Arts degree. All courses to be counted toward this degree must be university transferable.

A maximum of six credits of special topics classes in one subject area may apply toward any WNCC degree.

NOTE: Information on transfer to UNR is based on UNR requirements for the 2005-2006 school year. These requirements may change in subsequent years. See a WNCC counselor for the most up-to-date information.

Emphases and areas of study offered at WNCC include:

- **Criminal Justice**
- **Deaf Studies**
- **Fine Arts**
- **Musical Theatre**

ASSOCIATE OF ARTS DEGREE REQUIREMENTS

DEGREE REQUIREMENTS - *Coursework must total at least 60 credits.*

ENGLISH/COMMUNICATIONS REQUIREMENTS -
6 credits. WNCC and UNR:
- English **101**, **102**

FINE ARTS REQUIREMENT - *3 credits.*
WNCC and UNR: Choose from:
- Art **107***, 124, **160**, 224, **260**, **261**
- Dance 101
- Graphic Communications **107***
- Humanities **101**
- Music 111*, **121**, **123**, **124**, **221***
- Theatre **100, 105*, 180**

** Course may not meet the Fine Arts requirement at all universities. Please see a counselor.*

HUMANITIES REQUIREMENT - *6 credits.*
WNCC: Choose from:
- Core Humanities **201**, **202**
- English 200, 223, **231**, **232**, 235, 236, 241, 242, 243, 250, 252, 261, 266, 267, 271, 275
- History **105**, **106**, 207, 247, 260, 275
- Humanities 210
- Philosophy (any course except 102, 105, 114)

UNR: Choose one course from each group:
Group A: **CH 201, ENG 231*, HIST 105*, PHIL 200***
Group B: **CH 202, ENG 232*, HIST 106*, PHIL 207***
**These courses will not fulfill UNR's CH 201 and/or CH 202 requirement, if taken after the student has been admitted and enrolled at UNR.*

SCIENCE REQUIREMENT - *6 credits.*
WNCC: Choose from Group A and/or Group B. At least one lab science course recommended.
UNR: Choose from bolded courses, including at least one course from Group A:
- Biology **100**, 113, **190** , **191**, 223, 224, 251
- Chemistry **100**, 110, 111, **121**, **122**, **201**, **202**, 220, 241, 242, 245
- Geology **100**, **101**, **103**, 102, 105, 127, 132, 201, 210
- Physics **100**, **151**, **152**, **180**, **181**, **182**

Group B:
- Anthropology 102, **102 + 110L**
- Astronomy **109**, **110**
- Environmental Studies **100**
- Geography **103**, 104
- Nutrition **121**, 223

MATHEMATICS REQUIREMENT - *3 credits.*
WNCC and UNR: Choose from:
- Mathematics **120**, 124, 126, 127, **126** & **127**, **128**, **176**, **181**, **182**, 253, 280, 283, 285
- Statistics 152

SOCIAL SCIENCES REQUIREMENT - *9 credits.*
** WNCC: Choose from the following list. Must include work in two or more subject areas. UNR: Choose from bolded courses.*
- Anthropology **101**, **201**, **202**, 205, 210, 212
- Core Humanities 203
- Criminal Justice 101, 102, 220, 230, 270
- Economics **102**, **103**
- Geography **106**, 109
- History 101, 102, 111, 217, 281, 295
- Journalism 101
- Political Science 103, 105, 108, 116, **206**, 208, **231**, 285, 295, 299
- Psychology (any course except 210)
- Social Work 220
- Sociology (any course except 210)

** Number of credits required may vary according to specific emphasis. See articulation agreement or counselor.*

U.S. AND NEVADA CONSTITUTION REQUIREMENTS -
3 or 6 credits.
WNCC and UNR: Must meet both requirements.
Choose from:
- Core Humanities **203**
- History **111*** or
- Political Science **103*** or
- History **101*** and History **102*** or
- History **101*** and History **217*** or
- History **101*** and Political Science **208***

**These courses will not fulfill UNR's CH 203 requirement, if taken after the student has been admitted and enrolled at UNR.*

EMPHASIS REQUIREMENTS, PROGRAM REQUIREMENTS, OR GENERAL ELECTIVES - *21-24 credits.*
Students should utilize this area to take courses that meet requirements for their major at their intended transfer school. Those who have not yet selected a major may choose from among any university transferable courses to explore their options. Students planning to transfer to the University of Nevada, Reno should obtain a transfer handout from WNCC Counseling Services or the UNR Transfer Center.

Associate of Science

A Transfer Degree

The Associate of Science degree is designed to help students use the methods of observation, special analysis and logic by which we understand the mathematical, biological and physical nature of the world. The AS degree allows early choices for those planning a professional life in mathematics, science, engineering, medicine or agriculture.

The AS degree is primarily for the student who plans to transfer with junior standing to a four-year college or university for a baccalaureate degree. If the University of Nevada, Reno is the intended transfer school, choose ONLY those courses that are printed in **BOLD/ UNDERLINED** from the list below. Satisfactory completion of an AS degree with UNR designated courses (those in bold) guarantees completion of the lower division general education requirements at UNR. Students intending to transfer to other schools should see a counselor or follow the catalog of the transfer school.

Courses with a "B" after the course number (such as MATH 100B or CS 109C) and courses with a number under 100 (such as ENG 95) are not applicable toward this degree. All courses counted toward this degree must be university transferable.

A maximum of six credits of special topics classes in one subject area may apply toward any WNCC degree.

NOTE: UNR transfer information is based on requirements for the 2005-2006 school year. These requirements may change in subsequent years. See a counselor for the most up-to-date information.

Students must select an emphasis to follow in obtaining the Associate of Science degree. Emphases and areas of study offered at WNCC include:

- **Biophysical Sciences**
- **Chemistry**
- **Computer Science**
- **Engineering Science**
- **Geosciences**
- **Mathematics**
- **Physics**

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS

DEGREE REQUIREMENTS - *Coursework must total at least 60 credits.*

ENGLISH/COMMUNICATIONS REQUIREMENTS - *6 credits.*
WNCC and UNR:
- English **101, 102**

FINE ARTS REQUIREMENT - *3 credits.*
WNCC and UNR: Choose from:
- Art **107***, 124, **160**, 224, **260, 261**
- Dance 101
- Graphic Communications **107***
- Humanities **101**
- Music 111*, **121, 123, 124, 221***
- Theatre **100, 105*, 180**

** Course may not meet the Fine Arts requirement at all universities. Please see a counselor.*

HUMANITIES REQUIREMENT - *6 credits.*
WNCC: Choose from:
- Core Humanities **201**, **202**
- English 200, 223, **231**, **232**, 235, 236, 241, 242, 243, 250, 252, 261, 266, 267, 271, 275
- History **105**, **106**, 207, 247, 260, 275
- Humanities 210
- Philosophy (any course except 102, 105, 114)

UNR: Choose one course from each group:
Group A: **CH 201, ENG 231***, **HIST 105***, **PHIL 200***
Group B: **CH 202, ENG 232***, **HIST 106***, **PHIL 207***
**These courses will not fulfill UNR's CH 201 and/or CH 202 requirement, if taken after the student has been admitted and enrolled at UNR.*

SCIENCE REQUIREMENTS -
WNCC: Choose 12 credits for math emphasis only. Science requirements are already fulfilled for other emphases.
UNR: Choose 6 credits, with at least one course from Group A:
Group A:
- Biology **100**, **190**, **191**
- Chemistry **100**, **121**, **122**, **201**, **202**
- Geology **100**, **101**, **103**
- Geology **100**, **101**, **103**
- Physics

Group B:
- Anthropology 102, **102 + 110L**
- Astronomy **109, 110**
- Environmental Studies **100**
- Geography **103**, 104

MATHEMATICS REQUIREMENT - *6 credits.*
WNCC: Choose only for geosciences emphasis. Math requirement already fulfilled for other emphases.
WNCC and UNR: Choose from:
- Mathematics 124, 126, 127, **126 & 127, 128, 176, 181, 182,** 253, 280, 283, 285
- Statistics 152

SOCIAL SCIENCES REQUIREMENT - *6 credits.*
WNCC: Choose from the following: UNR: Choose from bolded courses:
- Anthropology **101, 201, 202,** 205, 210, 212
- Core Humanities 203
- Criminal Justice 101, 102, 220, 230, 270
- Economics **102, 103**
- Geography **106,** 109
- History 101, 102, 111, 217, 281, 295
- Journalism 101
- Political Science 103, 105, 108, 116, **206,** 208, **231,** 285, 295, 299
- Psychology **101,** 102, 130, 206, 207, 208, 233, 234, 240, 241, 261, 290, 299
- Social Work 220
- Sociology **101,** 102, 202, 205, 240, 261, 275

U.S. AND NEVADA CONSTITUTION REQUIREMENTS -
3 or 6 credits.
WNCC and UNR: Must meet both requirements.
Choose from:
- Core Humanities ***203***
- History **111*** or
- Political Science **103*** or
- History **101*** and History **102*** or
- History **101*** and History **217*** or
- History **101*** and Political Science **208***

**These courses will not fulfill UNR's CH 203 requirement, if taken after the student has been admitted and enrolled at UNR.*

EMPHASIS REQUIREMENTS, PROGRAM REQUIREMENTS, AND ELECTIVES
Number of credits varies according to emphasis. Students should utilize this area to take courses that meet requirements for their major at their intended transfer school. Those who have not yet selected a major may choose from among any university transferable courses to explore their options. Students planning to transfer to the University of Nevada, Reno should obtain a transfer handout from WNCC Counseling Services or the UNR Transfer Center.

Associate of Applied Science

The Occupational Degree

The Associate of Applied Science degree is designed for those students who desire a two-year course of study and training in an occupational and/or technological career field. Although the AAS degree is not designed to be a transfer program, some of the courses will transfer to four-year colleges or universities. Those students who wish to transfer to a four-year school should consult a WNCC counselor. Coursework must total at least 60 credits.

Courses with a number under 100 (such as ENG 95) are not applicable toward an Associate of Applied Science degree at WNCC.

Courses with a "B" designator after the number (such as MATH 100B) are college level courses which may apply toward a WNCC degree but which may not transfer to UNR or UNLV. In some cases, these courses may transfer to other Nevada community colleges and Nevada State College or to other colleges and universities. See a WNCC counselor for the latest transfer information.

A maximum of six credits of special topics classes in one subject area may apply toward any WNCC degree.

To make decisions about specific emphases under the Associate of Applied Science degree, please refer to the academic programs pages or see a WNCC counselor.

NOTE: All Associate of Applied Science degree and certificate programs require completion of appropriate courses in computation, communication and human relations. Additionally, introductory courses in all applied science and technology as well as all allied health programs include instruction in safety, industrial safety and environmental awareness, as appropriate.

Students with previous occupational or practical experience may challenge certain course requirements and prerequisites. In some cases, required courses may be waived, allowing the student to proceed to coursework at the appropriate level. In other cases, challenge examinations may be arranged for which the student can receive academic credit and a "pass" grade for the course.

Emphases and areas of study offered at WNCC include:

- **Accounting**
- **Accounting - Applied**
- **Automotive Mechanics**
- **Business - General Business**
- **Computer Networking Technology**
- **Construction Technology - Craft Training**
- **Construction Technology - Project Management**
- **Convergence Technology***
- **Criminal Justice**
- **Criminal Justice - Law Enforcement/Academy**
- **Drafting Technology - Architectural**
- **Drafting Technology - Civil**
- **Drafting Technology - Mechanical**
- **Early Childhood Education**
- **Electronics Technology**
- **Geographic Information Systems**
- **Graphic Communications**
- **Health Information Technology***
- **Machine Tool Technology**
- **Management**
- **Nursing**
- **Office Technology**
- **Paralegal Studies**
- **Real Estate**
- **Web Technology**
- **Welding Technology**

* Pending final approval by the NSHE Board of Regents

Associate of Applied Sciences Degree - Mission & Outcomes

MISSION - The purpose of the Associate of Applied Science degree is to provide employment-related knowledge and skills necessary to succeed in a chosen field of study.

STUDENT LEARNING OUTCOMES - Students who complete programs in occupational areas are expected to demonstrate that they -

1. know the subject matter appropriate to the emphasis of the degree.
2. are able to do the following:
   a. acquire skills and perform tasks necessary for employment or career enhancement.
   b. present themselves effectively to a potential employer.
   c. demonstrate effective communication and computation skills appropriate to the chosen occupational field.
   d. utilize appropriate resources to remain current in the chosen occupational field.
3. have developed an appreciation of the importance of social, ethical, legal and diversity issues.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS

DEGREE REQUIREMENTS - *Coursework must total at least 60 credits.*

ENGLISH/COMMUNICATIONS REQUIREMENTS - *6 credits.*
Must include a writing course.
Choose from the following:
- Business 107, 108
- Communication 113, 215
- Criminal Justice 103
- English
- Journalism 201
- Writing course (Business 108, English 101, 102, or any other 200 level English class except ENG 258)

MATHEMATICS REQUIREMENT - *3 credits.*
Choose from the following:
- Business 109B, 170
- Economics 261, 262
- Mathematics
- Real Estate 102B
- Statistics 152

SCIENCE REQUIREMENT - *3 credits.*
Choose from the following:
- Agriculture 101
- Animal Husbandry 101, 110B
- Anthropology 102
- Astronomy 109, 110
- Biology
- Chemistry
- Environmental Studies
- Geography 103, 104
- Geology
- Nutrition 121, 223
- Ornamental Horticulture 105B
- Physics
- Science

U.S. AND NEVADA CONSTITUTION REQUIREMENTS
3 or 6 credits. Must meet both requirements.
Choose from the following:
- Core Humanities 203
- History 111

or Political Science 103
or History 101 and History 102
or History 101 and History 217
or History 101 and Political Science 208

HUMAN RELATIONS REQUIREMENT - *1-3 credits.*
Choose from the following:
- Anthropology 101, 201, 205
- Business 110B, 287B
- Early Childhood Education 121
- Computer and Office Technology 131B
- Counseling and Personal Development 117, 129B
- Criminal Justice 270
- Human Development and Family Studies 201, 202
- Law 263
- Management 201, 212, 283
- Psychology (any course except PSY 210)
- Sociology (any course except SOC 210)

HUMANITIES/SOCIAL SCIENCE REQUIREMENTS - *3 credits.*
Choose from either Humanities or Social Science areas:

HUMANITIES AREA
- Art 107*, 160, 124, 224, 260, 261
- Core Humanities 201, 202
- Dance 101
- English 200, 221, 223, 231, 232, 235, 236, 241, 242, 250, 258, 261, 266, 267, 271, 275
- History 105, 106, 207, 247, 260, 275
- Humanities 101, 210
- Music 111*, 121, 123, 124, 221*
- Philosophy (any course except 102, 105, 114)
- Theatre 100, 105, 180

** Course may not meet the Fine Arts requirement at all universities. Please see a counselor.*

SOCIAL SCIENCES AREA
- Anthropology 101, 201, 202, 205, 210, 212
- Core Humanities 203
- Criminal Justice 101, 102, 120, 215, 220, 225, 226, 230, 270
- Economics 102, 103
- Geography 106, 109
- History 101, 102, 111, 217, 281, 295
- Journalism 101
- Political Science
- Psychology (any course except PSY 210)
- Social Work 220
- Sociology (any course except SOC 210)

EMPHASIS/CORE REQUIREMENTS, PROGRAM REQUIREMENTS, AND GENERAL ELECTIVES
Number of credits required may vary by emphasis. A mimimum of 36 credits required.
Some credits earned in non-traditional courses may be considered for elective credit and may require review in order to be applied to the AAS degree.

Associate of General Studies

The Degree to Meet a Variety of Needs

The Associate of General Studies has increasingly been utilized by students who intend to transfer to four-year colleges and universities. Although it was not designed for transfer, it can be used for this purpose if courses are selected carefully. The majority of the courses chosen should transfer to fulfill core and major requirements.

If you plan to attend the University of Nevada, Reno, it is recommended that you complete ENG 101 and 102, MATH 120 or a higher level math, and science/social science courses that fulfill UNR's core curriculum requirements. If you use any "B" courses in your program of study, you will need to make up those credits upon transfer.

Courses with a number under 100 (such as ENG 95) are not applicable toward an Associate of General Studies degree. Courses with a "B" designator after the number (such as MATH 100B) are college level courses which may apply toward a WNCC degree but will not transfer to UNR or UNLV. In some cases, these courses may transfer to other Nevada community colleges and Nevada State College or other colleges and universities. See a WNCC counselor for the latest transfer information.

ASSOCIATE OF GENERAL STUDIES DEGREE REQUIREMENTS

DEGREE REQUIREMENTS - *Coursework must total at least 60 credits.*

ENGLISH/COMMUNICATIONS REQUIREMENTS - *6 credits.*
Must include a three-credit writing course. Choose from the following:
- Business 107, 108
- Communication 113, 215
- Criminal Justice 103
- English
- Journalism 201
- Writing course (Business 108, English 101, 102, or any 200 level English class except ENG 258)

FINE ARTS AND HUMANITIES REQUIREMENTS - *3 credits.*
Choose from the following:
- American Sign Language
- Art
- Core Humanities 201, 202
- Crafts
- Dance 101
- English 190, 200, 223, 231, 232, 235, 236, 241, 242, 243, 250, 253, 258, 267, 271, 282, 297
- Foreign Language
- Graphic Communications
- History 105, 106, 207, 247, 260, 275
- Humanities 101, 210
- Music
- Philosophy (any course except 102, 105, 114)
- Theatre 100, 105, 180

SCIENCE REQUIREMENT - *3 credits.*
Choose from:
- Agriculture 101
- Animal Husbandry 101, 110B
- Anthropology 102
- Astronomy 109, 110
- Biology
- Chemistry
- Environmental Studies
- Geography 103, 104
- Geology
- Nutrition 121, 223
- Ornamental Horticulture 105B
- Physics
- Science

MATHEMATICS REQUIREMENT - *3 credits.*
Choose from the following:
- Business 109B
- Economics 261, 262
- Mathematics
- Real Estate 102B
- Statistics 152

SOCIAL SCIENCES REQUIREMENT - *3 credits.*
Choose from the following:
- Anthropology 101, 201, 202, 205, 210, 212
- Core Humanities 203
- Criminal Justice
- Economics 102, 103
- Geography 106, 109
- History 101, 102, 111, 217, 281, 295
- Journalism 101
- Political Science
- Psychology (any course except 210)
- Social Work 220
- Sociology (any course except 210)

U.S. AND NEVADA CONSTITUTION REQUIREMENTS - *3 or 6 credits.*
Must meet both requirements. Choose from the following:
- Core Humanities 203
- History 111, or Political Science 103, or History 101 & History 102, or History 101 & History 217, or History 101 & Political Science 208

GENERAL ELECTIVES - *36 or 39 credits.*
Students may choose from any occupational or general education courses to be used as electives for this degree. Some non-traditional credit approved by the Admissions and Records office may be applicable to satisfy course requirements for occupational degrees, while other such credits may be used as electives for the AGS and AAS degrees only. Students planning to transfer to the University of Nevada, Reno should use the UNR core curriculum guide to satisfy general education requirements.

Associate of General Studies Degree - Mission & Outcomes

MISSION - The purpose of the Associate of General Studies degree is to provide academic knowledge and skills for personal growth, professional advancement, and/or successful transfer.

STUDENT LEARNING OUTCOMES - Students who complete an AGS degree are expected to demonstrate that they -
1. know the subject matter appropriate to their field of study.
2. are able to do the following:
   a. read and think critically at the college level.
   b. speak and write effectively.
   c. comprehend and apply college level mathematics.
   d. understand the methods of science and the role of science and technology in the modern world.
   e. use research and computer skills to locate and evaluate information.
3. have developed an appreciation of the importance of ethics, civic responsibility, diversity, the natural world and the arts.

Certificate of Achievement

For those desiring a shorter course of study, WNCC offers certificates of achievement in many occupational areas.

A minimum of 30 credits is required for any certificate of achievement, although the exact number of credits required may differ with particular subject matter.

Certificates are listed in alphabetical order in the Academic Programs section.

Students may earn a certificate of achievement in the following areas:

- **Accounting Technician**
- **American Sign Language**
- **Automotive Mechanics**
- **Business**
- **Computer Technology - Cisco Systems**
- **Computer Technology - Computer Programming**
- **Computer Technology - Microcomputer/ Network Technician**
- **Computer Technology - Network Administration**
- **Criminal Justice - Law Enforcement/Academy**
- **Criminal Justice - 9-1-1 Dispatch Telecommunications**
- **Drafting Technology - Architectural**
- **Drafting Technology - Mechanical**
- **Early Childhood Education**
- **Electronics Technology**
- **Geographic Information Systems**
- **Graphic Communications**
- **Health Information Technology - Medical Coding**
- **Health Information Technology - Medical Transcription**
- **Health Information Technology - Medical Unit Clerk**
- **Machine Tool Technology**
- **Practical Nursing**
- **Retail Management**
- **Surgical Technology**
- **Welding Technology**

CERTIFICATE GENERAL EDUCATION REQUIREMENTS

All certificates include general education requirements which can be fulfilled from the following list of courses.

Courses with a number under 100 (such as ENG 95) are not applicable toward a certificate of achievement at WNCC.

Courses with a "B" designator after the number (such as MATH 100B) are college level courses which may apply toward a WNCC degree but which may not transfer to UNR or UNLV. In some cases, these courses may transfer to other Nevada community colleges and Nevada State College or to other colleges and universities. See a WNCC counselor for the latest transfer information.

ENGLISH/COMMUNICATIONS REQUIREMENTS - *3 credits.*
Must include a writing course.
Choose from the following:

- Business 107, 108
- Criminal Justice 103
- English
- Journalism 201
- Communication 113, 215
- Writing courses (Business 108, English 101, 102, 106, 107, 108, or any other 200 level English class except 258)

MATHEMATICS REQUIREMENT - *3 credits.*
Choose from the following:

- Business 109B, 170
- Economics 261, 262
- Mathematics
- Real Estate 102B
- Statistics 152

HUMAN RELATIONS REQUIREMENT - *1-3 credits.*
Choose from the following:

- Anthropology 101, 201, 205
- Business 110B, 287B
- Computer and Office Technology 131, 241
- Counseling and Personal Development 117, 129B
- Criminal Justice 270
- Early Childhood Education 121
- Human Development and Family Studies 201, 202
- Law 263
- Management 201, 212, 283
- Psychology (any course but PSY 210)
- Sociology (any course but SOC 210)

Certificate of Achievement - Mission & Outcomes

MISSION - The purpose of the Certificate of Achievement is to provide employment-related knowledge and skills.

STUDENT LEARNING OUTCOMES - Students who complete a Certificate of Achievement are expected to demonstrate that they -

1. know the subject matter appropriate to the emphasis of the certificate.
2. are able to do the following:
   a. acquire the skills necessary for employment or career enhancement.
   b. successfully represent themselves to a potential employer.
   c. demonstrate effective communication and computational skills appropriate to the certificate area.
   d. utilize appropriate resources for remaining current in the certificate area.
3. have developed an appreciation of the importance of social, ethical, legal and diversity issues.

ACCOUNTING

Associate of Applied Science in Business
Accounting Emphasis

The Accounting emphasis has been designed to enable students to establish, maintain and manage both manual and automated accounting systems. Students can also develop the necessary competencies to create and analyze information for managerial decision-making situations. In addition to this degree program, students who intend to become full-charge bookkeepers will also need experience in the field.

SALARY - $39,100 - $61,900/year *(middle range - Nevada)*
CAREER OUTLOOK - Average growth through 2012
GOOD TO KNOW - Four major accounting fields - public, management, government and internal auditing

DEGREE REQUIREMENTS – 60 credits

Business Core Requirements - 27 credits		**Credits**
ACC 201*	Financial Accounting	3
ACC 202	Managerial Accounting	3
BUS 101	Introduction to Business	3
or MGT 103	Small Business Management	
BUS 110B	Human Relations for Employment	3
or MGT 201	Principles of Management	
or MGT 212	Leadership & Human Relations	
or MGT 283	Personnel Administration	
BUS 273	Business Law	3
COT 202	Introduction to Computer Applications	3
or IS 201	Computer Applications	
ECON 102	Principles of Microeconomics	3
ECON 103	Principles of Macroeconomics	3
IS 101	Introduction to Information Systems	3

*ACC 135B and ACC 136B recommended prior to ACC 201

Emphasis Requirements* – 12 credits		**Credits**
ACC 203	Intermediate Accounting I	3
ACC 220	Microcomputer Accounting Systems	3

Choose 6 credits from the following:

ACC 105	Taxation for Individuals	3
ACC 180B	Payroll and Employee Benefit Accounting	3
ACC 199B	Special Topics in Accounting	3
ACC 204	Intermediate Accounting II	3
ACC 223B	Introduction to Quickbooks	3
ACC 251	Introduction to Auditing	3
ACC 261	Governmental Accounting	3
ACC 295B	Work Experience I	3
ACC 299B	Advanced Special Topics in Accounting	3
COT 262	Intermediate Spreadsheet Concepts	3

*Students should consult counselor or instructor for information regarding sequence of accounting courses.

General Education Requirements* - 21 credits	**Credits**
English Communications courses (BUS 107 and BUS 108 are recommended; must include a writing course)	6
BUS 109B or higher level mathematics course	3
Science course	3
U.S./Nevada constitutions course	3
General electives	6

*A list of courses fulfilling general education requirements is on page 9.

APPLIED ACCOUNTING

Associate of Applied Science in Business
Applied Accounting Emphasis

The Applied Accounting emphasis will provide students with an understanding of accounting. This area is designed for students who want to qualify for entry level bookkeeping positions.

SALARY - $22,900 - $33,500/year *(middle range - Nevada)*
CAREER OUTLOOK - Slower than average growth through 2012
GOOD TO KNOW - Employed in virtually every industry

DEGREE REQUIREMENTS – 60 credits

Business Core Requirements - 24 credits		**Credits**
ACC 135B	Bookkeeping I	3
ACC 136B	Bookkeeping II	3
BUS 101	Introduction to Business	3
or MGT 103	Small Business Management	
BUS 110B	Human Relations for Employment	3
or MGT 201	Principles of Management	
or MGT 212	Leadership and Human Relations	
or MGT 283	Personnel Administration	
BUS 273	Business Law	3
COT 202	Introduction to Computer Applications	3
or IS 201	Computer Applications	
ECON 102	Principles of Microeconomics	3
or ECON 103	Principles of Macroeconomics	
IS 101	Introduction to Information Systems	3

Emphasis Requirements* – 15 credits		**Credits**
ACC 220	Microcomputer Accounting Systems	3

Choose 12 credits from the following:

ACC 105	Taxation for Individuals	3
ACC 180B	Payroll and Employee Benefit Accounting	3
ACC 199B	Special Topics in Accounting	3
ACC 201	Financial Accounting	3
ACC 202	Managerial Accounting	3
ACC 223B	Introduction to Quickbooks	3
ACC 251	Introduction to Auditing	3
ACC 261	Governmental Accounting	3
ACC 295B	Work Experience I	3
ACC 299B	Advanced Special Topics in Accounting	3
COT 262	Intermediate Spreadsheet Concepts	3

*Students should consult counselor or instructor for information regarding sequence of accounting courses.

General Education Requirements* - 21 credits	**Credits**
English/ Communications courses (BUS 107 and BUS 108 recommended; must include a writing course)	6
BUS 109B or higher level mathematics course	3
Science course	3
U.S./Nevada constitutions course	3
General electives	6

*A list of courses fulfilling general education requirements is on page 9.

ACCOUNTING TECHNICIAN
Certificate of Achievement

CERTIFICATE REQUIREMENTS – 30 credits

Subject Requirements - 21 credits		**Credits**
ACC 135B	Bookkeeping I	3
& ACC 136B	Bookkeeping II	3
or ACC 201	Financial Accounting	
& ACC 202	Managerial Accounting	
ACC 220	Microcomputer Accounting Systems	3
BUS 110B	Human Relations for Employment	3
or MGT 201	Principles of Management	
or MGT 212	Leadership and Human Relations	
or MGT 283	Personnel Administration	
COT 202	Introduction to Computer Applications	3
or IS 201	Computer Applications	
IS 101	Introduction to Information Systems	3

Choose 3 credits from the following :

ACC 105	Taxation for Individuals	3
ACC 180B	Payroll and Employee Benefit Accounting	3
ACC 198B	Special Topics in Accounting	3
ACC 203	ntermediate Accounting I	3
ACC 223B	Introduction to Quickbooks	3
ACC 251	Introduction to Auditing	3
ACC 261	Governmental Accounting	3
ACC 299B	Advanced Special Topics in Accounting	3

General Education Requirements* - 9 credits	**Credits**
English/ Communications courses (BUS 107 and BUS 108 recommended; must include a writing course)	6
BUS 109B or higher level mathematics course	3

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE

First Semester	Completed	*Second Semester*	Completed
ACC 135B or 201	3 ☐	ACC 136B or 202	3 ☐
BUS 108 or ENG/COMM	3 ☐	ACC 220	3 ☐
BUS 109B or higher MATH	3 ☐	Accounting elective	3 ☐
IS 101	3 ☐	BUS 107 or ENG/COMM	3 ☐
MGT 201, 212, 283 or BUS 110B	3 ☐	COT 202 or IS 201	3 ☐

AMERICAN SIGN LANGUAGE -
See Deaf Studies listing.

AUTOMOTIVE MECHANICS
Associate of Applied Science Program

The Automotive Mechanics program offers students an opportunity to acquire the necessary skills and technical theory for a successful career as an automotive mechanic. Individuals who are now employed in the automotive mechanics field will be able to upgrade their knowledge. Students obtaining this 60-credit associate degree will have completed courses of a very technical nature, chosen to complement each other and provide breadth and depth of diagnostic and repair skill abilities necessary to work in a service facility.

SALARY - $27,900 - $46,400/year *(middle range - Nevada)*
CAREER OUTLOOK - Average growth through 2012
GOOD TO KNOW - Mechanics can be certified in as many as eight service areas

DEGREE REQUIREMENTS - 60 credits

Program Requirements - 36 credits		**Credits**
AUTO 101B	Introduction to General Mechanics	3
AUTO 102B	Automotive Electricity	3
AUTO 121B	Automotive Brake Systems	3
AUTO 125B	Steering & Suspension System	3
AUTO 218B	Tune-up Procedures	3
AUTO 223B	Advanced Engine Tune-up	3
AUTO 225B	Auto Air Conditioning Systems	3
AUTO 226B	Automatic Transmissions	3
AUTO 236B	Automotive Computer Systems	3
AUTO 250B	Engine Reconditioning	3
Automotive or Technical courses		6

General Education Requirements* - 24 credits	**Credits**
English/Communications courses (Must include a writing course)	6
Human Relations course (BUS 110B recommended)	1-3
Humanities/Social Science course	3
Mathematics course	3
Science course	3
U.S./Nevada Constitutions course	3
Elective	3-5

*A list of courses fulfilling general education requirements is on page 9.

AUTOMOTIVE MECHANICS
Certificate of Achievement

CERTIFICATE REQUIREMENTS - 30 credits

Subject Requirements - 18 credits		**Credits**
AUTO 101B	Introduction to General Mechanics	3
AUTO 102B	Automotive Electricity	3
AUTO 121B	Automotive Brake Systems	3
AUTO 125B	Steering & Suspension System	3
AUTO 218B	Tune-up Procedures	3
AUTO 223B	Advanced Engine Tune-up	3

General Education Requirements - 12 credits*	**Credits**
English/Communications courses (Must include a writing course)	6
Human Relations course (BUS 110B recommended)	1
Mathematics course	3
Elective	2

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
AUTO 101B	3	☐	AUTO 226B	3	☐
AUTO 121B	3	☐	AUTO 250B	3	☐
AUTO 218B	3	☐	AUTO elective	3	☐
Gen Ed course	3	☐	Elective	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Second Semester			*Fourth Semester*		
AUTO 102B	1	☐	AUTO 225B	3	☐
AUTO 125B	3	☐	AUTO 236B	3	☐
AUTO 223B	3	☐	AUTO elective	3	☐
Gen Ed course	3	☐	BUS 110B	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐

BIOPHYSICAL SCIENCES
Associate of Science Emphasis

The Biophysical Sciences emphasis is designed to place students wishing to pursue studies in the fields of, but not limited to, biology, environmental studies, pre-health care and biochemistry, either as a university major or as preparation for a teaching career.

SALARY - $42,500 - $60,900/year *(middle range - Nevada)*
CAREER OUTLOOK - Faster than average growth through 2012
GOOD TO KNOW - For advancement, some fields require graduate degrees

DEGREE REQUIREMENTS - 62-63 credits

Emphasis Requirements - 38-39 credits		**Credits**
BIOL 190/L	Intro to Cell & Molecular Biology & Lab	4
BIOL 191/L	Intro to Organismal Biology & Lab	4
BIOL 208	Introduction to Human Genetics	3
CHEM 121	General Chemistry I	4
CHEM 122	General Chemistry II	4
CHEM 220	Introductory Organic Chemistry	4
MATH 181	Calculus I	4
STAT152	Introduction to Statistics	3
or MATH 182	Calculus II	or 4
PHYS 151	General Physics I	4
PHYS 152	General Physics II	4

General Education Requirements* - 24 credits	**Credits**
English/Communications courses (Must include a writing course)	6
Fine Arts course	3
Humanities courses (CH 201 & CH 202 recommended)	6
Social Science courses	6
U.S./Nevada Constitutions course	3

*A list of courses fulfilling general education requirements is on page 7.

NOTE: CAPS 122 is strongly recommended but not required for graduation. CHEM 201 & 202 are acceptable in lieu of CHEM 121 & 122. PHYS 180/180L and 181/181L are acceptable in lieu of PHYS 151 & 152. MATH 152 is required for a bachelor's degree in biology at University of Nevada, Reno. It is recommended that students pursuing other areas in science take MATH 182. BIOL 192 is acceptable in lieu of BIOL 190L and 191L.

SUGGESTED COURSE SEQUENCE

First Semester		Completed
BIOL 190/190L	4	☐
CHEM 121	4	☐
English course	3	☐
Gen Ed course	3	☐
MATH 181	4	☐
Second Semester		
BIOL 191/191L	4	☐
CHEM 122	4	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
STAT 152 or MATH 182	3-4	☐

Third Semester		Completed
Gen Ed courses	6	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
PHYS 151	4	☐
Fourth Semester		
BIOL 208	3	☐
CHEM 220	4	☐
Gen Ed course	3	☐
PHYS 152	4	☐

BUSINESS PROGRAM

The Business Department at Western Nevada Community College provides students with the professional training necessary for careers in a variety of business fields and office environments. In the two-year program, which leads to an Associate of Applied Science degree, students may choose from several areas of study:

- Accounting
- Applied Accounting
- General Business
- Management
- Real Estate

One-year certificate programs are offered in the following Business areas for students desiring more basic skills:

- Accounting Technician
- Business
- Retail Management

Business programs are listed alphabetically. Related programs:

- Office Technology
  Administrative Assistant & Desktop Publishing
- Health Information Technology
  Medical Coding, Medical Transcription & Medical Unit Clerk

Associate of Applied Science Degree in Business - Mission & Outcomes

MISSION - The purpose of the Associate of Applied Science degree in business is to provide the knowledge and skills necessary to succeed in the current business environment.

STUDENT LEARNING OUTCOMES - Students who complete programs in occupational areas are expected to demonstrate that they -

1. know the subject matter appropriate to the emphasis of the degree program.
2. are able to do the following:
   a. demonstrate proficiency using technology in a business environment.
   b. demonstrate an understanding of the accounting process and its importance to the business environment.
   c. demonstrate effective oral, written, and computational skills appropriate to the business environment.
   d. demonstrate managerial and personal skills essential to the current business environment.
   e. utilize appropriate resources to remain current in the chosen occupational field.
3. have developed an appreciation of the importance of social, ethical, legal and diversity issues.

BUSINESS

Associate of Applied Science General Business Emphasis

The General Business emphasis provides general knowledge and skills in the field of business. Students are encouraged to meet with a WNCC counselor to identify programs of study which best suit their career goals.

SALARY - Large range depending on size & type of organization. $30,500 - $46,800/year *(middle range - Nevada)*
CAREER OUTLOOK - Below average growth through 2012
GOOD TO KNOW - Often includes hiring, training and supervising employees

DEGREE REQUIREMENTS - 60 credits

Business Core Requirements - 24 credits		Credits
ACC 135B	Bookkeeping I	3
& ACC 136B	Bookkeeping II	3
or ACC 201	Financial Accounting	
& ACC 202	Managerial Accounting	
BUS 101	Introduction to Business	3
or MGT 103	Small Business Management	
BUS 110B	Human Relations for Employment	3
or MGT 201	Principles of Management	
or MGT 212	Leadership and Human Relations	
or MGT 283	Personnel Administration	
BUS 273	Business Law	3
COT 202	Introduction to Computer Applications	3
or IS 201	Computer Applications	
ECON 102	Principles of Microeconomics	3
or ECON 103	Principles of Macroeconomics	
IS 101	Introduction to Information Systems	3

Emphasis Requirements – 15 credits **Credits**

Choose 15 credits from any of the following areas:
Accounting, Business, Computer and Office Technology, Economics, Finance, Information Systems, Insurance, Management, Marketing or Real Estate.

General Education Requirements* - 21 credits	Credits
English/ Communications courses (BUS 107 and BUS 108 recommended; must include a writing course)	6
BUS 109B or higher level mathematics course	3
Science course	3
U.S./Nevada constitutions course	3
General electives	6

*A list of courses fulfilling general education requirements is on page 9.

BUSINESS

Certificate of Achievement

CERTIFICATE REQUIREMENTS – 30 credits

Subject Requirements -18 credits		Credits
BUS 101	Introduction to Business	3
BUS 110B	Human Relations for Employment	3

Choose 12 credits from the following areas with no more than 3 credits in any one area:
Accounting, Business, Computer and Office Technology, Economics, Finance, Information Systems, Insurance, Management, Marketing, or Real Estate.

General Education Requirements* -12 credits	Credits
English/ Communications courses (BUS 107 and BUS 108 recommended; must include a writing course)	6
BUS 109B or higher level mathematics course	3
General electives	3

*A list of courses fulfilling general education requirements is on page 11.

CHEMISTRY
Associate of Science Emphasis

The Chemistry emphasis is designed to place students wishing to pursue studies in the fields of chemistry or geochemistry, either as a university major or as preparation for a teaching career.

SALARY - $38,700 - $70,900/year *(middle range - Nevada)*
CAREER OUTLOOK - Average growth through 2012
GOOD TO KNOW - For advancement, some fields require graduate degrees

DEGREE REQUIREMENTS - 60 credits

Emphasis Requirements - 36 credits		**Credits**
BIOL 191/191L	Intro to Organismal Biology & Lab	4
CHEM 201	General Chemistry I for Scientists & Engineers	4
CHEM 202	General Chemistry II for Scientists & Engineers	4
CHEM 241	Organic Chemistry I	3
CHEM 242	Organic Chemistry II	3
CHEM 245	Organic Chemistry Laboratory	2
MATH 181	Calculus I	4
MATH 182	Calculus II	4
PHYS 151	General Physics I	4
PHYS 152	General Physics II	4

General Education Requirements* - 24 credits	**Credits**
English/Communications courses (Must include a writing course)	6
Fine Arts course	3
Humanities courses (CH 201 & CH 202 recommended)	6
Social Science courses	6
U.S./Nevada Constitutions course	3

*A list of courses fulfilling general education requirements is on page 7.

NOTE: CAPS 122 is strongly recommended but not required for graduation. CHEM 121 & 122 are acceptable in lieu of CHEM 201 & 202. PHYS 180/180L and 181/181L are acceptable in lieu of PHYS 151 & 152. GEOL 101/103 recommended in addition to the above for those pursuiing a bachelor's degree in geochemistry.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
BIOL 191/191L	4	☐	CHEM 241	3	☐
CHEM (121) 201	4	☐	Gen Ed courses	6	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
MATH 181	4	☐	PHYS 151 (180/180L)	4	☐
Second Semester			*Fourth Semester*		
CHEM (122) 202	4	☐	CHEM 242	3	☐
Gen Ed course	3	☐	CHEM 245	2	☐
Gen Ed course	3	☐	Gen Ed courses	6	☐
MATH 182	4	☐	PHYS 152 (181/181L)	4	☐

COMPUTER SCIENCE
Associate of Science Emphasis

The Associate of Science degree in Computer Science will prepare students for transfer to a university, particularly the University of Nevada, Reno. It will provide students with a breadth of knowledge commonly accepted as necessary for a degree in the field of Computer Science. In addition, the degree core requirements also provide a depth of knowledge in several key areas of the computer science field, for students seeking entry-level employment in the growing field of computing and information sciences.

SALARY - $43,100 - $69,600/year *(middle range - Nevada)*
CAREER OUTLOOK - Much faster than average growth through 2012
GOOD TO KNOW - Bachelor's degree required for most systems analysts

DEGREE REQUIREMENTS – 63 credits

Emphasis Requirements – 39 credits	**Credits**
CHEM 121 – General Chemistry I	4
or	
CHEM 202 – General Chemistry for Scientists and Engineers I	
CIT 130 – Beginning Java	3
CIT 260 – Systems Analysis and Design	3
CS 201 – Computer Science I	3
CS 202 – Computer Science II	3
CS 236 – Introduction to Computer Engineering	3
MATH 181 – Calculus I	4
MATH 182 – Calculus II	4
MATH 283 – Calculus III	4
PHYS 180/180L – Engineering Physics I with Lab	4
PHYS 181/181L – Engineering Physics II with Lab	4

General Education Requirements* - 24 credits	**Credits**
English	6
Fine Arts Course	3
Humanities Courses	6
Social Sciences	6
U.S./Nevada Constitution	3

All courses required for this emphasis currently exist in the WNCC catalog.
* A list of courses fulfilling general education requirements is on page 7.

SUGGESTED COURSE SEQUENCE

First Semester		Completed
CIT 130	3	☐
Gen Ed courses	9	☐
MATH 181	4	☐

Second Semester		Completed
CIT 260	3	☐
CHEM 121	4	☐
Gen Ed courses	6	☐
MATH 182	4	☐

Third Semester		Completed
CS 201	3	☐
Gen Ed course	3	☐
MATH 283	4	☐
PHYS 180/180L	4	☐

Fourth Semester		Completed
CS 202	3	☐
CS 236	3	☐
Gen Ed courses	6	☐
PHYS 181/181L	4	☐

Associate of Science Degree in Computer Science - Mission & Outcomes

MISSION - The purpose of the Associate of Science in Computer Science degree is to prepare students with the necessary skills for transfer to a four-year university, in particular, University of Nevada, Reno. The degree is designed in such a manner as to provide students who do not have plans to continue on to a four-year university, the ability to obtain entry-level employment in the growing field of computing and information science.

STUDENT LEARNING OUTCOMES - Students who complete programs in this academic area are expected to demonstrate that they -

Know:
- practices and procedures required for transfer to a four-year institution,
- entry-level skill set, and
- theoretical principles relevant to their field of study.

Are able to:
- test successfully on competencies required to pass rigorous academic examinations of their skill level,
- communicate effectively and appropriately, in oral and written form,
- locate, evaluate and properly utilize the tools and resources appropriate to a computer science professional,
- acquire skills and perform tasks necessary for academic advancement,
- demonstrate effective communication and computation skills appropriate to the chosen academic discipline, and
- demonstrate the ability to obtain requirements, design, implement, test, debug and maintain computer programs in at least two computer programming languages.

Appreciate and Value:
- appropriate and effective presentation of themselves to potential employers, and
- standards of social, ethical, legal, accessibility and diversity issues of their work environment.

COMPUTER TECHNOLOGY PROGRAMS

WNCC's Computer Technology programs are designed to offer students access to the rapidly changing and growing opportunities in the computer and information technology career field.

The college offers five Associate of Applied Science degrees:

- Computer Networking Technology
  - Network Technology Management
  - Security & Information Assurance
- Convergence Technology
- Health Information Technology
- Office Technology
- Web Technology
  - Web Administration
  - Web Design
  - Web Programming

The college offers seven Certificates of Achievement:

- Cisco Systems
- Computer Programming
- Medical Coding
- Medical Transcription
- Medical Unit Clerk
- Microcomputer / Network Technician
- Network Administration

Students also have the opportunity to achieve industry certification through nationally available testing programs.

COMPUTER TECHNOLOGY
CISCO SYSTEMS
Certificate of Achievement

SALARY - $41,500 - $64,200/year *(middle range - Nevada)*
CAREER OUTLOOK - Growth will be much faster than average through 2012
GOOD TO KNOW - WNCC is a Cisco Regional Academy

CERTIFICATE REQUIREMENTS - 32-34 credits

Core Requirements - 6 credits		Credits
COT 202	Introduction to Computer Applications	3
CIT 260	System Analysis & Design I	3

Subject Requirements - 16 credits		Credits
CSCO 120B	Cisco Internetworking Academies I	4
CSCO 121B	Cisco Internetworking Academies II	4
CSCO 220B	Cisco Internetworking Academies III	4
CSCO 221B	Cisco Internetworking Academies IV	4

General Education Requirements* - 10-12 credits	Credits
English/Communications courses (Must include a writing course)	6
Human Relations course	1-3
Math course	3

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE - Cisco Systems

First Semester		Completed	*Second Semester*		Completed
COT 202	3	☐	CIT 260	3	☐
CSCO 120B	4	☐	CSCO 220B	4	☐
CSCO 121B	4	☐	CSCO 221B	4	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
GEn Ed course	1-3	☐	Gen Ed course	3	☐

COMPUTER TECHNOLOGY
COMPUTER PROGRAMMING
Certificate of Achievement

SALARY - $43,100 - $69,600/year *(middle range - Nevada)*
CAREER OUTLOOK - Average growth through 2012
GOOD TO KNOW - Best to know more than one program language

CERTIFICATE REQUIREMENTS – 30 credits

Core Requirements – 21 credits		Credits
CIT 130	Beginning Java	3
CIT 180B	Database Concepts and SQL	3
CIT 260	Systems Analysis and Design	3
IS 101	Introduction to Information Systems	3

Choose 9 credits from the following:

CIT 132	Beginning Visual Basic	3
CIT 133	Beginning C++	3
CIT 230	Advanced Java	3
CIT 232	Advanced Visual Basic	3
CIT 233	Advanced C++	3
CS 201	Computer Science I **	3
CS 202	Computer Science II	3

General Education Requirements – 9 credits	Credits
English/Communications course (Must include a writing course)	3
Mathematics course	3
Human Relations course	3

*A list of courses fulfilling general education requirements is on page 11.
**CS 201 prerequisite: (Math 126 and Math 127) or Math 128 or higher.

SUGGESTED COURSE SEQUENCE - Computer Programming

First Semester		Completed	*Second Semester*		Completed
CIT 130	3	☐	CIT 260	3	☐
CIT 180B	3	☐	Gen Ed course	6	☐
Degree elective	3	☐	Degree electives	6	☐
Gen Ed course	3	☐			
IS 101	3	☐			

Certificate of Achievement in Computer Programming - Mission & Outcomes

MISSION - The Certificate of Achievement in Computer Programming is designed to give students the tools to not only make them better computer programmers, but to make them attractive to employers who are seeking entry-level employees with computer programming skills.

STUDENT LEARNING OUTCOMES - Students who complete programs in this academic area are expected to demonstrate that they know:

- practices and procedures required for entry level employment, entry level skill set, and
- the theoretical principles relevant to computer information technology.

Are able to:

- test successfully on competencies required to pass industry certification exams,
- communicate effectively and appropriately, in oral and written form,
- locate, evaluate and properly utilize the tools and resources appropriate to a computer technology professional,
- acquire skills and perform tasks necessary for employment or career enhancement,
- demonstrate effective communication and computation skills appropriate to the field of computer information technology, and
- define a programming project scope, budget and schedule, then design, implement,
- test, debug, and maintain a software solution in at least two computer programming languages.

Appreciate and value:

- appropriate and effective presentation of themselves to potential employers, and standards of social, ethical, legal, accessibility, and diversity issues of their work environment.

COMPUTER TECHNOLOGY
MICROCOMPUTER/NETWORK TECHNICIAN
Certificate of Achievement

The Microcomputer/Network Technician certificate is designed to provide a student with the skills required of 'Help Desk' or computer support personnel.

SALARY - $29,800 - $51,700/year *(middle range - Nevada)*
CAREER OUTLOOK - Faster than average growth through 2012
GOOD TO KNOW - People & technical skills needed

CERTIFICATE REQUIREMENTS - 33-35 credits

Core Requirements - 6 credits		Credits
COT 202	Introduction to Computer Applications	3
ET 102B	Basic DC Electronics	3

Subject Requirements - 17 credits		Credits
CIT 110B	A+ Hardware	3
CIT 111B	A+ Software	3
CIT 112B	Network+	3
Choose 8 credits from:		
CIT 198B	Special Topics in CIT	4
CIT 211B	MCSE I Workstation	4
CIT 212B	MCSE II Server	4
CIT 213B	MCSE III Network Administraton	4
CIT 214B	MCSE IV Directory Services Administration	4
CIT 215B	MCSE Elective	4-8

General Education Requirements*- 10-12 credits	Credits
English/Communications courses (Must include a writing course)	6
Math course	3
Human Relations course	1-3

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE - Microcomputer/Network Technician

First Semester		Completed	*Second Semester*		Completed
CIT 110B	3	☐	CIT 112B	3	☐
CIT 111B	3	☐	CIT elective	4	☐
CIT elective	4	☐	COT 202	3	☐
ET 102B	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Gen Ed course	1-3	☐			

COMPUTER TECHNOLOGY
NETWORK ADMINISTRATION
Certificate of Achievement

SALARY - $43,300 - $69,600/year *(middle range - Nevada)*
CAREER OUTLOOK - Faster than average growth through 2012
GOOD TO KNOW - Administrators design, install & support networks

CERTIFICATE REQUIREMENTS - 32-34 credits

Core Requirements – 6 credits		Credits
CIT 260	System Analysis & Design I	3
COT 202	Introduction to Computer Applications	3

Subject Requirements – 16 credits		Credits
CIT 211B	MCSE I Workstation	4
CIT 212B	MCSE II Server	4
Choose 8 credits from:		
CIT 213B	MCSE III Network Administration	4
CIT 214B	MCSE IV Directory Services Administration	4
CIT 215B	MCSE Elective	4-8

General Education Requirements* – 10-12 credits	Credits
English/Communications courses (Must include a writing course)	6
Human Relations course	1-3
Math course	3

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE - Network Administration

First Semester		Completed	*Second Semester*		Completed
CIT 211B	4	☐	CIT elective	4	☐
CIT 212B	4	☐	CIT elective	4	☐
COT 202	3	☐	CIT 260	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Gen Ed course	1-3	☐	Gen Ed course	3	☐

MICROSOFT CERTIFICATION DATABASE ADMINISTRATION COURSES TO PREPARE FOR CERTIFICATION

Microsoft Certified Professionals (MCPs) stand apart from other IT personnel. They've demonstrated undeniable expertise with Microsoft products and platforms to colleagues, employers, and—most importantly—to themselves.

Certification Tracks:

MCDST - Microsoft Certified Desktop Support Technicians (MCDSTs) have the technical and customer service skills to troubleshoot hardware and software operation issues in Microsoft Windows environments. MCDST candidates are required to pass two independently administered exams. WNCC offers the preparatory course work as follows:

CIT 211B	MCSE I Workstation	4
CIT 215B	MCSE Elective	4

(TOPIC: Supporting & Troubleshooting Applications on Windows XP)

MCSA - Microsoft Certified Systems Administrators (MCSAs) administer network and systems environments based on the Microsoft Windows platforms. Specializations include MCSA: Messaging and MCSA: Security. MCSA candidates are required to pass four independently administered exams. WNCC offers the preparatory course work as follows:

CIT 211B	MCSE I Workstation	4	CIT 213B	MCSE III Network Administration	4
CIT 212B	MCSE II Server	4	CIT 215B	MCSE Elective	4

MCSE - Microsoft Certified Systems Engineers (MCSEs) design and implement an infrastructure solution based on the Windows platform and Microsoft Windows Server System software. Specializations include MCSE: Messaging and MCSE: Security. MCSE candidates are required to pass seven independently administered exams. Three electives are required to complete Microsoft's MCSE certification, including one focused on design. WNCC offers the preparatory course work as follows:

CIT 211B	MCSE I Workstation	4	CIT 215B	MCSE Elective (Design)	4
CIT 212B	MCSE II Server	4	CIT 215B	MCSE Elective	4
CIT 213B	MCSE III Network Administration	4	CIT 215B	MCSE Elective	4
CIT 214B	MCSE IV Directory Services	4			

COMPUTER TECHNOLOGY
COMPUTER NETWORKING TECHNOLOGY
Associate of Applied Science Degree

The Computer Networking Technology program is designed for students seeking career skills in computer networking environments. Students choose one of three specializations to customize their program: Network Technology Management, Security and Information Assurance, or Transfer Option.

SALARY - $41,500 - $64,200/year *(middle range - Nevada)*
CAREER OUTLOOK - Much faster than average growth
GOOD TO KNOW - Businesses & government are investing heavily in "cyber-security"

DEGREE REQUIREMENTS - 62 credits

Program Requirements - 41 credits		**Credits**
CIT 161B	Essentials of Information Security	3
CIT 211B	MCSE I Workstation	4
CIT 212B	MCSE II Server	4
CSCO 120B	CISCO Internetworking Academies I	4
CSCO 121B	CISCO Internetworking Academies II	4
IS 101	Introduction to Information Systems	3
Choose 3 credits from the following:		
CIT 201B	Word Certification Preparation	1-3
or CIT 202B	Excel Certification Preparation	1-3
or CIT 203B	Access Certification Preparation	1-3
or CIT 204B	PowerPoint Certification Preparation	1-3

Specialization Requirements - 16 credits
Choose 16 credits from one of the following three specializations:
Network Technology Management

CIT 260	Systems Analysis and Design	3
CSCO 130B	Fundamentals of Wireless LANs FWL	4
MGT 212	Leadership and Human Relations	3
or MGT 283	Personnel Administration	
Choose two of the following:		
CIT 180B	Database Concepts and SQL	3
CIT 213B	MCSE III Net Administration	4
CIT 215B	MCSE Elective	4
CIT 255B	Web Server Administration I	3
CIT 256B	Web Server Administration II	3
CSCO 220B	CISCO Internetworking Academies III	4
CSCO 221B	CISCO Internetworking Academies IV	4

Security and Information Assurance

STAT 152	Introduction to Statistics	3
Any one from the following: CA, CIT, COT, CSCO or IS course		1
Choose four courses from the following:		
CIT 173B	Linux Installation and Configuration	3
CIT 264B	Operating System Security	3
CIT 265B	Infrastructure Security	3
CIT 266B	Operational/Organizational Security	3
CIT 267B	Communication Security	3
CIT 268B	Cryptography	3

Customized Option - Students may take 16 credits in this option, depending upon the specialization or the requirements of the four-year transfer institution. Prior department approval required. More than 16 credits may be required.

General Education Requirements - 21 credits	**Credits**
English/Communications courses	6
(Must include a writing course; ENG 107 recommended)	
Humanities/Social Science course	3
Human Relations course (MGT 201, MGT 212 or MGT 283 recommended)	3
Mathematics (MATH 126 or higher recommended)	3
Science course (PHYS 107B recommended)	3
U.S./Nevada Constitutions course	3

*A list of courses fulfilling general education requirements is on page 9.

SUGGESTED COURSE SEQUENCE - Network Technology Management Specialization

First Semester		Completed	*Third Semester*		Completed
CSCO 120B CCNA I	4	☐	CIT 211B MCSE I	4	☐
CSCO 121B CCNA II	4	☐	CIT 212B MCSE II	4	☐
IS 101	3	☐	Degree elective	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐			
			Fourth Semester		
Second Semester			CIT 161B	3	☐
CIT 201B - 204B	3	☐	MGT 212/283	3	☐
CIT 260	3	☐	Degree elective	3	☐
CSCO 130B	4	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐			

SUGGESTED COURSE SEQUENCE - Security & Information Assurance Specialization

First Semester		Completed	*Third Semester*		Completed
CSCO 120B CCNA I	4	☐	CIT 211B MCSE I	4	☐
CSCO 121B CCNA II	4	☐	CIT 212B MCSE II	4	☐
IS 101	3	☐	Degree elective	3	☐
Degree elective	3	☐	STAT152	3	☐
Gen Ed course	3	☐	Degree elective	1	☐
Second Semester			*Fourth Semester*		
CIT 201B - 204B	3	☐	CIT 161B	3	☐
Degree elective	3	☐	Gen Ed course	3	☐
Degree elective	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐

Associate of Applied Science Degree
Computer Networking Technology - Mission & Outcomes

The purpose of the Computer Networking Technology degree is to provide graduates with up-to-date training in the management of information resources, including computer and networking operations, infrastructure and information security.

MISSION - The purpose of the Associate of Applied Science degree is to provide employment-related knowledge and skills necessary to succeed in a chosen field of computer technology and/or applications study.

STUDENT LEARNING OUTCOMES - Students who complete programs in occupational areas are expected to demonstrate that they know:
- practices and procedures required for entry level employment,
- entry level skill set, and
- theoretical principles relevant to their emphasis.

Are able to:
- test successfully on competencies required to pass industry standard certification exams,
- communicate effectively and appropriately, in oral and written form,
- locate, evaluate and properly utilize the tools and resources appropriate to a computer technology professional,
- acquire skills and perform tasks necessary for employment or career enhancement,
- demonstrate effective communication and computation skills appropriate to the chosen occupational field.

Appreciate and value:
- appropriate and effective presentation of themselves to potential employers, and
- standards of social, ethical, legal, accessibility, and diversity issues of their work environment.

CONSTRUCTION TECHNOLOGY PROGRAM

The Construction Technology program prepares students for entry and mid-level positions within the various construction industry disciplines. As construction technology students will possess a diversity of work experiences, skills and interests, the program accommodates a variety of study areas and competency levels to address student and industry needs.

The program offers instruction in several academic areas which are critical to preparing skilled employees. See academic degrees in the following areas:

- Construction Project Management
- Craft Training

The college also offers classes toward licensure in:

- Certified Inspector of Structures

Construction Technology programs are listed alphabetically.

CONSTRUCTION TECHNOLOGY

STATE OF NEVADA

CERTIFIED INSPECTOR OF STRUCTURES

LICENSE REQUIREMENTS - 10 credits		Credits
CONS 260B	Certified Inspector of Structures - Residential	3
CONS 261B	Under-Floor Inspections for Certified Inspectors of Structures	1
CONS 262B	Above-Floor Inspections for Certified Inspectors of Structures	2
CONS 263B	Supervised Residential Inspections for Certified Inspectors of Structures	4

These licensing programs fulfill the minimum course requirements needed for licensure as a certified inspector of structures-residential. For additional information, please contact the State of Nevada, Real Estate Division, or Bill Oney at 445-3353.

CONSTRUCTION TECHNOLOGY

CONSTRUCTION PROJECT MANAGEMENT

Associate of Applied Science Emphasis

The Construction Project Management emphasis provides management training that addresses topics of critical importance to subcontractors, general contractors, superintendents and project managers. Students will study contract administration, coordination, negotiation, quality control and the management of labor resources, equipment and materials.

SALARY - $61,000 - $95,500/year *(middle range - Nevada)*
CAREER OUTLOOK - Average growth through 2012
GOOD TO KNOW - About 47 percent are self-employed

DEGREE REQUIREMENTS - 60 credits

Core Requirements - 14 credits		Credits
CONS 102B	Blueprint Reading & Specifications	3
CONS 108B	Construction Practices	3
CONS 112B	Construction Law	1
CONS 113B	Construction Site Safety	1
CONS 115B	Construction Estimating	3
CONS 117B	Introduction to Building Codes	3

Emphasis Requirements - 24 credits		Credits
CONS 114B	Soils, Sitework, Concrete and Testing	3
CONS 116B	Plumbing and HVAC Systems	2
CONS 118B	Bid Documents, Contracts & Negotiation	3
CONS 119B	Construction Surveying	2
CONS 204B	Construction Planning and Methods	3
CONS 216B	Structural Layout and Assembly	2
CONS 220B	Electrical Distribution Systems	2
CONS 221B	Regulatory Agencies	1
CONS 222B	Computer Applications	3
CONS 290B	Internship in Construction	3

General Education Requirements - 22 credits	Credits
English/Communications courses (BUS 107 and 108 recommended)	6
Human Relations course (BUS 110B recommended)	1-3
Humanities/Social Science course	3
Mathematics course (MATH 110B recommended)	3
Science course (PHYS 100 recommended)	3
U.S. and Nevada Constitution course	3
Electives	1-3

*A list of courses fulfilling general education requirements is on page 9.

SUGGESTED COURSE SEQUENCE - Construction Project Management

First Semester		Completed
CONS 102B	3	☐
CONS 108B	3	☐
CONS 113B	1	☐
CONS 114B	3	☐
Gen Ed Course	3	☐
Gen Ed course	3	☐

Second Semester		
CONS 112B	1	☐
CONS 115B	3	☐
CONS 117B	3	☐
CONS 216B	2	☐
Gen Ed course	3	☐
Gen Ed course	3	☐

Third Semester		Completed
CONS 116B	3	☐
CONS 118B	3	☐
CONS 119B	2	☐
CONS 220B	2	☐
CONS 221B	1	☐
Gen Ed courses	6	☐

Fourth Semester		
BUS 110B	1-3	☐
CONS 204B	3	☐
CONS 222B	3	☐
CONS 290B	3	☐
General elective	1-3	☐

CONSTRUCTION TECHNOLOGY
CRAFT TRAINING
Associate of Applied Science Emphasis

The Craft Training emphasis is designed for those seeking careers within the many high paying crafts of the construction industry. The standardized competency-based training was developed by the National Center for Construction Education and Research and is recognized by many builders associations nationwide. Students are encouraged to contact such builders associations regarding apprenticeship status as on-job training is an essential element of craft training.

SALARY - $29,900 - $66,500/year *(middle range - Nevada)*
CAREER OUTLOOK - Average to faster than average growth through 2012
GOOD TO KNOW - Apprentice programs are required for most trades

DEGREE REQUIREMENTS - 60-61 credits

Core Requirements - 4 credits		**Credits**
CONS 113B	Construction Site Safety	1
CT 101B	Craft Training Basics	3

Concentration Requirements - 35-36 credits	**Credits**
(Pick one Concentration)	
Carpentry	36
Electrical	36
Heavy Equipment Operation	35
HVAC	36
Masonry	35
Plumbing	36
Sheet Metal	36

General Education Requirements* - 20-21 credits	**Credits**
English/Communications course (BUS 107 and BUS 108 recommended)	6
Human Relations course (BUS 110B recommended)	1-3
Humanities/Social Science course	3
Mathematics course (MATH 110B recommended)	3
Science course (PHYS 107B recommended)	3
U.S. and Nevada Constitution course	3
Electives	0-1

*A list of courses fulfilling general education requirements is on page 9.

Contact the Division of Business & Technology for course descriptions, outlines and other related information. Up to 15 credits of approved Bureau of Apprenticeship Training and/or State Apprenticeship Council training may be substituted for craft-training courses. Up to six credits of work experience may be substituted for craft training courses.

MASTER COURSE SCHEDULE - CRAFT TRAINING
STUDENTS WHO ARE INTERESTED IN THESE COURSES
CONTACT CONSTRUCTION TECHNOLOGY INSTRUCTOR
BILL ONEY FOR DETAILS AT 445-3353.
Classes vary on an individual basis; courses are offered on a basis of need.

CONVERGENCE TECHNOLOGY*

Associate of Applied Science Degree Emphasis
*Subject to approval by the NSHE Board of Regents

The Convergence Technology degree is designed to prepare students with a breadth of knowledge in the primary areas of convergence: Data Networking, Telephony, and Convergence, with areas of focus in wireless LANs, VoIP (Voice over IP), network security, telephony and troubleshooting of converged networks. Convergence technology is the merging of voice, video and data on a single network, integrating telecommunications and computer technology in a way that opens powerful new avenues of communication. In plain English, convergence technology is the intersection of telephone, TV, cable and Internet networks.

SALARY - $45,000 - $75,000/year *(middle range - U.S.)*
CAREER OUTLOOK - High demand through 2012
GOOD TO KNOW - Technicians are a necessity for unified communications solutions for voice, data and video

DEGREE REQUIREMENTS – 64 credits

Core Requirements – 45 credits		**Credits**
CSCO 120B	CISCO I	4
CSCO 121B	CISCO II	4
CSCO 130B	Fundamentals of Wireless LANs	3
CIT 129	Introduction to Programming	3
Choose one course:		
CIT 130	Beginning Java	3
or CIT 132	Beginning Visual Basic	
or CIT 133B	Beginning C++	
CIT 161B	Fundamentals of Network Security 3	
CIT 165B	Introduction to Convergence	3
CIT 265B	Advanced Convergence	3
ET 131B	Electronics I	4
ET 132B	Electronics II	4
ET 200B	Electronics Projects	3
ET 276B	Introduction to Telecommunications	4
ET 293B	Advanced Telecommunications	4

General Education Requirements - 19 credits	**Credits**
English course (must include a writing course)	6
Math course	3
Social Sciences/Humanities course	3
Science course	3
U.S./Nevada Constitution course	3
Human Relations course	1

* A list of courses fulfilling general education requirements is on page 9.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
CSCO 120B	4	☐	CIT 130, 132 or 133	3	☐
CSCO 121B	4	☐	CIT 165B	3	☐
ET 131B	4	☐	ET 276B	4	☐
Gen Ed courses	4	☐	Gen Ed courses	6	☐
Second Semester			*Fourth Semester*		
CIT 129	3	☐	CIT 265B	3	☐
CIT 161B	3	☐	CSCO 130B	3	☐
ET 132B	4	☐	ET 200B	3	☐
Gen Ed courses	6	☐	ET 293B	4	☐
			Gen Ed course	3	☐

Associate of Applied Science Degree
Convergence Technology - Mission & Outcomes

MISSION - The purpose of the Associate of Applied Science degree is to provide employment-related knowledge and skills necessary to succeed in a chosen field of study.

STUDENT LEARNING OUTCOMES - Students who complete programs in occupational areas are expected to demonstrate that they know:

- the subject matter appropriate to the emphasis of the degree

Are able to:

- test successfully on competencies required to pass industry standard certification exams as referenced at:
- HYPERLINK "http://www.cisco.com/en/US/learning/index.html" and
- HYPERLINK "http://www.ctpcertified.com/ctp/program.asp" http://www.ctpcertified.com/ctp/program.asp,
- communicate effectively and appropriately, in oral and written form,
- locate, evaluate and properly utilize the tools and resources appropriate to a computer technology professional,
- acquire skills and perform tasks necessary for employment orcareer enhancement,

Have developed:

- an appreciation of the importance of social, ethical, legal and diversity issues
- an appreciation of the need and importance of lifelong learning

CRIMINAL JUSTICE PROGRAM

WNCC offers associate degrees and certificates of achievement in the field of criminal justice. Two-year associate degrees include:

- Criminal Justice
- Criminal Justice Transfer Program
- Law Enforcement/Academy
- Paralegal Studies

One-year certificate programs are offered in the following areas for students desiring more basic skills:

- 9-1-1 Dispatch Telecommunications
- Law Enforcement/Academy

Criminal Justice programs are listed alphabetically.

CRIMINAL JUSTICE
Associate of Applied Science Program

The Criminal Justice Associate of Applied Science degree prepares students for a career in Law Enforcement, whether it be Probation and Parole, Corrections, Juvenile Justice or Law Enforcement. With this degree, students will understand the basics of criminal law and law enforcement pertaining to each of these career areas.

NOTE: Students are **REQUIRED** to complete a POST certified course to become a law enforcement officer in Nevada. This degree does NOT take the place of that certification.

SALARY - $36,400 - $60,000/year *(middle range - Nevada)*
CAREER OUTLOOK - Faster than average growth through 2012
GOOD TO KNOW - Must be physically fit; may work weekends, holidays & nights

DEGREE REQUIREMENTS - 60 credits

Core Requirements - 18 credits		**Credits**
CRJ 101	Introduction to Criminal Justice I	3
CRJ 102	Introduction to Criminal Justice II	3
CRJ 164	Principles of Investigation	3
CRJ 220	Criminal Procedures	3
CRJ 230	Criminal Law	3
CRJ 270	Introduction to Criminology	3

Emphasis Requirement - 18 credits	
Choose 9 credits from the following:	**Credits**
CRJ 106 Introduction to Corrections	3
CRJ 155 Juvenile Justice System	3
CRJ 211 Police in America	3
CRJ 225 Criminal Evidence	3
CRJ 265 Introduction to Physical Evidence	3
Choose 9 credits from the following:	
Any other Criminal Justice course except CRJ 110B	1-9
Any Psychology course except PSY 210	1-6
Any Sociology course except SOC 210	1-6
Any Foreign Language	3-6
Bus 107, 108	3-6
COM 113	3
COT 105, 113, 202	3
CPD 116, 117	3
CRJ 295, 296, 297, 298	1-6
IS 101	3
MGT 201, 212, 235, 283	3-6
SW 220, 230	3-6

General Education Requirements* - 24 credits	**Credits**
English/Communications courses (must include a writing course: ENG 101 and 102 recommended)	6
Humanities course	3
Mathematics course	3
Science course	3
U.S./Nevada Constitution course	3
General electives	6

*A list of courses fulfilling general education requirements is on page 9.

CRIMINAL JUSTICE
Associate of Arts Transfer Emphasis

The Criminal Justice transfer emphasis is an Associate of Arts degree for students who are planning to transfer to the University of Nevada, Reno, the University of Nevada, Las Vegas, or any other four-year institution.

SALARY - $45,200 - $65,800/year *(middle range - Nevada)*
CAREER OUTLOOK - Depends on specialization; demand is strong for investigators & detectives
GOOD TO KNOW - Must enforce laws, gather facts & evidence; may also work with the public

DEGREE REQUIREMENTS - 60 credits

Core Requirements - 21-24 credits		**Credits**
CRJ 101	Introduction to Criminal Justice I	3
CRJ 102	Introduction to Criminal Justice II	3
CRJ 106	Introduction to Corrections	3
or CRJ 211	Police in America	
CRJ 164	Principles of Investigation	3
CRJ 222	Criminal Law and Procedure	3
or CRJ 220	Criminal Procedures	
and CRJ 230	Criminal Law	3
CRJ 225	Criminal Evidence	3
CRJ 270	Introduction Criminology	3

General Education Requirements* - 36-39 credits		**Credits**
ENG 101	Composition I	3
ENG 102	Composition II	3
Fine Arts course		3
Humanities courses		6
Mathematics course		3
Science courses		6
Social Science course		3
U.S./Nevada Constitutions course		3
Degree electives		6-9

(recommend Spanish courses (up to eight credits), ANTH 101, CPD 116, 117, PSY 101, PSY 233, PSY 234, PSY 280, SOC 101, SW 230)
*A list of courses fulfilling general education requirements is on page 6.

SUGGESTED COURSE SEQUENCE
Associate of Arts Transfer Emphasis

First Semester		Completed	*Third Semester*		Completed
CRJ 101	3	☐	CRJ 225	3	☐
CRJ 106 or CRJ 211	3	☐	CRJ 270	3	☐
ENG 101	3	☐	Degree electives	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Second Semester			*Fourth Semester*		
CRJ 102	3	☐	CRJ 222	3	☐
CRJ 164	3	☐	Degree electives	3	☐
Degree electives	3	☐	Gen Ed course	3	☐
ENG 102	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐

CRIMINAL JUSTICE
LAW ENFORCEMENT/ACADEMY
Associate of Applied Science Emphasis

The Law Enforcement Academy emphasis is designed to prepare students for various careers within the field of criminal justice. In Nevada, a Category I and III Post Certificate is necessary for most local and state jobs in the criminal justice field. This major, with the Western Nevada State Peace Officer Academy as the emphasis, allows a student to go right into a criminal justice career in Nevada.

Other Important information:
Documentation and currency of health insurance (card) is required.

SALARY - $44,000 - $60,000/year *(middle range - Nevada)*
CAREER OUTLOOK - Faster than average growth through 2012
GOOD TO KNOW - Communication skills are important; may work weekends, holidays and nights

DEGREE REQUIREMENTS - 63.5 credits

Core Requirements - 18 credits		Credits
CRJ 101	Introduction to Criminal Justice I	3
CRJ 102	Introduction to Criminal Justice II	3
CRJ 164	Principles of Criminal Investigation	3
CRJ 220	Criminal Procedures	3
CRJ 230	Criminal Law	3
CRJ 270	Introduction to Criminology	3

Emphasis Requirements - 33.5 credits		Credits
CRJ 103	Communication within the Criminal Justice System	3
CRJ 266B	Western Nevada State Peace Officer Academy**	27
EMS 100B	BCLS/CPR Healthcare Provider	0.5
EMS 105B	First Responder	3

** Spring and summer classes that will fulfill the POST requirement.

General Education Requirements* - 12 credits	Credits
English writing course (ENG 101 recommended)	3
Mathematics course	3
Science course	3
U.S./Nevada Constitutions course	3

*A list of courses fulfilling general education requirements is on page 9.

SUGGESTED COURSE SEQUENCE
Associate of Applied Science - Law Enforcement/Academy

First Semester	Completed	*Third Semester*	Completed
CRJ 101	3 ☐	CRJ 230	3 ☐
Gen Ed course	3 ☐	CRJ 270	3 ☐
Gen Ed course	3 ☐	Gen Ed Course	3 ☐
Second Semester		*Fourth Semester*	
CRJ 102	3 ☐	CRJ 103	3 ☐
CRJ 164	3 ☐	CRJ 226B	27 ☐
CRJ 220	3 ☐	EMS 100B	.5 ☐
Gen Ed course	3 ☐	EMS 100B	3 ☐

CRIMINAL JUSTICE
LAW ENFORCEMENT/ACADEMY
Certificate of Achievement

CERTIFICATE REQUIREMENTS - 39.5 credits

Core Requirements - 33.5 credits.		Credits
CRJ 103	Communication within the Criminal Justice System	3
CRJ 266B	Western Nevada State Peace Officer Academy**	27
EMS 100B	BCLS/CPR Healthcare Provider	0.5
EMS 105B	First Responder	3

** Spring and summer classes that will fulfill the POST requirement.

General Education Requirements* - 6 credits	Credits
English writing course (ENG 101 recommended)	3
Mathematics course	3

*A list of courses fulfilling general education requirements is on page 11.

CRIMINAL JUSTICE
9-1-1 DISPATCH TELECOMMUNICATIONS
Certificate of Achievement

SALARY - $33,500 - $48,000/year *(middle range - Nevada)*
CAREER OUTLOOK - Average growth through 2012
GOOD TO KNOW - Bilingual dispatchers are in great demand

CERTIFICATE REQUIREMENTS – 31-33 credits

Core Requirements – 12 credits		Credits
CRJ 260B	911-Dispatch Emergency Telecommunicator Academy	12

Subject Requirements – 9-10 credits		Credits
CRJ 101	Introduction to Criminal Justice I	3
CRJ 102	Introduction to Criminal Justice II	3
SPAN 101B	Conversational Spanish I	3
or		
SPAN 111	First Year Spanish I	4

General Education Requirements* – 10-12 credits	Credits
English Writing/Communication courses (Must include writing course)	6
Math course	3
Human Relations course	1-3

* A list of courses fulfilling general education requirements is on page 11.

DEAF STUDIES
Associate of Arts Emphasis

The Deaf Studies degree will prepare students for transfer to a bachelor's program/degree in Deaf Studies or a related academic field. Courses will help students develop knowledge about American Sign Language, cultural impacts related to being deaf or hard of hearing, and the state of Nevada statutory regulations which govern interpreting.

SALARY - $25,000 - $35,600/year *(middle range - Nevada)*
CAREER OUTLOOK - Faster than average growth through 2012
GOOD TO KNOW - Interpreters may be paid by the day, often by the courts or schools

DEGREE REQUIREMENTS – 60 credits

Program Requirements – 24 credits		**Credits**
AM 145	American Sign Language I	4
AM 146	American Sign Language II	4
AM 147	American Sign Language III	4
AM 148	American Sign Language IV	4
AM 151	Fingerspelling I	1
AM 152	Fingerspelling II	1
AM 153	Deaf Culture	3
AM 154	Deaf History	3

General Education Requirements* – 36 credits	**Credits**
ENG 101 and 102	6
Fine Arts course (THTR 105 is recommended)	3
Humanities courses	6
MATH 120 or higher	3
Science courses	6
Social Science courses	9
U.S./Nevada Constitutions course	3

*A list of courses fulfilling general education requirements is on page 6.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
AM 145	4	☐	AM 147	4	☐
General Education Course	3	☐	AM 151	1	☐
General Education Course	3	☐	AM 153	3	☐
General Education Course	3	☐	General Education Course	3	☐
General Education Course	3	☐	General Education Course	3	☐

Second Semester		Completed	*Fourth Semester*		Completed
AM 146	4	☐	AM 148	4	☐
AM 154	3	☐	AM 152	1	☐
General Education Course	3	☐	General Education Course	3	☐
General Education Course	3	☐	General Education Course	3	☐
General Education Course	3	☐	General Education Course	3	☐

AMERICAN SIGN LANGUAGE
Certificate of Achievement

CERTIFICATE REQUIREMENTS – 30 credits

Subject Requirements – 18 credits		**Credits**
AM 145	American Sign Language I	4
AM 146	American Sign Language II	4
AM 147	American Sign Language III	4
AM 148	American Sign Language IV	4
AM 151	Fingerspelling I	1
AM 152	Fingerspelling II	1

General Education Requirements* – 12 credits	**Credits**
English/Communications Courses (Must include a writing course)	6
Human Relations Course	3
Mathematics Course	3

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
AM 145	4	☐	AM 147	4	☐
General Education Course	3	☐	AM 151	1	☐
			General Education Course	3	☐

Second Semester		Completed	*Fourth Semester*		Completed
AM 146	4	☐	AM 148	4	☐
General Education Course	3	☐	AM 152	1	☐
			General Education Course	3	☐

DRAFTING TECHNOLOGY - ARCHITECTURAL
Associate of Applied Science Emphasis

The Drafting Technology-Architectural emphasis is designed to concentrate course work in architecturally oriented subjects. Students will be taking several courses offered through the Construction Technology Program.

SALARY - $34,800 - $49,500/year *(middle range - Nevada)*
CAREER OUTLOOK - Depends on speciality - greatest demand is for architectural & civil drafters
GOOD TO KNOW - Specialize in drawing features of buildings & other structures

DEGREE REQUIREMENTS - 60 credits

Core Requirements - 12 credits		**Credits**
CADD 100	Introduction to Computer Aided Drafting	3
CADD 105	Intermediate Computer Aided Drafting	3
CADD 200	Advanced Computer Aided Drafting	3
DFT 100	Basic Drafting Principles	3

Emphasis Requirements - 24 credits		**Credits**
CADD 120B	Architectural Drafting I	3
CADD 225B	Architectural Computer Aided Drafting	3
CONS 102B	Blueprint Reading and Specifications	3
CONS 108B	Construction Practices	3
CONS 117B	Construction Practices	3

Capstone Course

CADD 210B	CADD Project	3
or		
CADD 290B	Internship in CADD	

Degree Electives

Choose 6 credits from the following:

CADD 198B	Special Topics in CADD	3
CADD 210B	CADD Project*	3
CADD 220B	Architectural Drafting II	3
CADD 290B	Internship in CADD*	3
CADD 295B	Independent Study	3
CONS 112B	Construction Law	1
CONS 114B	Soils, Sitework, Concrete and Testing	3
CONS 115B	Construction Estimating	3
CONS 118B	Bid Documents, Contracts and Negotiation	3
CONS 124B	Interior and Exterior Treatments	1
CONS 221B	Regulatory Agencies	1
COT 204	Using Windows	3

*May be taken only if not previously used to meet degree requirements.

General Education Requirements* - 24 credits	**Credits**
English/Communications courses (BUS 108B recommended)	6
Human Relations course (BUS 110B recommended)	3
Mathematics course (MATH 127 or higher)	3
Science Course (Physics recommended)	3
Social Science / Humanities course	3
U.S. / Nevada Constitution course	3
Elective	3

*A list of courses fulfilling general education requirements is on page 9.

DRAFTING TECHNOLOGY - ARCHITECTURAL
Certificate of Achievement

CERTIFICATE REQUIREMENTS - 31 credits

Subject Requirements - 21 credits		**Credits**
CADD 100	Introduction to Computer Aided Drafting	3
CADD 105	Intermediate Computer Aided Drafting	3
CADD 120B	Architectural Drafting I	3
CADD electives		6
CONS 102B	Blueprint Reading & Specifications	3
DFT 100	Basic Drafting Principles	3

General Education Requirements* - 10 credits	**Credits**
English/Communications courses	6
(BUS 108 is recommended; Must include a writing course)	
Human Relations course	1
MATH 110B**, 127 or higher level math course, except STAT 152	3

*A list of courses fulfilling general education requirements is on page 11.

**MATH 110B does not fulfill the requirement for the Associate of Drafting Technology - Architectural Emphasis.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
CADD 100	3	☐	CADD 200	3	☐
CADD 120B	3	☐	CADD 225B	3	☐
CONS 102B	3	☐	Degree elective	3	☐
DFT 100	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Second Semester			*Fourth Semester*		
CADD 105	3	☐	Capstone course	3	☐
CONS 108B	3	☐	CONS 117B	3	☐
Gen Ed course	3	☐	Degree elective	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	General elective	3	☐

DRAFTING TECHNOLOGY - CIVIL
Associate of Applied Science Emphasis

The Drafting Technology Civil Drafting emphasis is designed to concrete course work in civil drafting oriented subjects. Students will be taking several courses offered through the Construction Technology program.

SALARY - $34,800 - $49,500/year *(middle range - Nevada)*
CAREER OUTLOOK - Depends on speciality - greatest demand is for architectural & civil drafters
GOOD TO KNOW - Specialize in drawings & maps of highways, pipelines & water systems

DEGREE REQUIREMENTS - 61 credits

Core Requirements – 12 credits		**Credits**
CADD 100	Intro to Computer Aided Drafting	3
CADD 105	Intermediate Computer Aided Drafting	3
CADD 200	Advanced Computer Aided Drafting	3
DFT 100	Basic Technical Drawing	3

Emphasis Requirements – 25 credits		**Credits**
CADD 230B	Civil Drafting I	3
CEE 140	Intro to Civil Engineering	2
CONS 102B	Blueprinting Reading and Specifications (Civil)	3
CONS 114B	Soils, Sitework, Concrete & Testing	3
CONS 119B	Construction Surveying	2
SUR 266B	Land Development I	3

Capstone Course

CADD 231B	Civil Drafting II	3
or		
CADD 290B	Internship in CADD	

Degree Electives

Choose 6 credits from the following:		Credits
CADD 210B	CADD Project	3
CADD 225B	Architectural Computer Aided Drawing (CAD)	3
CADD 290B	Internship in CADD *	3
CONS 112B	Construction Law	1
CONS 115B	Construction Estimating	3
CONS 118B	Bid Documents, Contracts, & Negotiation	3
CONS 221B	Regulatory Agencies	1
CONS 223B	Advanced Sitework Estimating	3

*May be taken only if not previously used to meet degree requirements.

General Education Requirements* - 24 credits	**Credits**
English/Communications courses	6
(BUS 108 recommended; must include a writing course)	
Human Relations course (BUS 110B recommended)	3
Mathematics course (MATH 127 or higher)	3
Science course (Physics recommended)	3
Social Science / Humanities course	3
U.S. / Nevada Constitution course	3
Elective	3

*A list of courses fulfilling general education requirements is on page 9.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
CADD 100	3	☐	CADD 200	3	☐
CEE 140	2	☐	CONS 114B	3	☐
DFT 100	3	☐	Degree elective	3	☐
Degree elective	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
			General elective	3	☐
Second Semester			*Fourth Semester*		
CADD 105	3	☐	Capstone course	3	☐
CADD 230B	3	☐	CONS 119B	2	☐
CONS 102B	3	☐	SUR 266B	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐

DRAFTING TECHNOLOGY - MECHANICAL
Associate of Applied Science Emphasis

The Drafting Technology-Mechanical emphasis is designed to concentrate course work in subjects related to manufacturing and machining.

SALARY - $35,700 - $47,400/year *(middle range - Nevada)*
CAREER OUTLOOK - Nationally, slow growth through 2012
GOOD TO KNOW - Most use computer-aided drafting (CAD) systems, but some still is done manually

DEGREE REQUIREMENTS - 60 credits

Core Requirements - 12 credits		**Credits**
CADD 100	Introduction to Computer Aided Drafting	3
CADD 105	Intermediate Computer Aided Drafting	3
CADD 200	Advanced Computer Aided Drafting	3
DFT 100	Basic Drafting Principles	3

Emphasis Requirements - 24 credits		**Credits**
CADD 140	Technical Drafting I	3
CADD 141B	Technical Drafting II	3
CADD 245	Solid Modeling and Parametric Design (Autodesk Inventor)	3
COT 204	Using Windows	3
DFT 110B	Blueprint Reading for Industry	3

Capstone Course

CADD 210B	CADD Project	3
or CADD 290B	Internship in CADD	

Degree Electives

Choose 6 credits from the following:

CADD 210B	CADD Project	3
CADD 242	Advanced Technical Drafting	3
CADD 260B	Introduction to CAD/CAM	3
CADD 290B	Internship in CADD*	
CADD 295B	Independent Study	3
MTT 105B	Machine Shop I	3

*May be taken only if not previously used to meet degree requirements.

General Education Requirements* - 24 credits	**Credits**
English/Communications courses (BUS 108 is recommended)	6
Human Relations course (BUS 110B recommended)	3
Mathematics course (MATH 127 or higher)	3
Social Science / Humanities course	3
U.S. / Nevada Constitution course	3
Science Course (Physics recommended)	3
Elective	3

*A list of courses fulfilling general education requirements is on page 9.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
CADD 100	3	☐	CADD 141B	3	☐
COT 204	3	☐	CADD 200	3	☐
DFT 100	3	☐	Degree elective	3	☐
DFT 110B	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Second Semester			*Fourth Semester*		
CADD 105	3	☐	CADD 245	3	☐
CADD 140	3	☐	Capstone course	3	☐
Gen Ed course	3	☐	Degree elective	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
MATH course	3	☐	General elective	3	☐

DRAFTING TECHNOLOGY - MECHANICAL
Certificate of Achievement

CERTIFICATE REQUIREMENTS - 31 credits

Subject Requirements - 21 credits		**Credits**
CADD 100	Introduction to Computer Aided Drafting	3
CADD 105	Intermediate Computer Aided Drafting	3
CADD 141B	Technical Drafting II	3
CADD Electives		6
DFT 100	Basic Drafting Principles	3
DFT 110B	Blueprint Reading for Industry	3

General Education Requirements* - 10 credits	**Credits**
English/Communications courses (BUS 108 is recommended; must include a writing course)	6
Human Relations course	1
MATH (110B**, 127 or higher level math course, except STAT152)	3

*A list of courses fulfilling general education requirements is on page 11.

**MATH 110B does not fulfill the requirement for the Associate of Applied Science in Drafting Technology - Mechanical Emphasis, which requires MATH 127 or higher.

EARLY CHILDHOOD EDUCATION

WNCC's Early Childhood Education program is an occupational preparation program which concentrates on the teaching skills needed to work with young children and parents. Students may earn an Early Childhood Education Certificate of Achievement or an Associate of Applied Science degree to help them gain employment in the child care or related field.

Some courses transfer to local colleges and universities, providing a "career ladder" opportunity for students who are seeking additional training for jobs in the care and education of infants, preschoolers and handicapped young children.

The curriculum includes experience with children to develop teaching skills; classes in human development and interpersonal relationships; and instruction on how to select, plan and present learning activities.

Successful completion of the Early Childhood Education certificate or associate degree is designed to qualify students for such employment opportunities as assistants, teachers and directors in child care centers; teachers and assistants in preschools; home day care providers and other child/family related careers.

Certificate of Achievement & Associate of Applied Science Degree in Early Childhood Education - Mission & Outcomes

Certificate of Achievement

MISSION - The Early Childhood Education Certificate of Achievement will provide the academic knowledge and skills for employment in a variety of child care settings.

STUDENT LEARNING OUTCOMES - Upon completion of the Early Childhood Education certificate program, the student will be able to:

1. recognize and organize a physical environment that supports age appropriate development in young children.
2. plan and implement activities that meet the psychosocial, physical and cognitive needs of children in a child care setting.
3. develop strategies for maintaining a safe and healthy child care environment.

Associate of Applied Science

MISSION - The Associate of Applied Science degree in Early Childhood Education will provide the academic knowledge and skills for employment in child care or pre-kindergarten programs, and related family service fields. The degree will meet educational criteria for employment in publicly funded programs and prepare the student for possible transfer to other colleges and universities to meet higher educational and professional goals.

STUDENT LEARNING OUTCOMES - Students who complete the Associate of Applied Science degree in Early Childhood Education are expected to demonstrate that they:

1. know the subject matter appropriate to early childhood education.
2. are able to do the following:
   a. organize and implement developmentally appropriate environments for curriculum for young children.
   b. demonstrate supervisory and administrative skills including lead teaching, budgeting and the development of parent/teacher relationships.
   c. meet current educational criteria for employment in publicly funded early childhood programs.
   d. be aware of community child and family service agencies.
3. have developed an appreciation of the following:
   a. the importance of advocating for child and family related issues at the community and legislative level.
   b. the benefits of participation in early childhood professional organizations.

EARLY CHILDHOOD EDUCATION
Associate of Applied Science Program

The Early Childhood Education Associate of Applied Science degree provides the information, knowledge and skill training for persons caring for young children in a variety of child care facilities.

SALARY - $15,700 - $20,300/year *(middle range - Nevada)*
CAREER OUTLOOK - Faster than average growth through 2012
GOOD TO KNOW - Work hours often variable - full-time or part-time; potential to work from home

DEGREE REQUIREMENTS - 60 credits

Program Requirements - 36 credits		**Credits**
COT 105	Computer Literacy	3
or COT 202	Intro to Computer Applications	
or IS 101	Intro to Information Systems	
ECE 121	Parent-Caregiver Relationships	1
ECE 122	Observation Skills	1
ECE 129	Environments for Infants/Toddlers	1
ECE 200	The Exceptional Child	3
ECE 204	Principles of Child Guidance	3
ECE 231	Preschool Practicum: Early Childhood Lab	6
ECE 240	Administration of the Preschool	3
ECE 250	Intro to Early Childhood Education	3
ECE 251	Curriculum in Early Childhood	3
HDFS 201	Lifespan Human Development	3

Choose 6 credits from the following:

Other related Early Childhood Education courses		1-6
(ECE 123 and ECE 168 are recommended)		
HDFS 202	Introduction to Families	3
HDFS 232	Diversity & Young Child/Multicultural Perspective	3
Psychology courses (except Statistical Methods)		1-3

General Education Requirements* - 24 credits	**Credits**
English/Communications courses	6
(Must include a writing course; BUS 108 is recommended)	
Humanities/Social Science course	3
Mathematics course (BUS 109B is recommended)	3
Science course (HEC 121 is recommended)	3
U.S./Nevada Constitutions course	3
Electives	6

*A list of courses fulfilling general education requirements is on page 9.

EARLY CHILDHOOD EDUCATION
Certificate of Achievement

CERTIFICATE REQUIREMENTS - 30 credits
The following courses may be taken in any sequence.
However, ECE 131 is a recommended prerequisite.

Subject Requirements - 21 credits		**Credits**
ECE 121	Parent-Caregiver Relationships	1
ECE 122	Observation Skills	1
ECE 129	Environments for Infants/Toddlers	1
ECE 204	Principles of Child Guidance	3
ECE 231	Preschool Practicum: Early Childhood Lab	3
ECE 250	Intro to Early Childhood Education	3
ECE 251	Curriculum in Early Childhood	3
HDFS 201	Lifespan Human Development	3

Choose 3 credits from related courses in any of the following subject areas: Early

Childhood Education	1-3
Psychology	1-3
Human Development and Family Studies	1-3

General Education Requirements* - 9 credits	**Credits**
English/Communications courses	6
(Must include a writing course; BUS 108 is recommended)	
Mathematics course (BUS 109B is recommended)	3

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE

First Semester		Completed
ECE 121	1	☐
ECE 122	1	☐
ECE 129	1	☐
ECE 250	3	☐
HDFS 201	3	☐
English/Comm course	3	☐
General elective	3	☐
Second Semester		
ECE 200	3	☐
ECE 251	3	☐
Degree elective	3	☐
Gen Ed course	3	☐
Gen Ed course	3	☐

Third Semester		Completed
ECE 204	3	☐
ECE 231	6	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
Fourth Semester		
COT 105, 202 or IS 101	3	☐
ECE 240	3	☐
Degree elective	1	☐
Degree elective	1	☐
Degree elective	1	☐
Gen Ed course	3	☐
General elective	3	☐

ELECTRONICS TECHNOLOGY
Associate of Applied Science Program

The Electronics Technology program is designed to train students in the specialized areas of electronics. Those now working in the electronics field will be able to upgrade their knowledge, while those wishing to enter the field may take advantage of a large selection of course offerings that will ensure a solid understanding of electronics.

SALARY - $31,800 - $53,000/year *(middle range - Nevada)*
CAREER OUTLOOK - Mixed, with some slowdown, but possibility of jobs created by Internet popularity
GOOD TO KNOW - May work with switchboards & other equipment, or in laboratories & offices

DEGREE REQUIREMENTS - 60 credits

Program Requirements - 36 credits		**Credits**
CIT 132	Beginning Visual Basic	3
or		
CIT 133B	Beginning C++	
DFT 131	Introduction to Computer Aided Drafting	3
ET 131B	Electronics I	4-6
or		
ET 102B	Basic DC Electronics	
& ET 103B	Basic AC Electronics	
ET 132B	Electronics II	4-6
or		
ET 108B	Basic Semiconductors	
& ET 109B	Basic Electronic Circuits	
ET 134B	Basic Troubleshooting	2
ET 172B	Semi-Conductor Devices	4
ET 173B	Advanced Troubleshooting	2
ET 280B	Digital Electronics	4
ET 283B	Microprocessors & Controllers	4
ET 291B	Digital Troubleshooting	2
Choose 1-4 credits from the following:		
ET 174B	Circuit Simulation	2
ET 175B	Circuit Simulation II	2
ET 200B	Electronics Projects	.5-6
ET 284B	Microprocessors	4
ET 295B	Work Experience I	1-4
PHYS 100	Introduction to Physics I (or higher)	3-4
Other related electronics courses		1-4

General Education Requirements* - 24 credits	**Credits**
English/Communications courses	6
(BUS 107 & 108 recommended; Must include a writing course)	
Human Relations course (BUS 110B recommended)	1-3
Humanities/Social Science course	3
Math courses (MATH 126 or higher)	3
Science Course (Physics recommended)	3
U.S./Nevada Constitutions course	3
Electives	3-5

*A list of courses fulfilling general education requirements is on page 9.

ELECTRONICS TECHNOLOGY
Certificate of Achievement

CERTIFICATE REQUIREMENTS - 30-34 credits

Subject Requirements - 23-27 credits		**Credits**
DFT 131	Introduction to Computer Aided Drafting	3
ET 131B	Electronics I	4-6
or ET 102B	Basic DC Electronics	
& ET 103B	Basic AC Electronics	
ET 132B	Electronics II	4-6
or ET 108B	Basic Semiconductors	
& ET 109B	Basic Electronic Circuits	
ET 134B	Basic Troubleshooting	2
ET 172B	Semi-Conductor Devices	4
ET 173B	Advanced Troubleshooting	2
ET 283B	Microprocessors & Controllers	4

General Education Requirements* - 7 credits	**Credits**
English/Communications courses	3
(BUS 108 recommended; writing course required)	
Human Relations course (BUS 110B recommended)	1
Mathematics course (MATH 126 or higher)	3

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE

First Semester		Completed
DFT 131	3	☐
ET 131B or 102B & 103B	4-6	☐
ET 132B or 108B & 109B	4-6	☐
Gen Ed course	3	☐
Second Semester		
CIT 132B or CIT 133B	3	☐
ET 172B	4	☐
ET 280B	4	☐
Gen Ed course	3	☐
Gen Ed course	1-3	☐

Third Semester		Completed
ET 134B	2	☐
ET 291B	2	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
General electives	0-2	☐
Fourth Semester		
ET 173B	2	☐
ET 283B	4	☐
Degree electives	1-4	☐
Gen Ed course	3	☐
General electives	3	☐

ENGINEERING SCIENCE

Associate of Science Emphasis

The Engineering Science degree program is designed for students planning to obtain a four-year engineering degree. Engineering is the practical application of scientific theory and principles, and this program develops a strong foundation in mathematics and physical science and provides an introduction to the fundamental aspects of engineering which are developed more thoroughly in the remaining two years of the baccalaureate program. Students who complete the associate degree can transfer to other colleges or universities in many engineering disciplines including civil, chemical, computer, electrical, geological, mechanical, metallurgical, mining, computer science, and engineering physics. All courses in the Engineering Science program are approved for direct transfer to the Mackey School of Earth Sciences and Engineering at the University of Nevada, Reno, and up to 64 WNCC credits may be directly applied toward a baccalaureate degree.

SALARY - $54,400 - $83,700/year *(middle range - Nevada)*
CAREER OUTLOOK - Slow to brisk, depending on field - computer engineering to see fastest growth
GOOD TO KNOW - Work with computers; often work in teams

DEGREE REQUIREMENTS - 64 credits

Emphasis Requirements - 40 credits		**Credits**
CHEM 201**	General Chemistry for Scientists/Engineers I	4
CS 201	Computer Science I	3
MATH 181	Calculus I*	4
MATH 182	Calculus II	4
MATH 283	Calculus III	4
PHYS 180/180L*	Engineering Physics I*	4
PHYS 181/181L*	Engineering Physics II*	4

Choose 13 credits from the following:

CHEM 202**	General Chemistry for Scientists/Engineers II	4
CS 202	Computer Science II	3
EE 200	Network Analysis Laboratory	1
EE 201	Introduction to Network Analysis	3
EE 236	Introduction to Computer Engineering	4
EE 291	Computer Methods for Electrical Engineers	3
EE 296	Internship I	1
MATH 285	Differential Equations	3
ME 198	Cooperative Training Report	1
ME 241	Statics	3
ME 242	Dynamics	3
ME 298	Cooperative Training Report	1
METE 250	Elements of Material Science	3
PHYS 182/182L	Engineering Physics III	4

*Or higher
** CHEM 121 may be substituted for CHEM 201 and CHEM 122 may be substituted for CHEM 202.

General Education Requirements*- 24 credits	**Credits**
English/Communications courses	6
Fine Arts course	3
Humanities courses 6	
Social Science courses	6
U.S./Nevada Constitutions course	3

*A list of courses fulfilling general education requirements is on page 7.

SUGGESTED COURSE SEQUENCE

First Semester		Completed
CS 201	3	☐
English course	3	☐
MATH 181	4	☐
PHYS 180 & 180L	4	☐
Gen Ed course	3	☐
Second Semester		
CHEM 201 (121)	4	☐
English course	3	☐
MATH 182	4	☐
PHYS 181 & 181L	4	☐

Third Semester		Completed
MATH 283	4	☐
Degree electives	6	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
Fourth Semester		
Degree electives	7	☐
Gen Ed course	3	☐
Gen Ed courses	6	☐

Transfer Notes:

Electives: Students may be able to transfer up to 64 credits to the University of Nevada, Reno, toward requirements for a bachelor's degree in engineering, depending on the major chosen. Students pursuing the Computer Engineering track within Computer Science are advised to take EE 200 and EE 201 as electives. PHYS 182 is required for a bachelor's degree in Engineering Physics at UNR. CHEM 202 is required for a few of the majors leading to a bachelor's degree at the UNR School of Mines, including a bachelor's degree in Chemical Engineering and Metallurgical Engineering at UNR. Please consult the current UNR catalog or an advisor for the latest degree requirements.

For those planning to transfer to the College of Engineering at the University of Nevada, Reno, the following disciplines and electives are the most applicable:

- Civil Engineering: EE 201 (3), MATH 285(3), ME 241 (3), ME 242 (3), and maximum 3-4 credits from BIOL 190 (3), CHEM 202 (4), GEOL 101 (3), which will be transferred as restrictive electives.
- Environmental Engineering under Civil Engineering: ME 241 (3), CHEM 142 (3), CHEM 202 (4), BIOL 190 (3)
- Computer Science: CS 202 (3), CS 236 (4), EE 201 (3), EE 200 (1), PHYS 182 (4), MATH 285 (3). PHYS and MATH will transfer as general electives.
- Computer Science with Computer Engineering Track: CS 202 (3), CS 236 (4), EE 200 (1), EE 201 (3), and maximum four credits from MATH 285 (3) or PHYS 203 (4), which will transfer as general electives.
- Electrical Engineering: EE 200 (1), EE 201 (3), EE 231 (3), EE 236 (4), EE 298 (1), MATH 285(3), ME 241 (3).
- Electrical Engineering with Computer Engineering Track: CS 202 (3), EE 200 (1), EE 201 (3), EE 231 (3), MATH 285(3), ME 241 (3).
- Mechanical Engineering: EE 200 (1), EE 201 (3), MATH 285(3), ME 241 (3), ME 242 (3), METE 250 (3).
- Engineering Physics: CHEM 202 (4), CS 202 (3), EE 201 (3), MATH 285(3), PHYS 182 (4).

Note: Most engineering courses are not offered every semester, so technical and non-technical electives should be scheduled to permit the student to enroll in those engineering courses which are most pertinent to his/her preferred discipline of engineering.

FINE ARTS
Associate of Arts Emphasis

The Associate of Arts degree in Fine Arts is designed to provide training in the breadth of skills required for many careers in the fine arts field as well as to satisfy many of the lower division requirements for the Bachelor of Arts and Bachelor of Fine Arts degrees at most four-year institutions.

SALARY - $22,000 - $59,200/year *(middle range - Nevada)*
CAREER OUTLOOK - Average growth through 2012
GOOD TO KNOW - Many fine artists are self-employed; some have graduate degrees

DEGREE REQUIREMENTS – 60 credits

Program Requirements – 27 credits		**Credits**
ART 100	Visual Foundations	
or		
ART 107	Design Fundamentals (2-D)	
or		
GRC 107	Design Fundamentals (2-D)	3
ART 101	Drawing I	3
ART 160	Art Appreciation	3
ART 135	Photography I	
or		
*ART 141	Introduction to Digital Photography	
or		
*ART 243	Digital Imaging I	3
*ART 298	Portfolio Emphasis	3

Select one 3 credit course from the following 2-D courses:

ART 231	Painting I	
or		
*ART 127	Watercolor I	
or		
ART 124	Beginning Printmaking	3

Select one 3 credit course from the following 3-D courses:

ART 216	Sculpture I	
or		
ART 211	Ceramics I	
or		
*ART 115	Beginning Clay Sculpture	3

Select 6 credits from the following:

ART 102	Drawing II	3
*ART 105	Color Theory	3
*ART 115	Beginning Clay Sculpture	3
ART 124	Beginning Printmaking	3
ART 224	Intermediate Printmaking	3
*ART 127	Watercolor I	3
*ART 227	Watercolor II	3
ART 135	Photography	3
*ART 141	Introduction to Digital Photography I	3
*ART 142	Introduction to Digital Photography II	3
ART 201	Life Drawing	3
*ART 208	Fiber Arts	3
*ART 111	Introduction to Ceramics	3
ART 211	Ceramics I	3
ART 212	Ceramics II	3
ART 216	Sculpture I	3
ART 217	Sculpture II	3
*ART 218	Alternative Sculpture	3
ART 224	Intermediate Printmaking	3
*ART 227	Watercolor II	3
ART 231	Painting I	3
ART 232	Painting II	3
ART 235	Photography II	3
ART 236	Photography III	3
*ART 243	Digital Imaging I	3
*ART 244	Digital Imaging II	3
ART 260	Survey of Art History I	3
ART 261	Survey of Art History II	3

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
ART 100 Visual Communications or			3-D Required Course	3	☐
ART 107 Design Fundamentals	3	☐	Photography Required Course	3	☐
ART 101 Drawing I	3	☐	General Education Course	3	☐
General Education Course	3	☐	General Education Course	3	☐
General Education Course	3	☐	General Education Course	3	☐
General Education Course	3	☐			

Second Semester		Completed	*Fourth Semester*		Completed
2-D Required Course	3	☐	Art Recommended Course	3	☐
ART 160 Art Appreciation	3	☐	Art Recommended Course	3	☐
General Education Course	3	☐	ART 298 Portfolio Emphasis	3	☐
General Education Course	3	☐	General Education Course	3	☐
General Education Course	3	☐	General Education Course	3	☐

General Education Requirements – 33 credits**	**Credits**
English/Communications courses	6
Humanities courses	6
Mathematics course	3
Science courses	6
Social Science courses	9
U.S. Nevada Constitutions course	3

* Courses satisfy WNCC degree requirements but will not transfer directly to the University of Nevada, Reno as the same course. They may transfer as electives.
** A list of courses fulfilling general education requirements is on page 6.

GEOGRAPHIC INFORMATION SYSTEMS
Associate of Applied Science Program

WNCC's Geographic Information Systems (GIS) program offers students access to rapidly growing career tracks in agencies and industries using computer software packages to store and present information about resources, water, soils geography, land uses, development patterns, utilities and other mapping related functions of planning and management.

SALARY - $27,600 - $46,400/year *(middle range - Nevada)*
CAREER OUTLOOK - Faster than average growth through 2012
GOOD TO KNOW - Use analytic & technical skills; heavy computer use

DEGREE REQUIREMENTS - 60 credits

Program Requirements – 36 credits		Credits
GIS 109	Intro to GIS	3
GIS 110	Principles of Cartography	3
GIS 111	Intro to Remote Sensing	3
GIS 112	Intro to ArcInfo	3
GIS 170B	GIS Applications in Conservation Issues	1
GIS 171B	GIS Applications in Urban & Regional Planning	1
GIS 172B	Current Trends in GIS	1
GIS 205	GIS Applications	3
GIS 212	Intermediate ArcInfo	3
GIS 235	Spatial Analysis with GIS	3
GIS 250	GIS Database	3
GIS 270	GIS Extensions	3
GIS 280	Internship in GIS	3
GIS 290	Portfolios in GIS	3

General Education Requirements* - 24 credits	Credits
English/Communications courses	6
Human Relations course	1-3
Humanities/Social Science (GEOG 106 recommended)	3
MATH 126 or higher STAT 152 (STAT 152 recommended)	3
Science (GEOG 103 recommended)	3
U.S./Nevada Constitution	3
Electives	3-5

*A list of courses fulfilling general education requirements is on page 9.

GEOGRAPHIC INFORMATION SYSTEMS
Certificate of Achievement

CERTIFICATE REQUIREMENTS - 30 credits

Subject Requirements – 21 credits		Credits
GEOG 103	Physical Geography	3
GIS 109	Intro to GIS	3
GIS 110	Principles of Cartography	3
GIS 112	Intro to ArcView	3
GIS 205	GIS Applications	3
GIS 250	GIS Database	3
GIS 270	GIS Extensions	3

General Education Requirements* - 9 credits	Credits
English Writing Course	3
Human Relations (PSY recommended)	1-3
MATH 126 or higher or STAT 152	3
Electives	0-2

*A list of courses fulfilling general education requirements on page 11.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
GIS 109	3	☐	GIS 171B	1	☐
GIS 110	3	☐	GIS 212	3	☐
GIS 112	3	☐	GIS 235	3	☐
Gen Ed course	3	☐	GIS 280	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
			Gen Ed course	1-3	☐
Second Semester					
GIS 111	3	☐	*Fourth Semester*		
GIS 170B	1	☐	GIS 172B	1	☐
GIS 205	3	☐	GIS 250	3	☐
Gen Ed course	3	☐	GIS 270	3	☐
Gen Ed course	3	☐	GIS 290	3	☐
Gen Ed course	3	☐	Electives	3-5	☐

GEOSCIENCES
Associate of Science Emphasis

The Geosciences emphasis is designed to provide a strong foundation in earth and physical sciences, and will prepare students for transfer into many disciplines, including geology, geography, environmental science, and science teaching. All courses in the Geosciences emphasis are approved for direct transfer to University of Nevada, Reno, and up to 64 WNCC credits may be directly applied toward a baccalaureate degree.

SALARY - $49,800 - $78,500/year *(middle range - Nevada)*
CAREER OUTLOOK - Average growth through 2012
GOOD TO KNOW - Often requires graduate degrees for career advancement

DEGREE REQUIREMENTS - 60-62 credits

Emphasis Requirements – 30-32 credits		**Credits**
GEOG 103	Physical Geography	3
GEOG 104	Physical Geography Laboratory	1
GEOG 106	Cultural Geography	3
GEOL 101	Physical Geology	3
or GEOL 100	Earthquakes and Volcanoes	
GEOL 103	Physical Geology Laboratory	1
Choose one course:		
CHEM 100	Elementary Concepts of Chemistry	3
CHEM 121 (or CHEM 201)	General Chemistry I (for Scientists/Engineers)	4
CHEM 122 (or CHEM 202)	General Chemistry II (for Scientists/Engineers)	4
Choose one course:		
BIOL 100	General Biology for Non-Majors	3
BIOL 190	Introduction to Cell Biology	3
BIOL 191	Introduction to Organismal Biology	3
Choose 12-13 credits from the following:		
BIOL 190/L	Intro to Cell & Molecular Biology Lab	1
BIOL 191/L	Intro to Organismal Biology Lab	1
BIOL 192	Principles of Biological Investigation	2
ENV 100	Humans and The Environment	3
GEOG 117	Meteorology and Climatology	3
GEOL 102	Earth and Life Through Time	4
GEOL 127	Prehistoric Life	3
GEOL 132	Rocks and Minerals	3
GEOL 201	Geology of Nevada	3
GIS 109	Intro to Geographic Information Systems	3
GIS 205	GIS Applications	3
PHY 100	Introduction to Physics I	3
PHYS 151	General Physics I	4
or PHYS 180/180L	Engineering Physics I	
PHYS 152	General Physics II	4
or PHYS181/181L	Engineering Physics II	

SUGGESTED COURSE SEQUENCE

First Semester		Completed
CHEM 100 (121,122)	3	☐
ENG 101	3	☐
GEOG 103	3	☐
GEOG 104	1	☐
GEOG 106	3	☐
Gen Ed course	3	☐
Second Semester		
BIOL 100 (190, 191)	3	☐
ENG 102	3	☐
GEOL 101 (100)	3	☐
GEOL 103	1	☐
Gen Ed course	3	☐
Gen Ed course	3	☐

Third Semester		Completed
Emphasis Sciences (choose from)	6-7	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
Fourth Semester		
Emphasis Sciences (choose from)	6-7	☐
Gen Ed course	3	☐
Degree elective	3	☐

General Education Requirements* - 30 credits	**Credits**
English 101	3
English 102	3
Fine Arts course	3
Humanities courses	6
Mathematics	6
Social Science course	3
U.S./Nevada Constitution course	3
Elective	3

Note: Students planning to transfer to UNR or another university are encouraged to select courses that fulfill core and major requirements, which will vary depending on major. Please consult the current UNR or appropriate university catalog or an advisor for degree requirements.
*A list of courses fulfilling general education requirements is on page 7.

GRAPHIC COMMUNICATIONS
Associate of Applied Science Program

WNCC's Graphic Communications program is designed for students who want quick access to one of the career fields involving graphic arts and computer-aided design and layout.

SALARY - $30,800 - $50,200/year *(middle range - Nevada)*
CAREER OUTLOOK - Faster than average growth, due to expansion of the Internet & need for web page design
GOOD TO KNOW - Creativity is an important skill; more talented designers can earn more money; many graphic artists are self-employed

DEGREE REQUIREMENTS - 63 credits

Program Requirements - 45 credits		**Credits**
ART 101	Drawing I	3
ART/GRC 107	Design Fundamentals	3
GRC 109	Color and Design	3
GRC 110B	Rendering and Illustration	3
GRC 118	Computer Graphics/Print Media	3
GRC 119	Computer Graphics/Digital Media	3
GRC 144B	Electronic Layout and Typography	3
GRC 151B	Electronic Image Capture & Production	3
GRC 156	Computer Illustration	3
GRC 175	Web Design and Publishing I	3
GRC 183	Electronic Imaging	3
GRC 185	Computer Animation I	3
GRC 188	Web Animation and Interactivity I	3
GRC 294B	Professional Portfolio	3

Program Electives - (choose 3 credits from the following)

ART 115	Beginning Clay Sculpture	3
ART 124	Beginning Printmaking	3
ART 127	Watercolor	3
ART 135	Photography I	3
ART 141	Introduction to Digital Photography	3
ART 160	Art Appreciation	3
ART 211	Ceramics I	3
ART 216	Sculpture	3
ART 231	Painting I	3
ART 260	Survey of Art History I	3
ART 261	Survey of Art History II	3

General Education Requirements* - 18 credits	**Credits**
English/Communication courses	6
Human Relations course (PSY or SOC recommended)	3
Math course	3
Science course	3
U.S./Nevada Constitution course	3

*A list of courses fulfilling general education requirements is on page 9.

GRAPHIC COMMUNICATIONS
Certificate of Achievement

CERTIFICATE REQUIREMENTS - 30 credits

Subject Requirements - 21 credits		**Credits**
ART/GRC 107	Design Fundamentals	3
GRC 118	Computer Graphics/Print Media	3
GRC 119	Computer Graphics/Digital Media	3
GRC 144B	Electronic Layout and Typography	3
GRC 156	Computer Illustration I	3
GRC 175	Web Design and Publishing I	3
GRC 183	Electronic Imaging	3

General Education Requirements* - 9 credits	**Credits**
English/Communications course	3
Human Relations course (PSY or SOC recommended)	3
Mathematics course	3

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
ART/GRC 107	3	☐	GRC 156	3	☐
GRC 118	3	☐	GRC 175	3	☐
GRC 119	3	☐	GRC 183	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Second Semester			*Fourth Semester*		
ART 101	3	☐	GRC 185	3	☐
GRC 109	3	☐	GRC 188	3	☐
GRC110B	3	☐	GRC 294B	3	☐
GRC 151B	3	☐	Gen Ed course	3	☐
GRC 144B	3	☐	Gen Ed course	3	☐

Certificate of Achievement & Associate of Applied Science Degree in Graphic Communications - Mission & Outcomes

Certificate of Achievement

MISSION - The purpose of the Graphic Communications Certificate of Achievement is to provide basic knowledge and skills necessary to enter the graphic communications field.

STUDENT LEARNING OUTCOMES - Graphic Communications certificate program graduates should acquire basic skills and perform tasks necessary for employment or career enhancement.

Associate of Applied Science

MISSION - The Associate of Applied Science degree in Graphic Communications will provide employment-related knowledge and skills necessary to succeed in the graphic communications field. The degree will meet educational criteria for employment and prepare the student for possible transfer to other colleges and universities to meet higher educational and professional goals.

STUDENT LEARNING OUTCOMES - Associate of Applied Science in Graphic Communications graduates are expected to research design problems, demonstrate technical skills, implement design concepts, work collaboratively and perform successful presentations.

HEALTH INFORMATION TECHNOLOGY PROGRAM

A new program in Health Information Technology is being offered at WNCC. Health Information Technology combines a profession in health care with information technology. Health Information technicians maintain, collect, and analyze data crucial to the delivery of quality patient care. The HIT program will offer individuals the opportunity to pursue a business-related career that is an essential part of the health care industry. Starting in Fall 2005, WNCC will offer the following certificates and degree:

- Associate of Applied Science Degree in Health Information Technology*
- Certificate of Achievement in Medical Coding
- Certificate of Achievement in Medical Transcription
- Certificate of Achievement in Medical Unit Clerk

This program is also designed to prepare students for national certifications. For information, call (775) 445-4243.

HEALTH INFORMATION TECHNOLOGY*

Associate of Applied Science Program

* Pending approval of the NSHE Board of Regents

WNCC's Health Information Technology program will provide students with the technical component of providing a variety of health information services, as well as general education requirements.

SALARY - $17,700 - $36,100/year *(middle range - Nevada)*
CAREER OUTLOOK - High demand through 2012
GOOD TO KNOW - Specialties include diagnosis & procedure coding & tumor registrars

DEGREE REQUIREMENTS - 61 credits

Program Requirements - 41 credits		Credits
COT 202	Introduction to Computer Applications	3
HIT 100B	Introduction to ICD-9-CM	2
HIT 101B	Current Procedural Terminology	3
HIT 105B	Healthcare Dynamics	2
HIT 117B	Medical Terminology I	1
HIT 118B	Language of Medicine	3
HIT 165B	Pathophysiology I	3
HIT 170B	Computers in Health Care	3
HIT 180B	Introduction to Health Information Management	3
HIT 201B	Classification Systems for Health Care Data	3
HIT 205B	Structure & Organization of Health Info Systems	3
HIT 206B	Clinical Applications I	3
HIT 207B	Health Information Management	3
HIT 210B	Coding Applications I	3
HIT 245B	Quality Improvement Techniques	3

General Education Requirements* - 20 credits	Credits
English/Communications course (BUS 107 is recommended)	3
ENG 101 Composition I	3
Humanities/Social Sciences course	3
Mathematics course	3
Science course (BIOL 200, BIOL 206 required)	5
U.S./Nevada Constitutions course	3
(Human Relations included in HIT 105B)	

*A list of courses fulfilling general education requirements is on page 9.

HEALTH INFORMATION TECHNOLOGY

MEDICAL CODING

Certificate of Achievement

CERTIFICATE REQUIREMENTS - 34 credits

Subject Requirements - 28 credits		Credits
BIOL 200	Elements of Human Anatomy & Physiology	3
BIOL 206	Microbial Foundations	2
COT 202	Introduction to Computer Applications	3
HIT 100B	Introduction to ICD-9-CM	2
HIT 101B	Current Procedural Terminology	3
HIT 105B	Healthcare Dynamics	2
HIT 117B	Medical Terminology I	1
HIT 118B	Language of Medicine	3
HIT 180B	Introduction to Health Information Management	3
HIT 201B	Classification Systems for Health Care Data	3
HIT 210B	Coding Applications I	3

General Education Requirements* – 6 credits		Credits
ENG 101	Composition I	3
Mathematics course		3
(Human Relations included in HIT 105B)		

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE-Health Information Technology

First Semester		Completed	*Third Semester*		Completed
BIOL 200	3	☐	BIOL 206	2	☐
COT 202	3	☐	Eng 101	3	☐
HIT 100B	2	☐	HIT 165B	3	☐
HIT 101B	3	☐	HIT 205B	3	☐
HIT 117B	1	☐	HIT 207B	3	☐
HIT 118B	3	☐	HIT 245B	3	☐
Second Semester			*Fourth Semester*		
HIT 105B	2	☐	BUS 107	3	☐
HIT 170B	3	☐	HIT 206B	3	☐
HIT 180B	3	☐	Gen Ed course	3	☐
HIT 201B	3	☐	Gen Ed course	3	☐
HIT 210 B	3	☐	Gen Ed course	3	☐

Certificate of Achievement & Associate of Applied Science Degree in Health Information Technology - Mission & Outcomes

MISSION - The purpose of the Associate of Applied Science degree is to provide employment-related knowledge and skills necessary to succeed in a chosen field of study.

STUDENT LEARNING OUTCOMES - Students who complete programs in occupational areas are expected to demonstrate that they -

Know:
- the subject matter appropriate to the emphasis of the degree

Are able to:
- acquire skills and perform tasks necessary for employment or career enhancement
- present themselves effectively to a potential employer
- demonstrate effective communication skills appropriate to the chosen occupational field
- utilize appropriate resources to remain current in the chosen occupational field

Have developed:
- an appreciation of the importance of social, ethical, legal and diversity issues.

HEALTH INFORMATION TECHNOLOGY
MEDICAL TRANSCRIPTION
Certificate of Achievement

CERTIFICATE REQUIREMENTS - 34 credits

Subject Requirements – 28 credits		Credits
BIOL 200	Elements of Human Anatomy & Physiology	3
BIOL 206	Microbial Foundations	2
COT 116B	Medical Filing	2
COT 150B	Introduction to WordPerfect	3
or		
COT 151B	Introduction to Microsoft Word	
COT 202	Introduction to Computer Applications	3
COT 216	Intermediate Word Processing	3
HIT 105B	Healthcare Dynamics	2
HIT 117B	Medical Terminology I	1
HIT 118B	Language of Medicine	3
HIT 120B	Medical Transcription I	3
HIT 121B	Medical Transcription II	3

General Education Requirements* – 6 credits		Credits
ENG 101	Composition I	3
Mathematics course		3
(Human Relations included in HIT 105B)		

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE-Medical Transcription

First Semester	Completed	*Second Semester*	Completed
BIOL 200	3 ☐	BIOL 206	2 ☐
COT 150B or COT 151B	3 ☐	COT 116B	2 ☐
ENG 101	3 ☐	COT 202	3 ☐
HIT 117B	1 ☐	COT 216	3 ☐
HIT 118B	3 ☐	HIT 105B	2 ☐
Math course	3 ☐	HIT 120B	3 ☐
		HIT 121B	3 ☐

SUGGESTED COURSE SEQUENCE-Medical Coding

First Semester	Completed	*Second Semester*	Completed
BIOL 200	3 ☐	BIOL 206	2 ☐
COT 202	3 ☐	ENG 101	3 ☐
HIT 100B	2 ☐	HIT 180B	3 ☐
HIT 101B	3 ☐	HIT201B	3 ☐
HIT 105B	2 ☐	HIT 210 B	3 ☐
HIT 117B	1 ☐	Math course	3 ☐
HIT 118B	3 ☐		

HEALTH INFORMATION TECHNOLOGY
MEDICAL UNIT CLERK
Certificate of Achievement

CERTIFICATE REQUIREMENTS - 34 credits

Subject Requirements – 28 credits		Credits
BIOL 200	Elements of Human Anatomy & Physiology	3
BIOL 206	Microbial Foundations	2
COT 116B	Medical Filing	2
COT 150B	Introduction to WordPerfect	3
or		
COT 151B	Introduction to Microsoft Word	
COT 202	Introduction to Computer Applications	3
COT 216	Intermediate Word Processing	3
HIT 105B	Healthcare Dynamics	2
HIT 117B	Medical Terminology I	1
HIT 118B	Language of Medicine	3
HIT 180B	Introduction to Health Information Management	3
HIT 206B	Clinical Applications I	3

General Education Requirements* – 6 credits		Credits
ENG 101	Composition I	3
Mathematics course		3
(Human Relations included in HIT 105B)		

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE-Medical Unit Clerk

First Semester	Completed	*Second Semester*	Completed
BIOL 200	3 ☐	BIOL 206	2 ☐
COT 116B	2 ☐	COT 202	3 ☐
COT 150B		COT 216	3 ☐
or COT 151B	3 ☐	HIT 180B	3 ☐
ENG 101	3 ☐	HIT 206B	3 ☐
HIT 105B	2 ☐	Math course	3 ☐
HIT 117B	1 ☐		
HIT 118B	3 ☐		

MACHINE TOOL TECHNOLOGY
Associate of Applied Science Program

The Machine Tool Technology program provides training for students who plan to enter the machine trades field and upgrading for those in the field who desire additional skills. The program is competency based, allowing students to enter at their own level and progress at their own pace. Hands-on learning is stressed, allowing students to take as many laboratory hours as possible.

SALARY - $29,000 - $44,000/year *(middle range - Nevada)*
CAREER OUTLOOK - Slower than average growth, but good jobs available due to difficulty finding skilled workers
GOOD TO KNOW - Often work with computerized numerical control (CNC) machines

DEGREE REQUIREMENTS - 60 credits

Program Requirements - 39-41 credits		**Credits**
DFT 124B	Blueprint Reading for Industry	3
MATH	Mathematics course (MATH 110B recommended)	3
MTT 105B	Machine Shop I	3
MTT 110B	Machine Shop II	3
MTT 230B	Computer Numerical Control I	4
MTT 232B	Computer Numerical Control II	4
MTT 250B	Machine Shop III	3
MTT 260B	Machine Shop IV	3

Choose 13-15 credits from the following:

Drafting courses		1-6
MTT 106B	Machine Shop Practice I	2
MTT 107B	Screw Machine I	3
MTT 111B	Machine Shop Practice II	2
MTT 150B	Metallurgy	3
MTT 151B	Non-Destructive Examination	3
MTT 251B	Machine Shop Practice III	2
MTT 261B	Machine Projects	1-6
MTT 262B	Machine Shop Practice IV	2
MTT 270B	Mold Making I	3
MTT 271B	Mold Making II	3
MTT 292B	Computer-Aided Manufacturing I	1-4
MTT 293B	Computer-Aided Manufacturing II	1-4
MTT 295B	Work Experience	1-6
Any other MTT courses		1-6
Welding courses		1-6

General Education Requirements* - 19-21 credits	**Credits**
English/Communications courses	6
(Must include a writing course; BUS 108 recommended)	
Human Relations course	1-3
Humanities/Social Science course	3
Science course	3
U.S./Nevada Constitution course	3
Electives	3-5

*A list of courses fulfilling general education requirements is on page 9.

MACHINE TOOL TECHNOLOGY
Certificate of Achievement

CERTIFICATE REQUIREMENTS - 30 credits

Subject Requirements - 20 credits		**Credits**
DFT 124B	Blueprint Reading for Industry	3
MTT 105B	Machine Shop I	3
MTT 106B	Machine Shop Practice I	2
MTT 110B	Machine Shop II	3
MTT 111B	Machine Shop Practice II	2
MTT 230B	Computer Numerical Control I	4
Related machine shop courses		3

General Education Requirements* - 10 credits	**Credits**
English/Communications	6
(Must include a writing course; BUS 108 is recommended)	
Human Relations course	1
Mathematics course	3

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
DFT 124B	3	☐	MTT 230B	4	☐
MTT 105B	3	☐	MTT 250B	3	☐
Gen Ed course	3	☐	Degree elective	3	☐
Gen Ed course	3	☐	Degree elective	2-3	☐
Math course	3	☐	Gen Ed course	3	☐
Second Semester			*Fourth Semester*		
MTT 110B	3	☐	MTT 232B	4	☐
Degree elective	3	☐	MTT 260B	3	☐
Degree elective	3	☐	Degree elective	2-3	☐
Gen Ed course	3	☐	Gen Ed course	1-3	☐
Gen Ed course	3	☐	General electives	3-5	☐

MANAGEMENT
Associate of Applied Science Emphasis

The Management emphasis is designed to provide a foundation for employment in a variety of business/managerial positions.

SALARY - $30,500 - $46,800/year *(middle range - Nevada)*
CAREER OUTLOOK - More than 600 annual openings in Nevada, mostly created by business growth or vacancies
GOOD TO KNOW - Often requires hiring, training & supervising employees, solving problems & administrative duties

DEGREE REQUIREMENTS – 60 credits

Business Core Requirements - 24 credits		**Credits**
ACC 135B	Bookkeeping I	3
and ACC 136B	Bookkeeping II	3
or ACC 201	Financial Accounting	
and ACC 202	Managerial Accounting	
BUS 101	Introduction to Business	3
or MGT 103	Small Business Management	
BUS 273	Business Law	3
COT 202	Introduction to Computer Applications	3
or IS 201	Computer Applications	
ECON 102	Principles of Microeconomics	3
or ECON 103	Principles of Macroeconomics	
IS 101	Introduction to Information Systems	3
MGT 201	Principles of Management	3

Emphasis Requirements – 15 credits		**Credits**
MGT 212	Leadership and Human Relations	3
Choose 12 credits from the following:		
BUS 101	Introduction to Business	3
BUS 150B	Personal Finance	3
ECON 102	Principles of Microeconomics	3
ECON 103	Principles of Macroeconomics	3
MGT 103	Small Business Management	3
MGT 235	Organizational Behavior	3
MGT 247B	Industrial Management	3
MGT 283	Personnel Administration	3
MKT 111	Introduction to Merchandising	3
MKT 115	Purchasing	3
MKT 127	Introduction to Retailing	3
MKT 210	Marketing Principles	3
MKT 211	Introduction to Professional Sales	3
MKT 262	Introduction to Advertising	3
PSY 206	Business & Industrial Psychology	3

General Education Requirements* - 21 credits	**Credits**
English/ Communications courses (BUS 107 and BUS 108 recommended; must include a writing course)	6
BUS 109B or higher level mathematics course	3
Science course	3
U.S./Nevada constitutions course	3
General elective	6

*A list of courses fulfilling general education requirements is on page 9.

NOTE: See also Retail Management.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
ACC 135B or 201	3	☐	IS 101	3	☐
BUS 101 or MGT 103	3	☐	MGT 212	3	☐
BUS 109B or higher	3	☐	Degree elective	3	☐
Degree elective	3	☐	Degree elective	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Second Semester			*Fourth Semester*		
ACC 136B or 202	3	☐	BUS 273	3	☐
ECON 102 or 103	3	☐	COT 202 or IS 201	3	☐
MGT 201	3	☐	Gen Ed course	3	☐
Degree elective	3	☐	General elective	3	☐
Gen Ed course	3	☐	General elective	3	☐

MATHEMATICS
Associate of Science Emphasis

The Mathematics emphasis has been designed to place students on a career track toward mathematics, either as a university major or as preparation for a teaching career. An associate degree in mathematics offers a student flexibility in future academic endeavors and career opportunities.

SALARY - $37,700 - $86,437/year *(median range - U.S.)*
CAREER OUTLOOK - Need for math teachers & professors is expected to increase faster than average
GOOD TO KNOW - Often requires graduate degrees for career advancement

DEGREE REQUIREMENTS - 60 credits

Emphasis Requirements - 30 credits		**Credits**
MATH 181	Calculus I	4
MATH 182	Calculus II	4
MATH 283	Calculus III	4
Choose 6 credits from the following: Math courses numbered 120 or higher, except MATH 122 & 123. One class must be higher than MATH 200. STAT 152 is also accepted.		6
Choose 12 credits from at least two subject areas in the courses listed under Science Requirements for the Associate of Science degree. Must include a minimum of four credits of lecture and laboratory from the same subject area.		12

General Education Requirements* - 30 credits	**Credits**
English/Communications course (Must include a writing course)	6
Fine Arts course	3
Humanities courses 6	
Social Science courses	6
U.S./Nevada Constitutions course	3
Electives	6

*A list of courses fulfilling general education requirements is on page 7.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
MATH 181	4	☐	MATH 283	4	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Gen Ed course	3	☐	General elective	3	☐
Science elective	4	☐	Science elective	4	☐
Second Semester			*Fourth Semester*		
MATH 182	4	☐	CHEM 101 w/lab	4	☐
Gen Ed course	3	☐	General elective	3	☐
Gen Ed course	3	☐	Math elective	3	☐
Gen Ed course	3	☐	Math elective	3	☐
Science elective	4	☐			

MUSICAL THEATRE
Associate of Arts Emphasis

The Associate of Arts degree in Musical Theatre is designed to provide training in the breadth of skills required for musical theatre performance, as well as satisfy many of the lower division requirements for the Bachelor of Arts degree in musical theatre at most four-year institutions.

SALARY - $31,600 - $68,100/year *(middle range - Nevada)*
CAREER OUTLOOK - Average growth
GOOD TO KNOW - Competition for jobs will be strong; many actors have other part-time employment or teach acting classes

DEGREE REQUIREMENTS - 64 credits

Program Requirements - 34 credits		**Credits**
THTR 105	Introduction to Acting I	3
THTR 199	Play Structure and Analysis I	3
THTR 204	Theater Technology I	3
THTR 205	Introduction to Acting II	3
MUS 203	Music Theory I	3
Piano Proficiency		0
Total of 4 credits: MUSA 145/245 Voice @ 1 credit		4
Select 4 credits from the following:		
DAN 132	Beginning Jazz Dance	1
DAN 135	Beginning Ballet	1
DAN 144	Beginning Tap Dance	1
DAN 232	Intermediate Jazz Dance	1
DAN 244	Intermediate Tap Dance	1
Total of four semesters participation in college productions:		
MUS 176/276	Musical Theatre Practicum	8
Select from: MUS 121, THTR 100		3

General Education Requirements* - 30 credits	**Credits**
English/Communications Courses	6
Humanities Course s	6
Mathematics Course	3
Science Courses	6
Social Science Courses	6
U.S./Nevada Constitutions Course	3

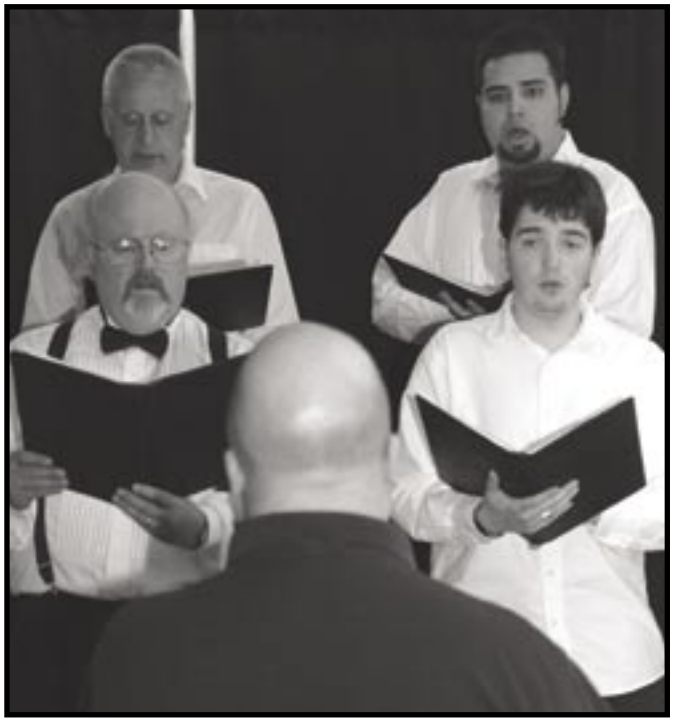
(The fine arts requirement is fulfilled by the program requirement)

* A list of courses fulfilling general education requirements is on page 6.

SUGGESTED COURSE SEQUENCE

First Semester		Completed
Dance elective	1	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
MUS 176/276	2-3	☐
MUSA 145	1	☐
Piano Proficiency	0	☐
THTR 105	3	☐
Second Semester		
Dance elective	1	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
MUSA 145	1	☐
MUS 176/276	2-3	☐
MUS 203	3	☐
THTR 205	3	☐

Third Semester		Completed
Dance elective	1	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
MUSA 245	1	☐
MUS 121 or THTR 100	3	☐
MUS 176/276	2-3	☐
THTR 204	3	☐
Fourth Semester		
Dance elective	1	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
MUSA 245	1	☐
MUS 176A/276	2-3	☐
THTR 199	3	☐



ASSOCIATE DEGREE NURSING PROGRAM

WNCC's associate degree nursing program is intended for students seeking a career as a registered nurse. The curriculum is sequenced and progresses in complexity. Integration of knowledge from the bio/psycho/social sciences, humanities, and nursing is intended to prepare graduates to pass the national licensure examination and to function as registered nurses in diverse care settings.

Upon completion of the associate degree nursing program, students will be awarded an Associate of Applied Science degree. Graduates are eligible to sit for the National Council Licensing Examination for Registered Nurses (NCLEX-RN). Students completing the first year of the nursing program and NURS 162 are eligible to sit for the National Council Licensing Examination for Practical Nurses (NCLEX-PN).

The associate degree nursing program is approved by the Nevada State Board of Nursing and is accredited by the National League for Nursing Accrediting Commission (NLNAC). The address of the NLNAC is 61 Broadway Street, 33rd floor, New York, NY 10016 and the telephone number is (800) 669-9656. Applicants are advised that eligibility for licensure may be affected by the existence of a criminal record, a history of alcohol or drug abuse, and mental or physical illness that may interfere with the practice of nursing. Applicants are encouraged to contact the Office of Nursing and Allied Health or the Nevada State Board of Nursing should there be a concern regarding eligibility for licensure.

A limited number of qualified students are admitted as first semester students utilizing the selection criteria outlined below. The nursing program requires that pre- and corequisite courses be completed with a grade of "C" or better. Students admitted to the program are required to attend mandatory orientation sessions scheduled for the late spring or early summer and prior to the start of classes.

Associate of Applied Science in Nursing - Mission & Outcomes

MISSION - The mission of the nursing program at Western Nevada Community College is to meet the nursing educational needs of the service area. The program prepares qualified students to function as entry-level registered nurses and transfer to higher degree programs.

Graduates are prepared to function in a variety of health care settings, providing culturally sensitive, holistic nursing care to individuals and families across the life span. The nursing faculty supports graduate competency in an evolving and complex health care environment by facilitating the students' development of clinical judgment, promoting professional behaviors, and fostering the value of lifelong learning.

STUDENT LEARNING OUTCOMES - The graduate will demonstrate the ability to:

1. Utilize the nursing process in the provision of care to patients guided by a variety of theoretical frameworks.
2. Apply critical thinking and problem-solving skills by integrating knowledge derived from the bio/psycho/social sciences, humanities, and nursing in the provision of patient care in a variety of health care settings.
3. Employ verbal and non-verbal communication skills in interactions with patients, families and health care providers to promote adaptation.
4. Acquire, apply and value knowledge necessary to demonstrate safe, competent, practice within the profession's ethical and legal framework.
5. Demonstrate accountability for one's own nursing practice and continued professional development.
6. Practice as a professional nurse by integrating the three roles of the associate degree nurse to promote health and assist patients to achieve their highest level of adaptation.

Selective Admission Requirements:

- Apply for admission to Western Nevada Community College and the WNCC Nursing Program. Nursing program applications are available at each campus and on the WNCC Nursing & Allied Health web site.
- Provide proof of high school graduation or successful completion of the General Education Development (GED) exam.
- Show evidence of completion of high school chemistry or CHEM 121 within the last ten years.
- Complete all prerequisite courses prior to admission into the nursing program. (Note: The statute of limitations for all science courses is ten years.)
- Pass the Test of Essential Academic Skills (TEAS) with a minimum score of 40 percent for each of the four subtests (not required for LPN's applying to the second year).
- Submit completed application with supporting documents and required transcripts, as appropriate, to the Office of Admissions and Records in the time frame delineated on the nursing program application.

Other Important information:

Students who completed nursing courses more than two years ago but no more than five years prior to the date of application to the nursing program are required to demonstrate currency of nursing knowledge through a competency examination for each course previously completed. A score of 75 percent or more is required for each examination. Nursing courses taken more than five years prior to date of application will not be accepted.

- Nursing learning activities are scheduled on and off campus, days, evenings, and weekends.
- Courses are Web CT Enhanced, necessitating students have internet access, basic computer, word processing and internet skills.
- Clinical experiences take place at long-term health care facilities, acute care hospitals and community settings, including clinics and day care centers.
- A grade of C (75 percent) or better is required in all nursing courses.
- Students who have been expelled from a nursing program, or who are no longer eligible for admission to that program, are not eligible for admission to WNCC's nursing program.
- Students not admitted to the nursing program must reapply to be considered for admission the following year.
- Documentation and currency of the following is required after acceptance into the nursing program and prior to the start of classes:
  1. An acceptable physical examination, and required immunizations,
  2. Health Care Provider/BLS CPR through the American Heart Association or the American Red Cross (card required),
  3. Health insurance (card required).

Admission/Selection Criteria

Category	Maximum Points Possible (in parentheses)			
Science GPA (BIOL & CHEM pre- and corequisite courses)	2.0-2.49 (2)	2.5-3.0 (4)	3.1-3.49 (6)	3.5-4.0 (8)
GPA (pre- and corequisite courses)	2.0-2.49 (1)	2.5-3.0 (2)	3.1-3.49 (3)	3.5-4.0 (4)
Test of Essential Academic Skills (TEAS)	40-54 (1)	55-69 (2)	70-84 (3)	85-99 (4)

(A minimum cut score of 40 percent is required for each subtest) (Not required for LPNs or students seeking transfer with grades of C or better in nursing; points will not be awarded)

Completion of corequisite credits	3-6 credits (1)	7-9 credits (2)
Health related experience(1)		
Maximum Possible Points:		**19**

Admission will be offered to the applicants on the list with the highest priority points. Applicants not selected will not be carried forward and must reapply for consideration.

NURSING
Associate of Applied Science Program

SALARY - $49,300 - $65,600/year *(middle range - Nevada)*
CAREER OUTLOOK - Above average growth, especially in home health care & nursing homes
GOOD TO KNOW - Hospital nurses tend to earn more than nurses in doctors' offices; may include working days, nights, weekends or holidays

DEGREE REQUIREMENTS: 72 credits
Pre-nursing students must have completed one year of high school chemistry or must take CHEM 121 and pass the Test of Essential Academic Skills. For programs that require BIOL 223 & BIOL 224, both courses must be completed at the same college or university.

Prerequisite Courses - 21 credits		Credits
Behavioral science course (PSY 101 or SOC 101 required)		3
BIOL 223	Human Anatomy & Physiology I	4
BIOL 224	Human Anatomy & Physiology II	4
BIOL 251	General Microbiology	4
ENG 101	Composition I	3
MATH 120, 126 or higher		3

FIRST YEAR

Fall Semester Courses - 14 credits		Credits
NURS 136	Foundations of Nursing Science	6
NURS 141	Foundations of Pharmacology in Nursing	2
NURS 200	Health Assessment of the Individual	3
*ENG 102	Composition II	3

Spring Semester Courses - 14 credits		Credits
*SOC 101 or PSY 101 or humanities/social science course		3
NURS 155	Childbearing/Childrearing Family Health	4
NURS 159	Clinical Nursing Across the Lifespan	7

SECOND YEAR

Fall Semester Courses - 13 credits		Credits
NURS 265	Alterations in the Childbearing/Childrearing Family	5
NURS 270	Advanced Clinical Nursing I	5
**US/NV Constitutions (PSC 103, HIST 111 or CH 203 recommended)		3

Spring Semester Courses - 10 credits		Credits
NURS 280	Alterations in Psychosocial Adaptation	3
NURS 282	Advanced Clinical Nursing II	5
NURS 284	Role of the ADN Manager of Care	2

*Indicates corequisite
**A list of courses fulfilling general education requirements is on page 9.

OPTIONAL PRACTICAL NURSING PREPARATION
Certificate of Achievement

If the student successfully completes the first year of the program, including NURS 162 - Transitions to Practical Nursing course (3 credits), the student may receive a Certificate of Achievement and is eligible to take the National Council Licensing Examination - Practical Nurse (NCLEX-PN).
Note: NURS 162 is not required for progression to the second year.

CERTIFICATE REQUIREMENTS: 52 credits

Spring Course		Credits
NURS 162	Transitions to Practical Nursing	3
(Required for Certificate of Achievement)		

LICENSED PRACTICAL NURSE
Licensed practical nurses who have graduated from an accredited school of practical nursing may apply for advanced standing in the nursing program at WNCC. If the school is one other than WNCC, the student must have taken a practical nursing curriculum equivalent to that taught at WNCC, or must take the necessary classes to ensure an equivalent academic preparation. Credits will be evaluated for equivalency in the Office of Admissions and Records and by the appropriate nursing faculty as necessary.

In addition:
- Applicants are required to hold or be eligible to hold a current practical nursing license in Nevada. Applicants with a restricted LPN license will be evaluated on an individual basis.

- Applicants must submit evidence of current employment as an LPN with the nursing application. If applicants are not currently employed as an LPN they must submit a letter explaining previous professional employment history. Eligibility of applicants not currently employed as an LPN will be considered by the Admissions Committee on a case-by-case basis. Additional employment documentation may be required.

- Applicants with a restricted LPN license will be evaluated on an individual basis for possible acceptance.

- NURS 200 - Health Assessment of the Individual is a required course. Students are strongly encouraged to take NURS 200 prior to entering the second year of the program. NURS 200 is a required third semester course for students who lack this course.

- Students must repeat or challenge by examination first year nursing coursework over ten years old. The challenge test utilized is the NLN Acceleration Challenge Exam (ACE) I - PN to RN. The student must achieve a 75 percent or better on the examination.

- LPN students whose science coursework is more than ten years old may take a competency examination. Please consult with the Office of Nursing & Allied Health for additional information.

Admission to the second year is based on:
- Qualifying under the selective admission requirements.

- Completion of all first year pre- and corequisite courses (note exception for NURS 200). Science coursework over ten years old must also be repeated or successfully challenged by a competency exam.

- Successful completion of NURS 199B -- ADN Transition.

- Available space in the program.

In the event that more applications are received than space available, decisions regarding admissions will be made based upon the selection criteria used for first semester applicants (excluding TEAS scores).

Students Requesting Transfer & Re-admission into the Nursing Program
A limited number of qualified transfer and re-admission students are admitted into the nursing program on a space available basis. Please consult with the Office of Nursing and Allied Health for information regarding the process.

OFFICE TECHNOLOGY
Associate of Applied Science Program

The Office Technology program is designed for those seeking specific career skills in office environments. Students choose one of two specializations to customize their program: Administrative Assistant or Desktop Publishing.

SALARY - $27,900 - $44,800/year *(middle range - Nevada)*
CAREER OUTLOOK - Variable; rapid growth in temporary worker agencies
GOOD TO KNOW - Good communication skills critical; use computers heavily; may supervise office staff

DEGREE REQUIREMENTS - 60 credits

Program Requirements - 39 credits		**Credits**
Strongly recommend 40 wpm typing skills for successful degree completion.		
ACC 135B	Bookkeeping I	3
ACC 136B	Bookkeeping II	3
or ACC 201	Financial Accounting	
BUS 101	Introduction to Business	3
CIT 161B	Essentials of Information Security	3
COT 204	Using Windows	3
COT 290B	Internship in Computer Office and Technology	3
IS 101	Introduction to Information Systems	3
IS 201	Introduction to Computer Applications	3
Choose 3 credits from the following:		
CIT 201B	Word Certification Preparation	1-3
CIT 202B	Excel Certification Preparation	1-3
CIT 203B	Access Certification Preparation	1-3
CIT 204B	Powerpoint Certification Preparation	1-3
CIT 206B	MS Microsoft Outlook Certification Preparation	1-3

Specialization Requirements - 12 credits
Choose 12 credits from one of the following two specializations:

Administrative Assistant		**Credits**
ACC 220	Microcomputer Accounting Systems	3
CIT 205B	MS Microsoft Project Certification Preparation	1
CIT 206B	MS Microsoft Outlook Certification Preparation	1
COT 140B	Adobe Acrobat	1
COT 216	Intermediate Word Processing	3
COT 222	Desktop Publishing with Word Processing	3

Desktop Publishing		
CIT 151	Beginning Web Development	3
or GRC 175	Web Design and Publishing I	
COT 222	Desktop Publishing with Word Processing	3
COT 223	Advanced Desktop Publishing	3
GRC 144B	Electronic Layout and Typography	3
or ART 243	Digital Imaging I	
or COT 217B	Office Publications	

General Education Requirements* - 21 credits	**Credits**
English/Communications courses	6
(Must include a writing course; BUS 107 & 108 recommended)	
Humanities/Social Science course	3
Human Relations course (MGT 201, 212 or 283 recommended)	3
Mathematics course (BUS 109B recommended)	3
Science course	3
U.S./Nevada Constitutions course	3

Note: ACC 202 is acceptable in lieu of ACC 135B
*A list of courses fulfilling general education requirements is on page 9.

SUGGESTED COURSE SEQUENCE

First Semester	Completed	*Third Semester*	Completed
ACC 135B	3 ☐	IS 201	3 ☐
BUS 101	3 ☐	Gen Ed course	3 ☐
IS 101	3 ☐	Gen Ed course	3 ☐
Gen Ed course	3 ☐	Gen Ed course	3 ☐
Gen Ed course	3 ☐	Specialty choice	3 ☐
Second Semester		*Fourth Semester*	
ACC 136B or ACC 201	3 ☐	CIT 161B	3 ☐
COT 204	3 ☐	COT 290B	3 ☐
CIT 201B - 204B or 206B	3 ☐	Gen Ed course	3 ☐
Gen Ed course	3 ☐	Specialty course	3 ☐
Specialty choice	3 ☐	Specialty choice	3 ☐

Associate of Applied Science Degree in Office Technology - Mission & Outcomes

Office Technology Degree: Provides office technology courses for traditional college students and transitional employees. The program will prepare students with the necessary skills for entry level employment in a professional business office environment using current software applications. Some courses can transfer to baccalaureate programs as a result of common course numbering.

MISSION - The purpose of the Associate of Applied Science degree is to provide employment-related knowledge and skills necessary to succeed in a chosen field of computer technology and/or applications study.

STUDENT LEARNING OUTCOMES - Students who complete programs in occupational areas are expected to demonstrate that they -

Know:
- practices and procedures required for entry level employment,
- entry level skill set, and
- the theoretical principles relevant to their field of study.

Are able to:
- test successfully on competencies required to pass industry standard certification exams,
- communicate effectively and appropriately, in oral and written form,
- locate, evaluate and properly utilize the tools and resources appropriate to a computer technology professional,
- acquire skills and perform tasks necessary for employment or career enhancement,
- demonstrate effective communication and computation skills appropriate to the chosen occupational field.

Appreciate and value:
- appropriate and effective presentation of themselves to potential employers, and
- standards of social, ethical, legal, accessibility, and diversity issues of their work environment.

PARALEGAL STUDIES
Associate of Applied Science Program

The Paralegal Studies program is designed to train students in the legal system, its functions, and the role of the paralegals in the practice of law. Paralegals are members of a legal team who work under the supervision of attorneys. The professional services provided by paralegals have made them a respected addition to the staffs of law firms, corporations, banks, insurance companies and government agencies.

SALARY - $27,500 - $43,600/year *(middle range - Nevada)*
CAREER OUTLOOK - Faster than average growth through 2012
GOOD TO KNOW - Good research, organizational & analytical skills required

DEGREE REQUIREMENTS - 60 credits

Program Requirements - 42 credits		**Credits**
CRJ 222	Criminal Law and Procedure	3
LAW 101	Fundamentals of Paralegalism I	3
LAW 203	Real Property	3
LAW 204	Torts	3
LAW 205	Contracts	3
LAW 206B	Case Analysis	1
LAW 231	Civil Procedure	3
LAW 261	Legal Research I	3
LAW 262	Legal Writing I	3
LAW 263	Ethics	2
LAW 265	Legal Research II	3

Choose 12 credits from the following:

ACC 135B	Bookkeeping I	3
BUS 273	Business Law I	3
COT 202	Introduction to Computer Applications	3
CRJ 164	Principles of Investigation	3
CRJ 225	Criminal Evidence	3
LAW 198B	Special Topics in the Law	1-3
LAW 251	Bankruptcy	3
LAW 252	Family Law	3
LAW 255	Probate, Trusts, and Guardianship Law	3
LAW 295	Supervised Field Experience	3

General Education Requirements* - 18 credits		**Credits**
ENG 101	Composition I	3
ENG 102	Composition II	3
Mathematics course		3
Science course		3
U.S./Nevada Constitutions course		3
Electives		3

*A list of courses fulfilling general education requirements is on page 9.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
ENG 101	3	☐	LAW 205	3	☐
LAW 101	3	☐	LAW 231	3	☐
General elective	3	☐	LAW 262	3	☐
Gen Ed course	3	☐	Degree elective	3	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
Second Semester			*Fourth Semester*		
ENG 102	3	☐	LAW 203	3	☐
CRJ 222	3	☐	LAW 265	3	☐
LAW 204	3	☐	Degree elective	3	☐
LAW 206B	1	☐	Degree elective	3	☐
LAW 261	3	☐	Degree elective	3	☐
LAW 263	2	☐			

Associate of Applied Science Degree in Paralegal Studies - Mission & Outcomes

Mission - The Associate of Applied Science degree in Paralegal Studies will provide the academic knowledge and skill training necessary for employment in a variety of legal settings, including: law firms, corporations, banks, insurance companies and government agencies. The degree will meet the educational requirements to allow students to take a nationally recognized certifying examination.

Student Learning Outcomes - Students who complete the Associate of Applied Science degree in Paralegal Studies are expected to demonstrate that they -

1. know procedural and substantive law appropriate for a Paralegal.
2. are able to do the following:
   a. analyze case law, statutes and regulations;
   b. demonstrate effective oral and written communication skills;
   c. demonstrate ability to draft legal documents;
   d. conduct basic research of current and historical legal issues through use of the law library and computerized legal databases;
   e. locate newly decided cases and recent trends in the law.
3. have developed an appreciation of the following:
   a. the role of legal assistants in the legal system;
   b. the importance of ethics in the legal profession;
   c. the responsibility of members of the legal profession to society.

PHYSICS
Associate of Science Emphasis

The Physics transfer emphasis is designed to place students wishing to pursue studies in the field of physics, either as a university major or as preparation for a teaching career.

SALARY - $37,700 - $89,300/year *(middle range - Nevada)*
CAREER OUTLOOK - Slower than average growth through 2012
GOOD TO KNOW - Graduate degrees required for career advancement

DEGREE REQUIREMENTS: 60-62 credits

Emphasis Requirements - 36-38 credits		**Credits**
CHEM 201	General Chemistry I for Scientists and Engineers	4
CHEM 202	General Chemistry II for Scientists and Engineers	4
MATH 181	Calculus I	4
MATH 182	Calculus II	4
MATH 283	Calculus III	4
MATH 285	Differential Equations	3
PHYS 180/180L	Engineering Physics I	4
PHYS 181/181L	Engineering Physics II	4
PHYS 182/182L	Engineering Physics III	4
PHYS 293	Directed Study	1-3

General Education Requirements* - 24 credits	**Credits**
English/Communications Courses	6
Fine Arts Course	3
Humanities Courses (CH 201 and 202 recommended)	6
Social Science Courses	6
U.S./NV Constitution Course	3

NOTE: CAPS 122 is strongly recommended but not required for graduation. CHEM 121 and 122 are acceptable in lieu of CHEM 201 and 202.
*A list of courses fulfilling general education requirements is on page 7.

SUGGESTED COURSE SEQUENCE

First Semester		Completed
CHEM (121) 201	4	☐
MATH 181	4	☐
PHYS 180/180L	4	☐
Gen Ed course	3	☐
Gen Ed course	3	☐
Second Semester		
CHEM (122) 202	4	☐
MATH 182	4	☐
PHYS 181/181L	4	☐
Gen Ed course	3	☐

Third Semester		Completed
MATH 283	4	☐
PHYS 182/182L	4	☐
Gen Ed courses	6	☐
Fourth Semester		
MATH 285	3	☐
PHYS 293	1-3	☐
Gen Ed courses	6	☐
Gen Ed course	3	☐

REAL ESTATE

Associate of Applied Science in Business
Real Estate Emphasis

The Real Estate emphasis has been designed to prepare students for careers in the real estate sales industry. Career opportunities also exist in commercial banking, escrow services, land planning and zoning, and land development. Approved continuing education credits completed through the Nevada Real Estate Division may be applied toward this degree as real estate electives.
NOTE: Real Property Managers need 24 hours of approved continuing education in addition to licensing and state exam.

SALARY - $20,000 - $56,000/year *(agents' middle range - Nevada)*
CAREER OUTLOOK - Modest growth through 2012
GOOD TO KNOW - About 59 percent of real estate agents are self-employed

DEGREE REQUIREMENTS – 60 credits

Subject Requirements -24 credits		Credits
ACC 135B	Bookkeeping I	3
& ACC 136B	Bookkeeping II	3
or ACC 201	Financial Accounting	
& ACC 202	Managerial Accounting	
BUS 101	Introduction to Business	3
or MGT 103	Small Business Management	
BUS 110B	Human Relations for Employment	3
or MGT 201	Principles of Management	
or MGT 212	Leadership and Human Relations	
or MGT 283	Personnel Administration	
BUS 273	Business Law	3
COT 202	Introduction to Computer Applications	3
or IS 201	Computer Applications	
ECON 102	Principles of Microeconomics	3
or ECON 103	Principles of Macroeconomics	
IS 101	Introduction to Information Systems	3

Emphasis Requirements – 16 credits		Credits
RE 101	Real Estate Principles I	3
RE 103	Real Estate Principles II	3
RE 104	Real Estate Law and Conveyancing	3
RE 198B	Real Estate Law and Ethics	1
RE 206	Real Estate Appraising	3
Elective	Any Real Estate Course	3

General Education Requirements* -20 credits	Credits
English/ Communications courses (BUS 107 and BUS 108 recommended: must include a writing course)	6
RE 102B. BUS 109B or higher level mathematics course	3
Science course	3
U.S./Nevada constitutions course	3
Degree electives	5

*A list of courses fulfilling general education requirements is on page 9.

STATE OF NEVADA

REAL ESTATE - SALES LICENSE

REQUIREMENTS - 6 credits		Credits
RE 101	Real Estate Principles I	3
RE 103	Real Estate Principles II	3

STATE OF NEVADA

REAL ESTATE - BROKER LICENSE

REQUIREMENTS - 64 credits		Credits
RE 101	Real Estate Principles I	3
RE 103	Real Estate Principles II	3
RE 201B	Real Estate Brokerage	3
RE 206	Appraising	3
Real Estate, Business or Economics electives		15
General electives		37

STATE OF NEVADA

REAL ESTATE - RESIDENTIAL APPRAISER APPRENTICE LICENSE

REQUIREMENTS - 7 credits		Credits
RE 101	Real Estate Principles I	3
or RE 103	Real Estate Principles II	
RE 198B	Real Estate Appraisal Law and Ethics	1
RE 206	Real Estate Appraising	3

These licensing programs fulfill the minimum course requirements needed to be eligible to take the Nevada Real Estate Sales and/or Broker examination and the Residential Appraisers License examination. For additional information, please contact the State of Nevada Real Estate Commission.

RETAIL MANAGEMENT
Certificate of Achievement

Western Nevada Community College offers a 30-credit Certificate of Achievement in Retail Management to prepare students for a career in the retail business.

A retail management career incorporates buying, merchandising, promotion, management, operations, finance and computer applications.

Required classes for the Retail Management Certificate of Achievement are in business and business communications, accounting, information systems, management and marketing, and many serve as a ladder to business degrees. The WNCC program provides students an opportunity to earn a relevant certificate, and the classes required are also required for associate degrees. Most are also transferable to four-year colleges. The certificate may particularly benefit employees interested in moving up to supervisory and management positions.

SALARY - $22,900 - $41,000/year *(middle range- Nevada)*
CAREER OUTLOOK - Average growth through 2012
GOOD TO KNOW - Career incorporates buying, merchandising, promotion, management, operations, finance & computer applications

DEGREE REQUIREMENTS: 30 credits

Core Requirements - 21 credits		**Credits**
ACC 135B	Bookkeeping I	3
or		
ACC 201	Financial Accounting	
BUS 110B	Human Relations for Employment	3
COT 202	Introduction to Computer Applications	3
or		
IS 101	Introduction to Information Systems	
or		
IS 201	Introduction to Computer Applications	
MGT 201	Principles of Management	3
or		
MGT 235	Organizational Behavior	
or		
MGT 283	Personnel Administration	
MGT 212	Leadership & Human Relations	3
MKT 127	Introduction to Retailing	3
MKT 210	Marketing Principles	3

General Education Requirements* - 9 credits

English/Communications courses	6
(must include a writing course; BUS 107 and BUS 108 are recommended)	
Mathematics course (BUS 109B is recommended)	3

* A list of courses fulfilling general education requirements is on page 11.

SURGICAL TECHNOLOGY

Certificate of Achievement

The Surgical Technology Certificate of Achievement program is intended for the student seeking a career as a surgical technologist. It is designed to be completed 10 months after admission into the program. The program is accredited by the Commission on Accreditation of Allied Health Education Programs. Upon completion of the program, students will be eligible to take the National Certification Examination for Surgical Technology.

Classroom and laboratory experiences include instruction and practice in operating room techniques, infection prevention and control, and basic care of surgical patients in the operating room. Clinical learning includes supervised, hands-on hospital experiences in scrubbing for a variety of surgical procedures.

Program Objectives

Upon completion of the program the graduate will demonstrate the ability to:

1. Integrate and value knowledge derived from the bio/psycho/social sciences, humanities and surgical technology while providing surgical care to patients in a variety of health care settings under the direction of a registered nurse;
2. Practice within the legal and ethical standards for Level I Surgical Technologist;
3. Use communication techniques appropriate to the setting;
4. Achieve the Level I competencies identified by the Association of Surgical Technologists by demonstrating:
   a. knowledge and practice of basic patient care concepts;
   b. application of the principles of asepsis in a knowledgeable manner that provides for optimal patient care in the operating room;
   c. basic surgical case preparation skills;
   d. the ability to perform the role of first scrub on all basic surgical cases;
   e. responsible behavior as a health care professional.

Selective Admission Requirements

- Apply for admission to WNCC and the Surgical Technology program.
- Provide proof of high school graduation or successful completion of the General Education Development (GED) examination.
- Complete all prerequisite courses prior to admission into the program. *Note: science courses must be completed within the last 10 years.*
- Submit completed application with supporting documents and required transcripts, as appropriate, to the Office of Admissions and Records in the time frame delineated on the Surgical Technology program application.

A limited number of qualified students are admitted into the program utilizing specified selection criteria. See the WNCC web site at www.wncc.edu.

A point system is utilized to make decisions regarding admission of applicants. All applicants will be evaluated in four areas following the criteria outlined below. Following this, the top ranking 20 to 25 applicants will be invited to participate in an interview.

Additional Information

• Learning activities are scheduled on and off campus during days and weekends. Students are required to provide their own transportation.

• Clinical experiences take place in acute care hospital and same day surgery centers.

• Documentation and currency of the following is required after acceptance into the Surgical Technology program and prior to the start of classes:

1. Submission of an acceptable physical examination and required immunizations;

2. Health Care Provider/BLS CPR certification from the American Heart Association or the Red Cross (card required);

3. Health insurance (card required).

4. A minimum grade of C is required in all prerequisite and corequisite courses.

Employment opportunities for the graduate of the Surgical Technology program are excellent. Positions are available in hospitals and ambulatory surgical centers in the Reno, Carson City, Fallon and Lake Tahoe areas.

Admission/Selection Criteria

Category	Maximum Points Possible (in parentheses)			
Anatomy & Physiology GPA*	2.0-2.49 (2)	2.5-3.0 (4)	3.1-3.49 (6)	3.5-4.0 (8)
GPA for English,	2.0-2.49	2.5-3.0	3.1-3.49	3.5-4.0
Math & Human Relations courses Points Awarded	(1)	(2)	(3)	(4)
Health related employment experience ** points (Computed at .5 point intervals)				0 - 1
Employment experience other than health related points (Computed at .5 point intervals)				0 - 1

* Students must complete all prerequisite and corequisite courses with a minimum grade of "C." Completion of corequisite courses and health related employment and employment experience other than health related employment is not required.

**Examples of health related employment experiences include: LPN, EMT, CNA, medical assistant, ward clerk, technician or orderly.

SURGICAL TECHNOLOGY

SALARY - $32,400 - $43,700/year *(middle range - Nevada)*
CAREER OUTLOOK - Faster than average growth through 2012
GOOD TO KNOW - Technologists advance by specializing in a particular area of surgery

CERTIFICATE REQUIREMENTS - 39-43 credits
NOTE: For programs that require BIOL 223 and 224, both courses must be completed at the same school.

Prerequisite Courses: 10 credits		**Credits**
BIOL 223	Human Anatomy & Physiology I	4
or		
BIOL 200 & 204	Elements of Human Anatomy & Physiology & Lab	
ENG 101	Composition I	3
MATH 120	Fundamentals of College Mathematics	3
or		
MATH 124	College Algebra	
or		
MATH 126	Precalculus I (or higher)	
or		
MATH 100B	Math for Allied Health Programs	

Corequisite Courses: 3-7 credits		**Credits**
BIOL 224	Human Anatomy & Physiology II	0-4
(only if BIOL 223 taken as a prerequisite)		
Human Relations Course: Choose from following list:		3
ANTH 101	Introduction to Anthropology	
BUS 110B	Human Relations for Employment	
PSY 101	General Psychology	
PSY 102	Psychology of Personal & Social Adjustment	
PSY 280	Understanding Men and Women	
SOC 101	Principles of Sociology	
SOC 102	Contemporary Social Issues	
SOC 276	Aging in Modern American Society	

Subject Requirements - 26 credits		**Credits**
SGRT 100B	Foundations of Surgical Technology	2.5
SGRT 103B	Operating Room Techniques	4
SGRT 102B	Sterilization and Disinfection	2.5
SGRT 110B	Preparation of Surgical Patient	2.5
SGRT 111B	Surgical Procedures	5.5
SGRT 132B	Surgery Clinical Practice	9

WEB TECHNOLOGY
Associate of Applied Science Program

The Web Technology program is designed for students seeking specific career skills in Web environments. Students choose one of four specializations to customize their program: Web Administration, Web Design, Web Programming, or Transfer Option.

SALARY - $40,500 - $63,800/year *(middle range - Nevada)*
CAREER OUTLOOK - High demand through 2012
GOOD TO KNOW - About 24 percent of webmasters & data communications analysts are self-employed

DEGREE REQUIREMENTS - 60 credits

Degree Core Requirements - 36 credits		**Credits**
CIT 129	Introduction to Programming	3
CIT 151	Beginning Web Development	3
or GRC 175	Web Design and Publishing I	
CIT 152B	Web Script Language Programming	3
CIT 161B	Essentials of Information Security	3
CIT 260	Systems Analysis and Design	3
CIT/COT/IS course		3
IS 101	Introduction to Information Systems	3
IS 201	Introduction to Computer Applications	3

Specialization Requirement - 12 credits
Choose 12 credits from one of the following four specializations:

Web Administration

CIT 220B	E-Commerce on the Web	3
CIT 255B	Web Server Administration I	3
CIT 256B	Web Server Administration II	3
CIT 290B	Internship in CIT	3-6
or CIT 295B	Specialty Related Capstone Project	3

Web Design

CIT 157B	Graphics for the Web	3
CIT 251	Advanced Web Development	3
CIT 290B	Internship in CIT	3-6
or CIT 295B	Specialty Related Capstone Project	3
GRC 188	Web Animation and Interactivity I	3

Web Programming

CIT 180B	Database Concepts and SQL	3
CIT 251	Advanced Web Development	3
CIT 252B	Web Database Development	3-6
CIT 290B	Internship in CIT	3
or CIT 295B	Specialty Related Capstone Project	

Customized Option - Students may take 12 credits in this option, depending on the requirements of the four-year transfer institution. Prior department approval required. More than 12 credits may be required.

General Education Requirements - 24 credits	**Credits**
English/Communications courses (ENG 107 recommended) (Must include a writing course)	6
Humanities/Social Science course	3
Mathematics course (BUS 109B recommended)	3
Human Relations course (MGT 201, 212 or 283 recommended)	3
Science course	3
U.S./Nevada Constitutions course	3
General Elective	3

*A list of courses fulfilling general education requirements is on page 9.

SUGGESTED COURSE SEQUENCE- Web Administration Specialization

First Semester		Completed	*Third Semester*		Completed
CIT 129	3	☐	CIT 255B	3	☐
CIT 151 or GRC 175	3	☐	CIT 220	3	☐
IS 101	3	☐	CIT 201B/202B/203B	3	☐
Gen Ed course	6	☐	(1 credit each)		
			Gen Ed course	6	☐
Second Semester					
CIT 152B	3	☐	*Fourth Semester*		
CIT 161B	3	☐	CIT 256B	3	☐
CIT 260	3	☐	CIT 290B or CIT 295B	3	☐
Gen Ed course	6	☐	Degree elective	3	☐
			Gen Ed course	6	☐

SUGGESTED COURSE SEQUENCE-Web Design Specialization

First Semester		Completed	*Third Semester*		Completed
CIT 129	3	☐	CIT 157B	3	☐
CIT 151 or GRC 175	3	☐	CIT 251	3	☐
IS 101	3	☐	GRC 188	3	☐
Gen Ed course	6	☐	Gen Ed course	6	☐
Second Semester			*Fourth Semester*		
CIT 152B	3	☐	CIT 290 or 295	3	☐
CIT 161B	3	☐	CIT 201B/202B/203B	3	☐
CIT 260	3	☐	(1 credit each)		
Gen Ed course	6	☐	Degree elective	3	☐
			Gen Ed course	6	☐

SUGGESTED COURSE SEQUENCE - Web Programming Specialization

First Semester		Completed	*Third Semester*		Completed
CIT 129	3	☐	CIT 180B	3	☐
CIT 151 or GRC 175	3	☐	CIT 251	3	☐
IS 101	3	☐	CIT 201B/202B/203B	3	☐
Gen Ed course	6	☐	(1 credit each)		
			Gen Ed course	6	☐
Second Semester					
CIT 152B	3	☐	*Fourth Semester*		
CIT 161B	3	☐	CIT 252	3	☐
CIT 260	3	☐	CIT 290B or CIT 295B	3	☐
Gen Ed course	6	☐	Degree elective	3	☐
			Gen Ed course	6	☐

Associate of Applied Science Degree in Web Technology - Mission & Outcomes

MISSION - The purpose of the Web Technology degree is to offer an Associate of Applied Science degree to prepare students with the necessary skills for entry-level employment in Web-based occupations. In addition, many of the courses can transfer to baccalaureate programs in Web technology and related fields

STUDENT LEARNING OUTCOMES - Students who complete programs in occupational areas are expected to demonstrate that they -

Know:
- practices and procedures required for entry level employment,
- entry level skill set, and
- the theoretical principles relevant to their emphasis.

Are able to:
- test successfully on competencies required to pass industry standard certification exams,
- communicate effectively and appropriately, in oral and written form,
- locate, evaluate and properly utilize the tools and resources appropriate to a computer technology professional,
- acquire skills and perform tasks necessary for employment or career enhancement, and
- demonstrate effective communication and computation skills appropriate to the chosen occupational field.

Appreciate and value:
- appropriate and effective presentation of themselves to potential employers, and
- standards of social, ethical, legal, accessibility, and diversity issues of their work environment.

WELDING TECHNOLOGY
Associate of Applied Science Program

The Welding Technology program is a preparation program which offers students competencies to prepare for code exams. This allows students with varying degrees of competencies to enter the program and progress at their own pace. Students are encouraged to obtain as many lab hours as possible to ensure their skill development.

SALARY - $25,200 - $61,100/year *(middle range - Nevada)*
CAREER OUTLOOK - Average growth through 2012
GOOD TO KNOW - Certification required for many jobs

DEGREE REQUIREMENTS - 60 credits

Program Requirements - 39 credits		**Credits**
DFT 100	Basic Technical Drawing	3
MTL 212	Welding I	3
MTL 213	Welding II	3
MTL 217B	Welding III	3
MTL 218B	Welding IV	3
MTL 291B	Welding I/Practice	2
MTL 292B	Welding II/Practice	2
MTL 293B	Welding III/Practice	2
MTL 294B	Welding IV/Practice	2
MTL 296B	AWS Code Preparation	1-12
Choose 4-15 credits from the following:		
MTT 105B	Machine Shop I	3
or MTL 150B	Metallurgy I	
MTL 224B	Welding Projects	1-6
MTL 290B	Metal Technology - Cooperative Education	1-4
MTL	Related Metals courses	1-3

General Education Requirements* - 21 credits	**Credits**
English/Communications courses	6
(BUS 107 is recommended; must include a writing course)	
Human Relations (BUS 110B recommended)	1-3
Humanities/Social Science course	3
Mathematics course	3
Science course	3
U.S./Nevada Constitution course	3
Electives	0-2

*A list of courses fulfilling general education requirements is on page 9.

WELDING TECHNOLOGY
Certificate of Achievement

CERTIFICATE REQUIREMENTS- 30 credits

Subject Requirements - 18 credits		**Credits**
MTL 212	Welding I	3
MTL 213	Welding II	3
MTL 291B	Welding I/Practice	2
MTL 292B	Welding II/Practice	2
MTL 296B	AWS Code Preparation	6
Metals electives		2

General Education Requirements* - 12 credits	**Credits**
English/Communications courses	6
(BUS 107 is recommended; must include a writing course)	
Human Relations course (BUS 110B recommended)	1
Mathematics course	3
Elective	2

*A list of courses fulfilling general education requirements is on page 11.

SUGGESTED COURSE SEQUENCE

First Semester		Completed	*Third Semester*		Completed
MTL 212	3	☐	DFT 100	3	☐
MTL 291B	2	☐	MTL 217B	3	☐
Degree elective	3	☐	MTL 293B	2	☐
Gen Ed course	3	☐	MTL 296B	3	☐
Gen Ed course	3	☐	Degree elective	2	☐
			Gen Ed course	3	☐
Second Semester			*Fourth Semester*		
MTL 213	3	☐	MTL 218B	3	☐
MTL 292B	2	☐	MTL 294B	2	☐
Degree elective	3		MTL 296B	3	☐
Gen Ed course	3	☐	Degree elective	2	☐
Gen Ed course	3	☐	Gen Ed course	3	☐
General elective	0-2	☐	Gen Ed course	1-3	☐

Special Academic Programs

CONTINUING EDUCATION PROGRAMS

The college offers a number of programs and services through its Continuing Education to help WNCC students, graduates and employers. Services include:

COMMUNITY EDUCATION

Community Education offers non-credit, self-supporting classes and events that enrich the cultural, social, and recreational life of the community. These may include special interest courses, field trips and workshops.

The department also sponsors College for Kids, an educational enrichment program to challenge youth.

For unpublished course offerings or to suggest a new class, call
Carson ..... (775)445-4268
Fallon ..... (775) 423-5847
Douglas ..... (775) 782-2413

EMPLOYEE TRAINING CENTER

"The Emplyee Training Center (ETC) of Western Nevada Community College is dedicated to providing educational opportunities and training solutions for business, industries and government or non-profit agencies. Education and training for credit or non-credit can be delivered on-site at the organization or at WNCC sites. Training can also be customized to meet the specific needs of both employers and employees. Call:
Carson & Douglas ..... (775) 445-4458
Fallon ..... (775) 423-5847

www.wncc.edu/etc

CORRECTIONAL EDUCATION

WNCC offers classes leading to the completion of degrees and certificate programs to incarcerated students housed in Nevada State Prison facilities within its service area. Courses leading to the Associate of General Studies degree, the Associate of Arts degree, and various occupational certificates are conducted at the Nevada State Prison, Warm Springs Correctional Center, Northern Nevada Correctional Center, and Lovelock Correctional Center.
Call ..... (775) 887-3082

TEACHER EDUCATION PROGRAM

WNCC offers introductory courses in teacher education that can transfer to universities or colleges that offer a bachelor's degree in education including the University of Nevada, Reno and/or Nevada State College. These courses offer students a chance to explore a career in education. Successful completion of this set of courses prepares individuals to transfer with the emerging skills to thrive in a four-year program. Outcomes and performance-based assessments include portfolios and lesson plan presentations. Through a well-established partnership with local schools, field experiences are an integral and early part of all teacher preparation courses so that students can begin honing their skills in an authentic setting. These courses can also be used to gain a substitute license or by paraprofessionals needing to qualify under "No Child Left Behind" legislation.

Students can transfer to NSC for elementary education or to UNR to pursue a bachelor's degree and certification in:

- Elementary Education
- Special Education/Dual (SPED/Elem)
- Secondary Education (Middle/High School)

During classes at WNCC, students will develop introductory skills in the Domains of Professional Competence which include: knowledge of students and learning environments, subject matter and planning, etc. Small, individualized classes taught by highly qualified instructors provide an opportunity for students to be mentored into developing pedagogical skills and an individual teaching style.

Eligibility for eventual certification will require a TB test and a criminal background check that includes fingerprinting. Admittance to a four-year program will require passing a standardized test (PPST) and maintaining an above average grade point average.

WNCC also offers professional development and recertification classes for practicing teachers in such areas as methods, teaching the gifted, classroom management techniques, and technology. WNCC is committed to the effort of providing high quality teachers for their service area.

Teacher Education Program - Mission & Outcomes

MISSION - The purpose of the teacher education transfer program is to provide content knowledge and pedagogy for transfer to a university for degree completion and certification.

STUDENT LEARNING OUTCOMES - Students in teacher education preparation are expected to demonstrate that they -

1. will provide evidence of sufficient knowledge in the academic content areas necessary for all elementary education courses.
   a. assessment: evidence of completion of all elementary education courses with a minimum of a 2.5 GPA; passing scores on the PPST.
2. are able to interact appropriately with people from diverse backgrounds. Students will provide evidence of experiences that require appropriate interaction with children or adults in a teaching/learning situation.
   a. assessment: two letters of reference that address qualifications and potential as a teacher;
   b. evidence of successful experiences in practicum teaching and learning situations based on evaluations from teachers or community members who participated in student classroom and community fieldwork experiences.

WESTERN NEVADA STATE PEACE OFFICER ACADEMY

WNCC offers a 30-week, 33.5 credit program to prepare students for careers in law enforcement. The academy begins each January and meets all Nevada and POST certification requirements.

Anyone interested in a career in this exciting and challenging field should apply for admission early to be considered for the following January academy. Students enrolled in this program are required to submit evidence of medical insurance.
Call ..... (775) 445-4408

www.wncc.edu/conted/post.php.