



Instructional Divisions and Programs

Mark Vest, Vice President for Learning and Student Services

Arts and Sciences Dr. Eric Henderson, Dean

Anthropology	Geography
Art	Geology
Biology	History
Chemistry	Honors Colloquia
Developmental Education	Human Development
The Learning Cornerstone	Human Services
Developmental Reading	Humanities
Developmental Writing	Languages
Developmental Math	Mathematics
Study Skills	Music
ABE/GED (instruction)	Philosophy
Learning Assistance	Photography Technician
TLC Tutoring	Physics
Placement	Political Science
Student Writing Centers	Psychology
Early Childhood Development	Sociology
Education	Speech/Theatre
English	

Nursing and Allied Health

Ms. Peg Erdman, Dean

Allied Health - HES
Medical Assistant
Nursing Program
Nursing Assistant Training
Continuing Nursing Education
Paramedicine (EMT)
Pharmacy Technician

Apache County Programs

**Ms. Tamara Martin,
Coordinator**

Center Programming (Apache County)
Springerville/Eagar
St. Johns

Career and Technical Education

Ms. Peggy Belknap, Dean

Administration of Justice Studies	Drafting
Administrative Information Services	Fire Science
Automotive Technology	Health and Physical Education
Business	Heavy Equipment Operations
Business and Industry Training	Industrial Arts Technology
Community Services	Industrial Maintenance and Operations
Computer Information Systems	Law Enforcement Academy
Construction Technology	Welding
Cosmetology	Carl Perkins Vocational Funding
Dept. of Corrections	

Information and Communications Technology (ICT) Programs

Dr. Wei Ma, Coordinator

Programs and Degrees

What Degree Programs are Available?

Northland Pioneer College offers an **Associate of Arts (AA)**, **Associate of Arts in Elementary Education (AAEE)**, **Associate of Business (ABUS)**, and **Associate of Science (AS)** degrees designed for students transferring into four-year college or university programs. The general education requirements for these degrees are specifically designed to transfer to Arizona's public universities, fulfilling their lower division general education requirements.

The **Associate of Applied Science (AAS)** Degree and the **Certificate of Applied Science (CAS)** are awarded at the completion of programs designed to prepare graduates for employment. **Certificate of Proficiency (CP)** and **Certificate of Completion (CRT)** are also awarded in certain occupation-specific programs. Not all degree programs are offered at every NPC location. Consult with an academic adviser for offerings at your campus or center, or information about a housing assistance scholarship if you need to re-locate to attend specific classes.

The **Associate of General Studies (AGS)** Degree is intended for nonmajors seeking greater flexibility in planning their education. The AGS degrees in Early Childhood and Special Needs Educational Assistant provide a student the flexibility of meeting work-related course mandates while also pursuing general education courses that may serve as a foundation for a bachelor's degree. Although many courses within these programs may transfer to a four-year college or university, students should not assume that all courses will transfer.

General Education Values

General education is central to Northland Pioneer College's purposes, its definition and its academic commitments. Through a general education program, the college commits students and professors to the pursuit of comprehensiveness in learning – to seeing the relationship of special interests to the larger academic and cultural contexts that we share. It offers vantage points from which to sharpen our awareness of the development of our own culture and its relationship to others. The search for an integrated understanding requires a general desire to learn, an energetic interest in the world and a willingness to put us in the place of those whose beliefs and outlooks are different from our own. A general education program, pursued by curious and empathic professors and students, provides a structure in which the accumulation of knowledge and the practice of disciplined, independent thinking can grow into comprehensive understanding, appreciation and reasoned value.

An effective general education program requires the exercise of thoughtful and precise writing, critical reading, quantitative thinking and processes of analysis and synthesis that underlie valid reasoning. Therefore, students must have a solid foundation in writing, reading, mathematics and critical thinking.

Studies in the traditional academic disciplines are built upon foundation skills in thought and communication, and lead students to grasp the conceptual frameworks that govern different fields of study. Such courses demonstrate that the study of specialized subject matter in any of the traditional knowledge areas – arts and humanities, mathematics, physical and biological sciences, social and behavioral sciences – is critical to the central dialogues of general education.

General education studies focus on the conceptual frameworks through which a thinker, a culture, or an academic discipline may approach an issue. We discover both the ordering power and the potential limitations of the fundamental models of understanding that have shaped our thinking throughout the history of civilization. We acknowledge the dependence of thought upon these models, judge them through comparison with alternative models from other thinkers and cultures, and yet are able to continue to participate with active, discerning commitment in the political, ethical and aesthetic life of the community.

The purpose of general education is to give each student pursuing an undergraduate degree the fundamental skills and the familiarity with various branches of knowledge that are associated with college and university education and the cultivation necessary for a lifetime of learning, problem solving and responsible, humane action.

Assessment at NPC: Faculty and Student Roles

Northland Pioneer College adheres to “the following published definition of assessment as drafted by the Director of the Assessment Forum at the American Association for Higher Education and refined by educators across the nation: (NCA Staff Paper, 1996)”

Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain and improve performance. When it is embedded effectively within larger institutional systems, assessment can help us focus our collective attention, examine our assumptions and create a shared academic culture dedicated to assessing and improving the quality of higher education (AAHE Bulletin, November, 1995, p. 7).

The principle of assessment, and use of assessment feedback for measuring and improving overall student academic achievement and institutional effectiveness, is an integral part of NPC. Assessment of Student Academic Achievement applies to all five major academic related missions of NPC: general education, transfer preparation education, basic skills/developmental education, customized education, and personal interest education. Assessment is integral to the matching of instructional resources to the diversity of student academic needs in a manner that is accountable to all stakeholders.

Faculty Role

Assessment of Student Academic Achievement includes the extent to which each instructional academic unit (department, etc.) actually contributes to the incremental learning of its students in:

1. Cognitive Learning (knowledge acquisition);
2. Behavioral Learning (skill acquisition); and
3. Affective Learning (attitudinal development).

Hence, over time each academic unit is expected to measure its performance in facilitating student academic achievement in these areas. Each academic unit's faculty members help collect assessment data through faculty-directed student activities designed to enhance learning.

Student Role

Students at NPC are expected to take an active role in their acquisition of knowledge, skill and attitude. This includes the student's responsibility in acting upon appropriate:

1. Academic guidance with respect to course and program enrollment;
2. Regular participation in faculty-structured learning activities including attendance at scheduled times;
3. Completion of assignments in a timely manner; and
4. Serious preparation for and completion of learning AND assessment activities including essays, papers and examinations.

Specifically, over the length of a course or program NPC instructional units will collect samples of students' work across the college district, for use in assessment of collective student academic achievement. Such collected samples of students' work generally will be from selected coursework required to complete a program or degree, or representative of work done up to a predetermined point along the way to program or degree completion. Similarly, students and alumni may also be asked to complete surveys reflecting aspects of student academic achievement related to their programs.

Student work submitted by faculty for assessment of student academic achievement across time and district will be reviewed confidentially. However, students are still expected to do their best, whether the work selected was used by the faculty toward a course grade and/or by the academic units as a broader assessment of NPC students' academic achievement.

Transfer Degree Programs

The **Associate of Arts (AA)**, **Associate of Arts in Elementary Education (AAEE)**, **Associate of Business (ABus)**, and **Associate of Science (AS)** degrees are designed for students intending to transfer into four-year college or university programs. The general education requirements of these degrees are especially designed to transfer to Arizona's public universities, fulfilling their lower division general education requirements.

What is AGEC?

- AGEC stands for Arizona General Education Curriculum. AGEC is the best way to make your credits count for most transfer degrees.
- The purpose of AGEC is to provide Arizona public community college students with the opportunity to build a General Education curriculum that is transferable upon completion without a loss of credit to another Arizona public community college or university.
- AGEC is a statewide agreement between Arizona public community colleges, Northern Arizona University (NAU), Arizona State University (ASU), and the University of Arizona (U of A).
- AGEC is a 35-credit block of lower division General Education curriculum that fulfills the lower-division General Education requirements at any Arizona public community college or university.

Why complete an AGEC?

- When you complete an AGEC, all admission requirements are waived at all Arizona public universities. This means that you are unconditionally admitted to any Arizona public university of your choice after completing an AGEC. Arizona residents need to have a minimum AGEC GPA of 2.5. This does not mean that they will accept ALL transferable courses. Please see an adviser to discuss which courses will be counted toward the university's graduation requirements.
- **AGEC-A** satisfies ALL lower-division liberal studies requirements at all Arizona public universities.
- **AGEC-B** satisfies ALL lower division business studies requirements at all Arizona public universities.
- **AGEC-S** satisfies ALL lower division general education requirements in mathematics and math-intensive science programs at all Arizona public universities.
- For most majors, if you complete an AGEC and specific courses you need for transfer, you can enter any Arizona public university as a junior. Please see an adviser for more information.
- Save money by completing your lower-division

requirements at NPC. On average, Northland Pioneer College tuition rates are about one-third of the Arizona public universities' tuition.

- Classes are generally smaller than university freshman and sophomore liberal studies classes.
- If you have high school concurrent enrollment credits, transfer credits from another accredited college or university and/or CLEP credits that satisfy our General Education requirements, these credits may be counted toward an AGECE. An academic adviser can assist in determining whether those credits can be applied toward AGECE requirements.
- Students transferring to NPC from other institutions must complete a minimum of 15 credits of AGECE courses at NPC, which will include 13 or more credits from the arts and humanities, physical and biological sciences and the social and behavioral sciences to receive AGECE certification from NPC.

What happens if you don't complete an AGECE block?

- You will need to meet ALL standard university admission requirements.
- You will need to complete university requirements, which may or may not be the same as Northland Pioneer College's General Education requirements.
- Your General Education courses will be evaluated on a course-by-course basis using the Course Equivalency Guide (CEG) and may not meet the specific general education requirements at the university.

Transfer Degrees

Transfer: All courses included in these degrees must transfer to the three Arizona public universities as direct equivalents, departmental elective credits, or general elective credits. Students planning to transfer to a four-year college or university are advised to work with NPC academic advisers to facilitate a smooth and efficient transfer process. Access to information about degrees and pathways, common courses, *Course Equivalency Guides*, transfer guides and Arizona college and university catalogs is available through an academic adviser or directly at www.AZTransfer.com.

Requirements: The Associate of Arts, Associate of Arts in Elementary Education, Associate of Business, and Associate of Science degrees require a minimum of 64 hours of course credits to complete, with a grade of 'C' or better in all courses and a cumulative grade point average of 2.0 on a 4.0 scale.

Additionally, some of these courses have placement or course prerequisites that must be fulfilled. Completion of these prerequisites may result in coursework beyond 64 credits.

For courses that do have prerequisites or require satisfactory placement, a grade of 'C' or better is required in the

prerequisite courses. [For prerequisite purposes only, a 'P' (passing) grade is the equivalent of a 'C' grade.] More information about course prerequisites may be found in *Part IV, Course Descriptions*, which lists individual courses, or by consulting an academic adviser.

Graduates must complete at least 35 to 36 credits of general education options as listed for the specific degree. These must include six credits in English composition, three to four credits in mathematics, nine credits from the arts and humanities, eight credits from the natural sciences, and nine credits from the social and behavioral sciences. An additional 28 to 29 credits should be chosen carefully based on lower division and common course requirements for majors at the college or university to which the student plans to transfer.

Emphasis: In most NPC general education courses, special emphasis is placed upon developing written communication skills with intensive writing requirements embedded within each. Race and ethnic issue awareness is also embedded throughout the general education requirements of the arts and humanities, social and behavioral sciences, and physical and biological sciences. Specific courses, as noted in the degrees, meet the requirement for Contemporary Global/International or Historical Awareness.

University Transfer Agreements

NPC partners with other regionally-accredited colleges and universities, both within and outside of Arizona, through official articulation agreements that assist students with making a smooth transition from NPC to a participating 4-year institution without duplicating coursework. NPC students participating in transfer agreements are able to fulfill the four-year college's requirements by completing articulated courses at NPC. These partner institutions offer a variety of courses and programs online, via interactive television or classes through most NPC locations.

Students interested in learning more about transfer opportunities should contact an NPC academic adviser for more information regarding the partnerships available to NPC students. A listing of current transfer agreements can be found at www.npc.edu/transfer-agreements.

Please note that articulation agreements are subject to change without notice. Students are encouraged to meet as early as possible and periodically with an academic adviser both at NPC and at the transfer institution to confirm their choice of classes and to develop an education plan for transfer.

It is the final responsibility of the student to successfully meet all transfer requirements.

SUN numbers

NPC courses that transfer directly to other Arizona public community colleges and three state universities now

have an additional notation in the NPC class schedule: the **Shared Unique Number (SUN)**. The SUN number consists of the **SUN** symbol followed by a unique three-letter prefix and four-digit course number. For example, NPC offers its transfer course General Biology I with the designation BIO 181. Now the listing also includes its SUN number, **SUN** BIO 1181.

Watch for SUN numbers. When you enroll in an NPC course having this unique identifier, you know those class credits will be accepted by the three Arizona state universities and community colleges. For additional information about the SUN System, visit www.azsunsystem.com.

After January 2012, SUN course numbers will be included on your college transcript.

Definitions

The terms below are used in the degree program descriptions in the pages that follow:

General Education Requirements: Courses, typically mathematics, English and others, from a predetermined list of discipline studies (included within each degree or program description) that provide students with a broad knowledge base.

Core Requirements: Courses specifically selected to educate the student in the essential knowledge of the individual program.

Required Electives: Courses specifically selected to supplement and expand the student’s knowledge base in the individual program.

Unrestricted Electives: Any unduplicated course(s) at the 100-level or higher that the student may wish to select.

Associate of Arts (AA)

About this Degree

The **Associate of Arts (AA) degree** offers foundational education that enhances good communications skills and provides wide general knowledge. The AA is the basis for a wide range of bachelor degree programs and careers in fields such as languages, literature, political science, and more.

The **Associate of Arts degree is a transfer degree** designed for students planning to continue their education by transferring to one of the three Arizona public universities. The **general education component** of our AA degree fulfills all the requirements of the Arizona General Education Curriculum (AGEC-A). When completed, the AGECA will transfer to any of the three public Arizona state universities as a block meeting all lower division general education requirements. (see *What is AGECA?* – page 48)

NPC Requirements

- The **Associate of Arts (AA) degree** requires a minimum of **64 hours of course credits** with a grade of “C” or better in all courses and a cumulative grade point average of 2.0 on a 4.0 scale.
- Some courses have **placement requirements** or **prerequisites** that may result in coursework beyond 64 credits. These courses, too, require a grade of “C” or better. For information about prerequisites, see an NPC academic adviser.
- In most general education courses, special emphasis is placed on developing written communication skills with intensive writing requirements. Race and ethnic issue awareness is embedded throughout the general education requirements. Specific courses, as noted, meet the requirement for Contemporary Global/International or Historical Awareness.

Degree Requirements • 64 credits

■ General Education Requirements • 35 credits

Completion of the **35** general education course credits fulfills requirements for the Arizona General Education Education Curriculum (AGEC-A) for the Associate of Arts degree. (see *What is AGECA?* – page 48)

English • 6 credits

ENL 101 College Composition I	3 credit
ENL 102 College Composition II.....	3 credit

Mathematics • 3 credits

Select one of the following, or a mathematics course for which MAT 142 or MAT 152 is a prerequisite.

MAT 142 College Mathematics with Contemporary Applications	3 credit
MAT 152 Advanced Algebra	3 credit

Arts and Humanities • 9 credits

Select three courses from at least two disciplines.

ART 101 Understanding Art.....	3 credit
ART 115 Art History I.....	3 credit
ART 116 Art History II.....	3 credit
ENL 220 World Literature I	3 credit
ENL 221 World Literature II	3 credit
ENL 224 English Literature I.....	3 credit
ENL 225 English Literature II	3 credit
ENL 230 American Literature I.....	3 credit
ENL 231 American Literature II	3 credit
HUM 150 Humanities in the Western World I.....	3 credit
HUM 151 Humanities in the Western World II	3 credit
MUS 150 Music Appreciation	3 credit
PHL 101 Introduction to Philosophy	3 credit
PHL 105 Introduction to Ethics	3 credit
SPT 130 Introduction to Theatre.....	3 credit
SPT 150 Introduction to Film	3 credit
SPT 155 History of Television	3 credit

Physical and Biological Sciences • 8 credits

Select two courses. Students may transfer *either* CHM 130 or CHM 151, **but not both**; therefore, taking CHM 130 and CHM 151 will not satisfy the 8-credit requirement.

BIO 100 Biology Concepts	4 credit
BIO 105 Environmental Biology	4 credit
BIO 160 Introduction to Human Anatomy and Physiology I.....	4 credit
BIO 181 General Biology I.....	4 credit
BIO 182 General Biology II	4 credit
CHM 130 Fundamental Chemistry	4 credit
CHM 151 General Chemistry I.....	4 credit
CHM 152 General Chemistry II	4 credit
GEO 111 Physical Geography.....	4 credit
GLG 101 Introduction to Geology I - Physical.....	4 credit
GLG 102 Introduction to Geology II - Historical....	4 credit
PHY 113 General Physics I	4 credit
PHY 114 General Physics II	4 credit

Social and Behavioral Sciences • 9 credits

Pick three courses from at least two disciplines. Select at least one asterisk (*) course to meet requirements for Contemporary Global, International or Historical Awareness.

*ANT 102 Cultural Anthropology	3 credit
ANT 120 Buried Cities and Lost Tribes	3 credit
BUS 140 Principles of Economics - Macro.....	3 credit
BUS 141 Principles of Economics - Micro.....	3 credit
*GEO 110 World Regional Geography	3 credit
GEO 120 Human Geography.....	3 credit
*HIS 105 U.S. History to 1877	3 credit
*HIS 106 U.S. History since 1877.....	3 credit
*HIS 155 Western Civilization to 1700.....	3 credit
*HIS 156 Western Civilization since 1700.....	3 credit
POS 110 American Government.....	3 credit
PSY 101 Introduction to Psychology	3 credit
PSY 200 Psychology of Adjustment.....	3 credit
PSY 240 Developmental Psychology.....	3 credit
SOC 120 General Sociology.....	3 credit
SOC 121 Social Problems in America.....	3 credit
SOC 130 Racial, Ethnic and Gender Relations in Modern Society.....	3 credit
SOC 225 Sociology of the Family.....	3 credit

■ Electives • 29 credits

Select elective courses from:

1. Courses identified as common courses in university transfer guides in the student’s major of choice;
2. 0 to 16 credits of language, if required in the student’s major of choice at the university you plan to attend;
3. Prerequisites
4. Electives

The **electives component** must consist of credits that transfer to all three public Arizona universities as defined in the *Course Equivalency Guide* for the year in which the course is completed. Access to information

about degrees and pathways, common courses, *Course Equivalency Guides*, and Arizona college and university catalogs is available through an academic adviser or directly on the Internet at www.AZTransfer.com.

**Associate of Arts in
Elementary Education (AAEE)**

About this Degree

If you enjoy children, feel you have a talent for teaching and you want to help improve the world, the **Associate of Arts in Elementary Education (AAEE)** is a degree program you should consider. **The AAEE degree is a transfer degree** providing you with foundational skills in the elementary teaching field while preparing you for initial teacher certification programs at the state’s three public universities. The **general education component** of the AAEE degree is specifically designed to fulfill the lower division general education requirements at NAU, ASU and UofA.

Additionally, with your AAEE degree in hand, you meet current elementary school requirements to be a classroom instructional assistant. You have the credentials to work in your chosen setting while completing your bachelor’s degree.

NPC Requirements

- The Associate of Arts in Elementary Education degree requires a minimum of 64 hours of course credits with a “C” or better in all courses and a cumulative grade point average of 2.0 on a 4.0 scale.
- Some courses have **placement requirements or prerequisites** that may result in coursework beyond 64 credits. These courses, too, require a grade of “C” or better. For information about prerequisites, see an NPC academic adviser.
- In most general education courses, special emphasis is placed on developing written communication skills with intensive writing requirements. Race and ethnic issue awareness is embedded throughout the general education requirements. Specific courses, as noted, meet the requirement for Contemporary Global/International or Historical Awareness.

Degree Requirements • 64 credits

■ General Education Requirements • 35 credits

Completion of the 35 general education course credits fulfills requirements for the Arizona General Education Education Curriculum (AGEC-A). (see *What is AGECE?* – page 48)

English • 6 credits

- ENL 101 College Composition I 3 credit
- ENL 102 College Composition II..... 3 credit

Mathematics • 3 credits

Select one of the following, or a mathematics course for which MAT 142 or MAT 152 is a prerequisite.

- MAT 142 College Mathematics
with Contemporary Applications 3 credit
- MAT 152 Advanced Algebra 3 credit

Arts and Humanities • 9 credits

Select three courses from at least two disciplines.

- ART 101 Understanding Art..... 3 credit
- ART 115 Art History I..... 3 credit
- ART 116 Art History II..... 3 credit
- ENL 220 World Literature I 3 credit
- ENL 221 World Literature II 3 credit
- ENL 224 English Literature I..... 3 credit
- ENL 225 English Literature II 3 credit
- ENL 230 American Literature I..... 3 credit
- ENL 231 American Literature II 3 credit
- HUM 150 Humanities in the Western World I..... 3 credit
- HUM 151 Humanities in the Western World II 3 credit
- MUS 150 Music Appreciation 3 credit
- PHL 101 Introduction to Philosophy 3 credit
- PHL 105 Introduction to Ethics..... 3 credit
- SPT 130 Introduction to Theatre..... 3 credit
- SPT 150 Introduction to Film 3 credit
- SPT 155 History of Television 3 credit

Physical and Biological Sciences • 8 credits

Select two courses. Students may transfer *either* CHM 130 or CHM 151, **but not both**; therefore, taking CHM 130 and CHM 151 will not satisfy the 8-credit requirement.

- BIO 100 Biology Concepts 4 credit
- BIO 105 Environmental Biology 4 credit
- BIO 160 Introduction to Human Anatomy
and Physiology I..... 4 credit
- BIO 181 General Biology I..... 4 credit
- BIO 182 General Biology II 4 credit
- CHM 130 Fundamental Chemistry 4 credit
- CHM 151 General Chemistry I..... 4 credit
- CHM 152 General Chemistry II 4 credit
- GEO 111 Physical Geography..... 4 credit
- GLG 101 Introduction to Geology I - Physical..... 4 credit
- GLG 102 Introduction to Geology II - Historical.... 4 credit
- PHY 113 General Physics I 4 credit
- PHY 114 General Physics II 4 credit

Social and Behavioral Sciences • 9 credits

Select three courses from at least two disciplines. Select at least one asterisk (*) course to meet requirements for Contemporary Global/International or Historical Awareness.

- *ANT 102 Cultural Anthropology 3 credit
- ANT 120 Buried Cities and Lost Tribes 3 credits
- BUS 140 Principles of Economics - Macro 3 credit
- BUS 141 Principles of Economics - Micro 3 credit
- *GEO 110 World Regional Geography 3 credit
- GEO 120 Human Geography 3 credit
- *HIS 105 U.S. History to 1877 3 credit
- *HIS 106 U.S. History since 1877..... 3 credit
- *HIS 155 Western Civilization to 1700 3 credit
- *HIS 156 Western Civilization since 1700 3 credit
- POS 110 American Government..... 3 credit
- PSY 101 Introduction to Psychology 3 credit
- PSY 200 Psychology of Adjustment..... 3 credit
- PSY 240 Developmental Psychology..... 3 credit
- SOC 120 General Sociology..... 3 credit
- SOC 121 Social Problems in America..... 3 credit
- SOC 130 Racial, Ethnic and Gender Relations
in Modern Society..... 3 credit
- SOC 225 Sociology of the Family..... 3 credit

Core Requirements • 15 credits

You must complete all five courses.

- EDU 200 Introduction to Education 3 credit
- EDU 220 Diversity in Education..... 3 credit
- EDU 222 Introduction to Special Education..... 3 credit
- MAT 161 Algebra-based Mathematics
for Elementary Teachers I 3 credit
- MAT 162 Algebra-based Mathematics
for Elementary Teachers II 3 credit

Required Electives • 14 credits

1. Successful completion of one of the following:
 - EDU 272 Educational Psychology 3 credit
 - EDU 276 Managing the Learning Environment 3 credit
 - EDU 291 Children’s Literature..... 3 credit
 - ENL 291 Children’s Literature 3 credit
2. Plus, you must successfully complete all three courses:
 - CIS 105 Computer Applications and Information
Technology 3 credit
 - POS 221 Arizona Constitution 1 credit
 - POS 222 U.S. Constitution 1 credit
3. Plus, successful completion of six credits of unduplicated electives from the General Education Requirements list.

Associate of Business (ABus)

About this Degree

No matter what field you may decide to pursue, it is helpful to begin with an understanding of business. The **Associate of Business (ABus) degree** is the foundation for many careers and a way to gain an edge and the critical knowledge it entails.

The NPC Associate of Business degree is a transfer degree.

The general education component of the ABus degree fulfills the Arizona General Education Curriculum (AGEC-B). When completed, the AGECE-B will transfer to the three public Arizona state universities as a block that meets **all lower division general education requirements**.

(see *What is AGECE?* – page 48)

NPC Requirements

- The Associate of Business (ABus) degree requires a minimum of 64 hours of course credits with a grade of “C” or better in all courses and a cumulative grade point average of 2.0 on a 4.0 scale.
- Graduates must complete CIS 105 and at least 33 general education credits.
- Some courses have **placement requirements** or **prerequisites** that may result in coursework beyond 64 credits. These courses, too, require a grade of “C” or better. For information about prerequisites, see an NPC academic adviser.
- In most general education courses, special emphasis is placed on developing written communication skills with intensive writing requirements. Race and ethnic issue awareness is embedded throughout the general education requirements. Specific courses, as noted, meet the requirement for Contemporary Global/International or Historical Awareness.

Degree Requirements • 64 credits

■ General Education Requirements • 36 credits

Completion of the 36 general education course credits fulfills requirements for the Arizona General Education Curriculum (AGECE-B) for the Associate of Business degree. (see *What is AGECE?* – page 48)

English • 6 credits

ENL 101 College Composition I 3 credit
 ENL 102 College Composition II 3 credit

Mathematics • 4 credits

MAT 211 Technical Calculus 4 credit
 (Or MAT 221 or higher mathematics course for which MAT 211 is a prerequisite)

Arts and Humanities • 6 credits

Select two courses from two different disciplines:

ART 101 Understanding Art 3 credit
 ART 115 Art History I 3 credit
 ART 116 Art History II 3 credit
 ENL 220 World Literature I 3 credit
 ENL 221 World Literature II 3 credit
 ENL 224 English Literature I 3 credit
 ENL 225 English Literature II 3 credit
 ENL 230 American Literature I 3 credit

ENL 231 American Literature II 3 credit
 HUM 150 Humanities in the Western World I 3 credit
 HUM 151 Humanities in the Western World II 3 credit
 MUS 150 Music Appreciation 3 credit
 PHL 101 Introduction to Philosophy 3 credit
 PHL 105 Introduction to Ethics 3 credit
 SPT 130 Introduction to Theatre 3 credit
 SPT 150 Introduction to Film 3 credit
 SPT 155 History of Television 3 credit

Physical and Biological Sciences • 8 credits

Select two courses. Students may transfer *either* CHM 130 or CHM 151, **but not both**; therefore, taking CHM 130 and CHM 151 will not satisfy the 8-credit requirement.

BIO 100 Biology Concepts 4 credit
 BIO 105 Environmental Biology 4 credit
 BIO 160 Introduction to Human Anatomy and Physiology I 4 credit
 BIO 181 General Biology I 4 credit
 BIO 182 General Biology II 4 credit
 CHM 130 Fundamental Chemistry 4 credit
 CHM 151 General Chemistry I 4 credit
 CHM 152 General Chemistry II 4 credit
 GEO 111 Physical Geography 4 credit
 GLG 101 Introduction to Geology I - Physical 4 credit
 GLG 102 Introduction to Geology II - Historical 4 credit
 PHY 113 General Physics I 4 credit
 PHY 114 General Physics II 4 credit

Social and Behavioral Sciences • 6 credits

Select two courses from at least two disciplines. Make at least one selection an asterisk (*) course to meet requirements for Contemporary Global/International or Historical Awareness.

*ANT 102 Cultural Anthropology 3 credit
 ANT 120 Buried Cities and Lost Tribes 3 credit
 BUS 140 Principles of Economics - Macro 3 credit
 BUS 141 Principles of Economics - Micro 3 credit
 *GEO 110 World Regional Geography 3 credit
 GEO 120 Human Geography 3 credit
 *HIS 105 U.S. History to 1877 3 credit
 *HIS 106 U.S. History since 1877 3 credit
 *HIS 155 Western Civilization to 1700 3 credit
 *HIS 156 Western Civilization since 1700 3 credit
 POS 110 American Government 3 credit
 PSY 101 Introduction to Psychology 3 credit
 PSY 200 Psychology of Adjustment 3 credit
 PSY 240 Developmental Psychology 3 credit
 SOC 120 General Sociology 3 credit
 SOC 121 Social Problems in America 3 credit
 SOC 130 Racial, Ethnic & Gender Relations in Modern Society 3 credit
 SOC 225 Sociology of the Family 3 credit

Computer Science • 3 credits

CIS 105 Computer Applications and Information Technology 3 credit

General Electives Options • 3 credits

Select one additional course from either the Arts and Humanities or Social and Behavioral Sciences lists to satisfy the requirement of 36 general education credits.

■ Electives • 28 credits

Select elective courses from:

1. Courses identified as common courses in university transfer guides in the student's major of choice;
2. 0 to 16 credits of language, if required in the student's major of choice at the university you plan to attend;
3. Prerequisites
4. Electives

The **electives component** must consist of credits that transfer to all three public Arizona universities as defined in the *Course Equivalency Guide* for the year in which the course is completed. Access to information about degrees and pathways, common courses, *Course Equivalency Guides*, and Arizona college and university catalogs is available through an academic adviser or directly on the Internet at www.AZTransfer.com.

Associate of Science (AS)

About this Degree

The Associate of Science (AS) degree helps develop comprehensive knowledge and good communications skills, while providing a firm grounding in mathematics and the natural sciences. An Associate of Science degree is foundational for students looking toward biological, health and medical undergraduate degrees. Students who plan on going into business, engineering or agriculture may also want to consider this degree.

The Associate of Science degree is a transfer degree designed for students planning to continue their education by transferring to one of the three Arizona public universities. The general education component of our AS degree fulfills all the requirements of the Arizona General Education Curriculum (AGEC-S). When completed, the AGECS will transfer to any of the three public Arizona state universities as a block meeting all lower division general education requirements. (see *What is AGECS?* – page 48)

NPC Requirements

- The Associate of Science (AS) degree requires a minimum of 64 hours of course credits with a grade of “C” or better in all courses and a cumulative grade point average of 2.0 on a 4.0 scale.
- Some courses have placement requirements or prerequisites that may result in coursework beyond 64 credits. These courses, too, require a grade of “C” or better. For information about prerequisites, see an NPC academic adviser.

- In most general education courses, special emphasis is placed on developing written communication skills with intensive writing requirements. Race and ethnic issue awareness is embedded throughout the general education requirements. Specific courses, as noted, meet the requirement for Contemporary Global/International or Historical Awareness.

Degree Requirements • 64 credits

■ General Education Requirements • 36 credits

Completion of the 36 general education course credits fulfills requirements for the Arizona General Education Education Curriculum (AGEC-S) for the Associate of Science degree.

(see *What is AGECS?* – page 48)

English • 6 credits

- ENL 101 College Composition I 3 credit
- ENL 102 College Composition II 3 credit

Mathematics • 4 credits

- MAT 221 Calculus I (or a mathematics course for which MAT 221 is a prerequisite) 4 credit

Arts and Humanities • 6 credits

Select two courses from at least two disciplines.

- ART 101 Understanding Art 3 credit
- ART 115 Art History I 3 credit
- ART 116 Art History II 3 credit
- ENL 220 World Literature I 3 credit
- ENL 221 World Literature II 3 credit
- ENL 224 English Literature I 3 credit
- ENL 225 English Literature II 3 credit
- ENL 230 American Literature I 3 credit
- ENL 231 American Literature II 3 credit
- HUM 150 Humanities in the Western World I 3 credit
- HUM 151 Humanities in the Western World II 3 credit
- MUS 150 Music Appreciation 3 credit
- PHL 101 Introduction to Philosophy 3 credit
- PHL 105 Introduction to Ethics 3 credit
- SPT 130 Introduction to Theatre 3 credit
- SPT 150 Introduction to Film 3 credit
- SPT 155 History of Television 3 credit

Physical and Biological Sciences • 8 credits

Select two courses from the SAME discipline.

- BIO 181 General Biology I 4 credit
- BIO 182 General Biology II 4 credit
- CHM 151 General Chemistry I 4 credit
- CHM 152 General Chemistry II 4 credit

Social and Behavioral Sciences • 6 credits

Select two courses from two different disciplines, with at least one asterisk (*) course to meet requirements for Contemporary Global/International or Historical Awareness.

- *ANT 102 Cultural Anthropology 3 credit

ANT 120 Buried Cities and Lost Tribes	3 credit
BUS 140 Principles of Economics - Macro.....	3 credit
BUS 141 Principles of Economics - Micro.....	3 credit
*GEO 110 World Regional Geography	3 credit
GEO 120 Human Geography.....	3 credit
*HIS 105 U.S. History to 1877	3 credit
*HIS 106 U.S. History since 1877.....	3 credit
*HIS 155 Western Civilization to 1700.....	3 credit
*HIS 156 Western Civilization since 1700.....	3 credit
POS 110 American Government.....	3 credit
PSY 101 Introduction to Psychology	3 credit
PSY 200 Psychology of Adjustment.....	3 credit
PSY 240 Developmental Psychology.....	3 credit
SOC 120 General Sociology.....	3 credit
SOC 121 Social Problems in America.....	3 credit
SOC 130 Racial, Ethnic & Gender Relations in Modern Society.....	3 credit
SOC 225 Sociology of the Family.....	3 credit

Science/Mathematics Option • 6 credits

Select two courses not taken to satisfy Physical and Biological Sciences requirements.

BIO 105 Environmental Biology	4 credit
BIO 160 Introduction to Human Anatomy and Physiology I.....	4 credit
BIO 181 General Biology I.....	4 credit
BIO 182 General Biology II	4 credit
BIO 201 Human Anatomy and Physiology I.....	4 credit
BIO 202 Human Anatomy and Physiology II	4 credit
BIO 205 Microbiology.....	4 credit
CHM 151 General Chemistry I.....	4 credit
CHM 152 General Chemistry II	4 credit
GEO 111 Physical Geography.....	4 credit
GLG 101 Introduction to Geology I - Physical.....	4 credit
GLG 102 Introduction to Geology II - Historical....	4 credit
MAT 231 Calculus II	4 credit
MAT 241 Calculus III.....	4 credit
MAT 261 Introduction to Differential Equations ...	4 credit
PHY 113 General Physics I	4 credit
PHY 114 General Physics II	4 credit

■ **Electives • 28 credits**

Select elective courses from:

1. Courses identified as common courses in university transfer guides in the student’s major of choice;
2. 0 to 16 credits of language, if required in the student’s major of choice at the university you plan to attend;
3. Prerequisites
4. The **electives component** must consist of credits that transfer to all three public Arizona universities as defined in the *Course Equivalency Guide* for the year in which the course is completed. Access to information about degrees and pathways, common courses, *Course Equivalency Guides*, and Arizona college and university catalogs is available through an academic adviser or directly on the Internet at www.AZTransfer.com.

Non-Transfer Degree Programs

About the General Studies Degrees

The **Associate of General Studies (AGS) Degree** is designed for those who wish to enhance their personal development with the equivalent of two years of post-high school education but are not planning to transfer to a four-year college or university or prepare for a specific vocational career. **The Associate of General Studies (AGS) degree is the most flexible of the degrees offered at NPC.** With this degree you learn the basics of mathematics, English, science, history and a wide variety of other subjects, allowing you the chance to explore many different disciplines.

The AGS degree can provide you with recognized learning credentials. Completing the specializations in Early Childhood or Special Needs Educational Assistant provide a student the flexibility of meeting work-related course mandates while also pursuing general education courses that may serve as the foundation for a bachelor’s degree.

Although many courses within these programs may transfer to four-year colleges and universities, students should not assume that all courses will transfer.

NPC Requirements

- The **Associate of General Studies (AGS) degree** requires **64 hours of course credits** with a cumulative grade point average of 2.0 on a 4.0 scale.
- Students must complete 31 general education credits.
- Some courses have **placement requirements** or **prerequisites** that may result in coursework beyond the 64 credits. For information about prerequisites, see an NPC academic adviser.
- Students must meet with an NPC academic adviser to select a program of courses that will best meet the student’s goals.
- Students with an associate or higher degree will not be considered for this program.
- In most general education courses, special emphasis is placed on developing written communication skills with intensive writing requirements. Race and ethnic issue awareness is embedded throughout the general education requirements.

Degree Requirements • 64 credits

■ **General Education Requirements** • **31 credits**

Completion of 31 general education course credits is required for the AGS degree.

English • 6 credits

- ENL 101 College Composition I 3 credit
- Plus one of the following:
- ENL 102 College Composition II..... 3 credit
- ENL 109 Technical Writing..... 3 credit

Mathematics • 3 credits

Select one of the following, or a higher mathematics course for which MAT 112 is a prerequisite.

- MAT 105 Mathematics for General Education..... 3 credit
- MAT 112 Algebra II: Intermediate..... 3 credit

■ Discipline Studies

Arts and Humanities • 6 credits

Select two courses from at least two disciplines.

- ART 101 Understanding Art..... 3 credit
- ART 115 Art History I..... 3 credit
- ART 116 Art History II..... 3 credit
- ENL 220 World Literature I 3 credit
- ENL 221 World Literature II 3 credit
- ENL 224 English Literature I..... 3 credit
- ENL 225 English Literature II 3 credit
- ENL 230 American Literature I..... 3 credit
- ENL 231 American Literature II 3 credit
- HUM 150 Humanities in the Western World I..... 3 credit
- HUM 151 Humanities in the Western World II 3 credit
- MUS 150 Music Appreciation 3 credit
- PHL 101 Introduction to Philosophy 3 credit
- PHL 105 Introduction to Ethics 3 credit
- SPT 130 Introduction to Theatre..... 3 credit
- SPT 150 Introduction to Film 3 credit
- SPT 155 History of Television 3 credit

Physical and Biological Sciences • 4 credits

- BIO 100 Biology Concepts 4 credit
- BIO 105 Environmental Biology 4 credit
- BIO 160 Introduction to Human Anatomy
and Physiology I..... 4 credit
- BIO 181 General Biology I..... 4 credit
- BIO 182 General Biology II 4 credit
- CHM 130 Fundamental Chemistry 4 credit
- CHM 151 General Chemistry I..... 4 credit
- CHM 152 General Chemistry II 4 credit
- GEO 111 Physical Geography..... 4 credit
- GLG 101 Introduction to Geology I - Physical..... 4 credit
- GLG 102 Introduction to Geology II - Historical.... 4 credit
- PHY 113 General Physics I 4 credit
- PHY 114 General Physics II 4 credit

Social and Behavioral Sciences • 6 credits

Select two courses from two disciplines.

- *ANT 102 Cultural Anthropology 3 credit
- ANT 120 Buried Cities and Lost Tribes 3 credit
- BUS 140 Principles of Economics - Macro 3 credit
- BUS 141 Principles of Economics - Micro 3 credit

- *GEO 110 World Regional Geography 3 credit
 - GEO 120 Human Geography..... 3 credit
 - *HIS 105 U.S. History to 1877 3 credit
 - *HIS 106 U.S. History since 1877..... 3 credit
 - *HIS 155 Western Civilization to 1700 3 credit
 - *HIS 156 Western Civilization since 1700 3 credit
 - POS 110 American Government..... 3 credit
 - PSY 101 Introduction to Psychology 3 credit
 - PSY 200 Psychology of Adjustment..... 3 credit
 - PSY 240 Developmental Psychology..... 3 credit
 - SOC 120 General Sociology..... 3 credit
 - SOC 121 Social Problems in America..... 3 credit
 - SOC 130 Racial, Ethnic & Gender Relations
in Modern Society..... 3 credit
 - SOC 225 Sociology of the Family..... 3 credit
- Courses marked with an asterisk (*) meet requirements for Contemporary Global/International or Historical Awareness.

Additional Discipline Studies • 6 credits

Select a minimum of six additional credits from the Discipline Studies courses, or from these courses.

Foreign Language

- FRE 101 Elementary French I..... 4 credit
- FRE 102 Elementary French II..... 4 credit
- GER 101 Elementary German I 4 credit
- GER 102 Elementary German II..... 4 credit
- SPA 101 Elementary Spanish I..... 4 credit
- SPA 102 Elementary Spanish II..... 4 credit

Computer Science

- CIS 105 Computer Applications and Information
Technology 3 credit

Verbal Communication

- SPT 120 Public Speaking..... 3 credit

■ Unrestricted Electives • 33 credits

Select from any unduplicated courses at the 100 or higher level.

**Associate of General Studies
Early Childhood
Infant/Toddler**

About this Degree

The AGS Early Childhood Infant/Toddler degree requires satisfactory completion of 64 credits.

NPC Requirements

- The Associate of General Studies (AGS) Early Childhood Infant/Toddler degree requires 64 hours of course credits with a cumulative grade point average of 2.0 on a 4.0 scale.

- Students must complete 31 or 32 general education credits.
- Some courses have **placement requirements** or **prerequisites** that may result in coursework beyond the 64 credits. For information about prerequisites, see an NPC academic adviser.
- Students must meet with an NPC academic adviser to select a program of courses that will best meet the student's goals.
- Students with an associate or higher degree will not be considered for this program.
- In most general education courses, special emphasis is placed on developing written communication skills with intensive writing requirements. Race and ethnic issue awareness is embedded throughout the general education requirements.

Degree Requirements • 64 credits

■ General Education Requirements • 31 credits

Completion of the 31 general education course credits is required for the AGS degree.

English • 6 credits

- ENL 101 College Composition I 3 credit
 Plus one of the following:
 ENL 102 College Composition II..... 3 credit
 ENL 109 Technical Writing..... 3 credit

Mathematics • 3 credits

Select one of the following, or a higher mathematics course for which MAT 112 is a prerequisite.

- MAT 105 Mathematics for General Education..... 3 credit
 MAT 112 Algebra II: Intermediate 3 credit

■ Discipline Studies

Arts and Humanities • 6 credits

Select two courses from at least two disciplines.

- ART 101 Understanding Art..... 3 credit
 ART 115 Art History I..... 3 credit
 ART 116 Art History II..... 3 credit
 ENL 220 World Literature I 3 credit
 ENL 221 World Literature II 3 credit
 ENL 224 English Literature I..... 3 credit
 ENL 225 English Literature II 3 credit
 ENL 230 American Literature I..... 3 credit
 ENL 231 American Literature II 3 credit
 HUM 150 Humanities in the Western World I..... 3 credit
 HUM 151 Humanities in the Western World II 3 credit
 MUS 150 Music Appreciation 3 credit
 PHL 101 Introduction to Philosophy 3 credit
 PHL 105 Introduction to Ethics 3 credit

- SPT 130 Introduction to Theatre..... 3 credit
 SPT 150 Introduction to Film 3 credit
 SPT 155 History of Television 3 credit

Physical and Biological Sciences • 4 credits

- BIO 100 Biology Concepts 4 credit
 BIO 105 Environmental Biology 4 credit
 BIO 160 Introduction to Human Anatomy
 and Physiology I..... 4 credit
 BIO 181 General Biology I..... 4 credit
 BIO 182 General Biology II 4 credit
 CHM 130 Fundamental Chemistry 4 credit
 CHM 151 General Chemistry I..... 4 credit
 CHM 152 General Chemistry II 4 credit
 GEO 111 Physical Geography 4 credit
 GLG 101 Introduction to Geology I - Physical..... 4 credit
 GLG 102 Introduction to Geology II - Historical... 4 credit
 PHY 113 General Physics I 4 credit
 PHY 114 General Physics II 4 credit

Social and Behavioral Sciences • 6 credits

Select two courses from two disciplines.

- *ANT 102 Cultural Anthropology 3 credit
 ANT 120 Buried Cities and Lost Tribes 3 credit
 BUS 140 Principles of Economics - Macro 3 credit
 BUS 141 Principles of Economics - Micro 3 credit
 *GEO 110 World Regional Geography 3 credit
 GEO 120 Human Geography 3 credit
 *HIS 105 U.S. History to 1877 3 credit
 *HIS 106 U.S. History since 1877..... 3 credit
 *HIS 155 Western Civilization to 1700 3 credit
 *HIS 156 Western Civilization since 1700 3 credit
 POS 110 American Government..... 3 credit
 PSY 101 Introduction to Psychology 3 credit
 PSY 200 Psychology of Adjustment 3 credit
 PSY 240 Developmental Psychology..... 3 credit
 SOC 120 General Sociology 3 credit
 SOC 121 Social Problems in America..... 3 credit
 SOC 130 Racial, Ethnic & Gender Relations
 in Modern Society..... 3 credit
 SOC 225 Sociology of the Family..... 3 credit

Courses marked with an asterisk (*) meet requirements for Contemporary Global/International or Historical Awareness.

Additional Discipline Studies • 6 credits

Select a minimum of six additional credits from the Discipline Studies courses, or from these courses.

Foreign Language

- FRE 101 Elementary French I..... 4 credit
 FRE 102 Elementary French II..... 4 credit
 GER 101 Elementary German I 4 credit
 GER 102 Elementary German II..... 4 credit
 SPA 101 Elementary Spanish I..... 4 credit
 SPA 102 Elementary Spanish II 4 credit

Computer Science

CIS 105 Computer Applications and Information
Technology3 credit

Verbal Communication

SPT 120 Public Speaking.....3 credit

■ **Core Requirements • 29 credits**

ECD 100 Providing a Healthy Environment..... 1 credit
 ECD 102 Ensuring a Safe Environment..... 1 credit
 ECD 103 Planned Arrangements and Schedules..... 1 credit
 ECD 108 Techniques for Observing Children 1 credit
 ECD 110 Building Relationships with Parents
 Through Communication..... 1 credit
 ECD 112 Enhancing Family Involvement..... 1 credit
 ECD 143 Inclusion of Children
 With Special Needs.....2 credit
 ECD 154 Environments for Infants and Toddlers... 1 credit
 ECD 155 Curriculum and Learning Materials
 for Infants..... 1 credit
 ECD 156 Curriculum and Learning Materials
 for Toddlers 1 credit
 ECD 158 Developing and Utilizing Observations
 Skills in Infant and Toddler Programs 1 credit
 ECD 159 Recordkeeping Skills
 for Infant/Toddler Care..... 1 credit
 ECD 163 Cognitive Development
 of Infants and Toddlers..... 1 credit
 ECD 164 Practical Applications of Cognitive
 Development 1 credit
 ECD 165 Language Development of Infants
 and Toddlers..... 1 credit
 ECD 166 Encouraging Autonomy and
 Positive Self-Concept..... 1 credit
 ECD 167 Guidance and Discipline of Infants
 and Toddlers..... 1 credit
 ECD 168 Enhancing Social Competence
 of Infants/Toddlers..... 1 credit
 ECD 169 Sensorimotor Learning in Infancy
 and Toddlerhood..... 1 credit
 ECD 172 Physical Development in Infancy
 and Toddlerhood..... 1 credit
 ECD 101 The Child’s Total Learning Environment 1 credit
 ECD 175 Professionalism..... 1 credit
 ECD 200 Introduction to Early Childhood
 Education 3 credit
 ECD 250 Child Development I 3 credit

■ **Required Electives • 4 credits**

Four credits of **unduplicated** electives must be taken from any area (with the exception of 199s and 299s).

**Associate of General Studies
Early Childhood Management
About this Degree**

The AGS Early Childhood Management degree requires satisfactory completion 66 credits.

NPC Requirements

- The Associate of General Studies (AGS) Early Childhood Management degree requires 66 hours of course credits with a cumulative grade point average of 2.0 on a 4.0 scale.
- Students must complete 31 general education credits.
- Some courses have placement requirements or prerequisites that may result in coursework beyond the 66 credits. For information about prerequisites, see an NPC academic adviser.
- Students must meet with an NPC academic adviser to select a program of courses that will best meet the student’s goals.
- Students with an associate or higher degree will not be considered for this program.
- In most general education courses, special emphasis is placed on developing written communication skills with intensive writing requirements. Race and ethnic issue awareness is embedded throughout the general education requirements.

Degree Requirements • 66 credits

■ **General Education Requirements • 31 credits**

Completion of 31 general education course credits is required for the AGS degree.

English • 6 credits

ENL 101 College Composition I 3 credit
 Plus one of the following:
 ENL 102 College Composition II..... 3 credit
 ENL 109 Technical Writing..... 3 credit

Mathematics • 3 credits

Select one of the following, or a higher mathematics course for which MAT 112 is a prerequisite.

MAT 105 Mathematics for General Education..... 3 credit
 MAT 112 Algebra II: Intermediate..... 3 credit

■ **Discipline Studies**

Arts and Humanities • 6 credits

Select two courses from at least two disciplines.

ART 101 Understanding Art..... 3 credit
 ART 115 Art History I..... 3 credit

ART 116 Art History II.....	3 credit
ENL 220 World Literature I.....	3 credit
ENL 221 World Literature II.....	3 credit
ENL 224 English Literature I.....	3 credit
ENL 225 English Literature II.....	3 credit
ENL 230 American Literature I.....	3 credit
ENL 231 American Literature II.....	3 credit
HUM 150 Humanities in the Western World I.....	3 credit
HUM 151 Humanities in the Western World II.....	3 credit
MUS 150 Music Appreciation.....	3 credit
PHL 101 Introduction to Philosophy.....	3 credit
PHL 105 Introduction to Ethics.....	3 credit
SPT 130 Introduction to Theatre.....	3 credit
SPT 150 Introduction to Film.....	3 credit
SPT 155 History of Television.....	3 credit

Physical and Biological Sciences • 4 credits

BIO 100 Biology Concepts.....	4 credit
BIO 105 Environmental Biology.....	4 credit
BIO 160 Introduction to Human Anatomy and Physiology I.....	4 credit
BIO 181 General Biology I.....	4 credit
BIO 182 General Biology II.....	4 credit
CHM 130 Fundamental Chemistry.....	4 credit
CHM 151 General Chemistry I.....	4 credit
CHM 152 General Chemistry II.....	4 credit
GEO 111 Physical Geography.....	4 credit
GLG 101 Introduction to Geology I - Physical.....	4 credit
GLG 102 Introduction to Geology II - Historical.....	4 credit
PHY 113 General Physics I.....	4 credit
PHY 114 General Physics II.....	4 credit

Social and Behavioral Sciences • 6 credits

Select two courses from two disciplines.

*ANT 102 Cultural Anthropology.....	3 credit
ANT 120 Buried Cities and Lost Tribes.....	3 credit
BUS 140 Principles of Economics - Macro.....	3 credit
BUS 141 Principles of Economics - Micro.....	3 credit
*GEO 110 World Regional Geography.....	3 credit
GEO 120 Human Geography.....	3 credit
*HIS 105 U.S. History to 1877.....	3 credit
*HIS 106 U.S. History since 1877.....	3 credit
*HIS 155 Western Civilization to 1700.....	3 credit
*HIS 156 Western Civilization since 1700.....	3 credit
POS 110 American Government.....	3 credit
PSY 101 Introduction to Psychology.....	3 credit
PSY 200 Psychology of Adjustment.....	3 credit
PSY 240 Developmental Psychology.....	3 credit
SOC 120 General Sociology.....	3 credit
SOC 121 Social Problems in America.....	3 credit
SOC 130 Racial, Ethnic & Gender Relations in Modern Society.....	3 credit
SOC 225 Sociology of the Family.....	3 credit

Courses marked with an asterisk (*) meet requirements for Contemporary Global/International or Historical Awareness.

■ Additional Discipline Studies • 6 credits

Select a minimum of six additional credits from the Discipline Studies courses, or from these courses.

Foreign Language

FRE 101 Elementary French I.....	4 credit
FRE 102 Elementary French II.....	4 credit
GER 101 Elementary German I.....	4 credit
GER 102 Elementary German II.....	4 credit
SPA 101 Elementary Spanish I.....	4 credit
SPA 102 Elementary Spanish II.....	4 credit

Computer Science

CIS 105 Computer Applications and Information Technology.....	3 credit
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Verbal Communication

SPT 120 Public Speaking.....	3 credit
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■ Core Requirements • 35 credits

ECD 100 Providing a Healthy Environment.....	1 credit
ECD 102 Ensuring a Safe Environment.....	1 credit
ECD 103 Planned Arrangements and Schedules.....	1 credit
ECD 105 Guidance Principles for Encouraging Self Discipline.....	1 credit
ECD 108 Techniques for Observing Children.....	1 credit
ECD 110 Building Relationships with Parents Through Communication.....	1 credit
ECD 111 Supporting the Growth and Education of Parents.....	1 credit
ECD 112 Enhancing Family Involvement.....	1 credit
ECD 120 Enhancing a Positive Self-Concept.....	1 credit
ECD 128 Incorporating the Children's Culture.....	1 credit
ECD 129 Planning and Implementing a Bilingual Program.....	1 credit
ECD 136 Understanding How Children Learn.....	1 credit
ECD 175 Professionalism.....	1 credit
ECD 198 Internship (Early Childhood Management).....	1 credit
ECD 200 Introduction to Early Childhood Education.....	3 credit
ECD 201 Exploring Early Childhood Program Philosophies.....	1 credit
ECD 211 Providing Food and Nutrition Services....	1 credit
ECD 231 Planning and Managing an Early Childhood Program.....	2 credit
ECD 232 Designing Indoor and Outdoor Environments.....	2 credit
ECD 233 Developing Policies and Procedures for Early Childhood Programs.....	2 credit
ECD 234 Staffing an Early Childhood Program.....	2 credit
ECD 235 Budgeting and Financial Management.....	2 credit
ECD 236 Marketing the Early Childhood Program.....	2 credit
ECD 237 Evaluating an Early Childhood Program.....	1 credit
ECD 250 Child Development I.....	3 credit

Associate of General Studies

Early Childhood Preschool

About this Degree

The AGS Early Childhood Preschool degree requires satisfactory completion 64 credits.

NPC Requirements

- The Associate of General Studies (AGS) Early Childhood Preschool degree requires 64 hours of course credits with a cumulative grade point average of 2.0 on a 4.0 scale.
- Students must complete 31 general education credits.
- Some courses have placement requirements or prerequisites that may result in coursework beyond the 64 credits. For information about prerequisites, see an NPC academic adviser.
- Students must meet with an NPC academic adviser to select a program of courses that will best meet the student's goals.
- Students with an associate or higher degree will not be considered for this program.
- In most general education courses, special emphasis is placed on developing written communication skills with intensive writing requirements. Race and ethnic issue awareness is embedded throughout the general education requirements.

Degree Requirements • 64 credits

■ General Education Requirements • 31 credits

Completion of 31 general education course credits is required for the AGS degree.

English • 6 credits

- ENL 101 College Composition I 3 credit
Plus one of the following:
ENL 102 College Composition II 3 credit
ENL 109 Technical Writing 3 credit

Mathematics • 3 credits

Select one of the following, or a higher mathematics course for which MAT 112 is a prerequisite.

- MAT 105 Mathematics for General Education 3 credit
MAT 112 Algebra II: Intermediate 3 credit

■ Discipline Studies

Arts and Humanities • 6 credits

Select two courses from at least two disciplines.

- ART 101 Understanding Art 3 credit
ART 115 Art History I 3 credit

- ART 116 Art History II 3 credit
ENL 220 World Literature I 3 credit
ENL 221 World Literature II 3 credit
ENL 224 English Literature I 3 credit
ENL 225 English Literature II 3 credit
ENL 230 American Literature I 3 credit
ENL 231 American Literature II 3 credit
HUM 150 Humanities in the Western World I 3 credit
HUM 151 Humanities in the Western World II 3 credit
MUS 150 Music Appreciation 3 credit
PHL 101 Introduction to Philosophy 3 credit
PHL 105 Introduction to Ethics 3 credit
SPT 130 Introduction to Theatre 3 credit
SPT 150 Introduction to Film 3 credit
SPT 155 History of Television 3 credit

Physical and Biological Sciences • 4 credits

- BIO 100 Biology Concepts 4 credit
BIO 105 Environmental Biology 4 credit
BIO 160 Introduction to Human Anatomy
and Physiology I 4 credit
BIO 181 General Biology I 4 credit
BIO 182 General Biology II 4 credit
CHM 130 Fundamental Chemistry 4 credit
CHM 151 General Chemistry I 4 credit
CHM 152 General Chemistry II 4 credit
GEO 111 Physical Geography 4 credit
GLG 101 Introduction to Geology I - Physical 4 credit
GLG 102 Introduction to Geology II - Historical 4 credit
PHY 113 General Physics I 4 credit
PHY 114 General Physics II 4 credit

Social and Behavioral Sciences • 6 credits

Select two courses from two disciplines.

- *ANT 102 Cultural Anthropology 3 credit
ANT 120 Buried Cities and Lost Tribes 3 credit
BUS 140 Principles of Economics - Macro 3 credit
BUS 141 Principles of Economics - Micro 3 credit
*GEO 110 World Regional Geography 3 credit
GEO 120 Human Geography 3 credit
*HIS 105 U.S. History to 1877 3 credit
*HIS 106 U.S. History since 1877 3 credit
*HIS 155 Western Civilization to 1700 3 credit
*HIS 156 Western Civilization since 1700 3 credit
POS 110 American Government 3 credit
PSY 101 Introduction to Psychology 3 credit
PSY 200 Psychology of Adjustment 3 credit
PSY 240 Developmental Psychology 3 credit
SOC 120 General Sociology 3 credit
SOC 121 Social Problems in America 3 credit
SOC 130 Racial, Ethnic & Gender Relations
in Modern Society 3 credit
SOC 225 Sociology of the Family 3 credit

Courses marked with an asterisk (*) meet requirements for Contemporary Global/International or Historical Awareness.

■ **Additional Discipline Studies • 6 credits**

Select a minimum of six additional credits from the Discipline Studies courses, or from these courses.

Foreign Language

FRE 101 Elementary French I.....	4 credit
FRE 102 Elementary French II.....	4 credit
GER 101 Elementary German I.....	4 credit
GER 102 Elementary German II.....	4 credit
SPA 101 Elementary Spanish I.....	4 credit
SPA 102 Elementary Spanish II.....	4 credit

Computer Science

CIS 105 Computer Applications and Information Technology	3 credit
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Verbal Communication

SPT 120 Public Speaking.....	3 credit
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■ **Core Requirements • 29 credits**

ECD 100 Providing a Healthy Environment.....	1 credit
ECD 101 The Child’s Total Learning Environment	1 credit
ECD 102 Ensuring a Safe Environment.....	1 credit
ECD 103 Planned Arrangements and Schedules.....	1 credit
ECD 105 Guidance Principles for Encouraging Self-Discipline.....	1 credit
ECD 108 Techniques for Observing Children	1 credit
ECD 110 Building Relationships with Parents Through Communication.....	1 credit
ECD 112 Enhancing Family Involvement.....	1 credit
ECD 113 Fostering Communication and Language Skills.....	1 credit
ECD 114 Beginning Mathematical Concepts	1 credit
ECD 115 Nutrition in Early Childhood I.....	1 credit
ECD 116 Sciencing and Discovery II	1 credit
ECD 117 Enhancing Questions and Problem-Solving Abilities.....	1 credit
ECD 118 Blocks in Early Childhood Programs.....	1 credit
ECD 120 Enhancing a Positive Self-Concept.....	1 credit
ECD 123 Music and Creative Movement.....	1 credit
ECD 124 Dramatic Play in the Early Childhood Setting	1 credit
ECD 125 Creative Media.....	1 credit
ECD 126 Large Muscle Development	1 credit
ECD 127 Small Muscle Development	1 credit
ECD 136 Understanding How Children Learn.....	1 credit
ECD 175 Professionalism.....	1 credit
ECD 200 Introduction to Early Childhood Education	3 credit
or	
EDU 200 Introduction to Education	3 credit
ECD 216 Transitions.....	1 credit
ECD 250 Child Development I.....	3 credit

■ **Required Electives • 4 credits**

Complete four credits from the following:

Any ECD courses not listed above in required core credits, with the exception of ECD 199’s and ECD 299’s.

EDU 200 Introduction to Education (if not taken as part of core).....	3 credit
EDU 201 Substitute Teaching in the Schools.....	3 credit
LAN 120 Conversational Navajo I.....	3 credit
LAN 121 Conversational Navajo II.....	3 credit
LAN 125 Conversational Apache I.....	3 credit
LAN 126 I Conversational Apache II.....	3 credit
LAN 160 Beginning American Sign Language.....	3 credit
LAN 161 Intermediate American Sign Language....	3 credit
POS 221 Arizona Constitution and Government ...	1 credit

**Associate of General Studies
Special Needs
Educational Assistant**

About this Degree

The AGS Special Needs Educational Assistant degree requires satisfactory completion 64 credits.

NPC Requirements

- The Associate of General Studies (AGS) Special Needs Educational Assistant degree requires 64 hours of course credits with a cumulative grade point average of 2.0 on a 4.0 scale.
- Students must complete 31 general education credits.
- Some courses have placement requirements or prerequisites that may result in coursework beyond the 64 credits. For information about prerequisites, see an NPC academic adviser.
- Students must meet with an NPC academic adviser to select a program of courses that will best meet the student’s goals.
- Students with an associate or higher degree will not be considered for this program.
- In most general education courses, special emphasis is placed on developing written communication skills with intensive writing requirements. Race and ethnic issue awareness is embedded throughout the general education requirements.

Degree Requirements • 64 credits

■ **General Education Requirements • 31 credits**

Completion of the 31 to 32 general education course credits is required for the AGS degree.

English • 6 credits

- ENL 101 College Composition I 3 credit
- Plus one of the following:
- ENL 102 College Composition II..... 3 credit
- ENL 109 Technical Writing..... 3 credit

Mathematics • 3 credits

Select one of the following, or a higher mathematics course for which MAT 112 is a prerequisite.

- MAT 105 Mathematics for General Education..... 3 credit
- MAT 112 Algebra II: Intermediate..... 3 credit

■ Discipline Studies

Arts and Humanities • 6 credits

Select two courses from at least two disciplines.

- ART 101 Understanding Art..... 3 credit
- ART 115 Art History I..... 3 credit
- ART 116 Art History II..... 3 credit
- ENL 220 World Literature I 3 credit
- ENL 221 World Literature II 3 credit
- ENL 224 English Literature I..... 3 credit
- ENL 225 English Literature II 3 credit
- ENL 230 American Literature I..... 3 credit
- ENL 231 American Literature II 3 credit
- HUM 150 Humanities in the Western World I..... 3 credit
- HUM 151 Humanities in the Western World II 3 credit
- MUS 150 Music Appreciation 3 credit
- PHL 101 Introduction to Philosophy 3 credit
- PHL 105 Introduction to Ethics..... 3 credit
- SPT 130 Introduction to Theatre..... 3 credit
- SPT 150 Introduction to Film 3 credit
- SPT 155 History of Television 3 credit

Physical and Biological Sciences • 4 credits

- BIO 100 Biology Concepts 4 credit
- BIO 105 Environmental Biology 4 credit
- BIO 160 Introduction to Human Anatomy
and Physiology I..... 4 credit
- BIO 181 General Biology I..... 4 credit
- BIO 182 General Biology II 4 credit
- CHM 130 Fundamental Chemistry 4 credit
- CHM 151 General Chemistry I..... 4 credit
- CHM 152 General Chemistry II 4 credit
- GEO 111 Physical Geography..... 4 credit
- GLG 101 Introduction to Geology I - Physical..... 4 credit
- GLG 102 Introduction to Geology II - Historical.... 4 credit
- PHY 113 General Physics I 4 credit
- PHY 114 General Physics II 4 credit

Social and Behavioral Sciences • 6 credits

Select two courses from two disciplines.

- *ANT 102 Cultural Anthropology 3 credit
- ANT 120 Buried Cities and Lost Tribes 3 credit
- BUS 140 Principles of Economics - Macro 3 credit
- BUS 141 Principles of Economics - Micro..... 3 credit

- *GEO 110 World Regional Geography 3 credit
- GEO 120 Human Geography..... 3 credit
- *HIS 105 U.S. History to 1877 3 credit
- *HIS 106 U.S. History since 1877..... 3 credit
- *HIS 155 Western Civilization to 1700 3 credit
- *HIS 156 Western Civilization since 1700 3 credit
- POS 110 American Government..... 3 credit
- PSY 101 Introduction to Psychology 3 credit
- PSY 200 Psychology of Adjustment..... 3 credit
- PSY 240 Developmental Psychology..... 3 credit
- SOC 120 General Sociology..... 3 credit
- SOC 121 Social Problems in America..... 3 credit
- SOC 130 Racial, Ethnic & Gender Relations
in Modern Society..... 3 credit
- SOC 225 Sociology of the Family..... 3 credit

Courses marked with an asterisk (*) meet requirements for Contemporary Global/International or Historical Awareness.

■ Additional Discipline Studies • 6 credits

Select a minimum of six additional credits from the discipline study courses, or from these courses.

Foreign Language

- FRE 101 Elementary French I..... 4 credit
- FRE 102 Elementary French II..... 4 credit
- GER 101 Elementary German I 4 credit
- GER 102 Elementary German II..... 4 credit
- SPA 101 Elementary Spanish I..... 4 credit
- SPA 102 Elementary Spanish II..... 4 credit

Computer Science

- CIS 105 Computer Applications and Information
Technology 3 credit

Verbal Communication

- SPT 120 Public Speaking..... 3 credit

■ Core Requirements • 21 credits

- ECD 136 Understanding How Children Learn..... 1 credit
- ECD 222 Young Children with Special Needs 3 credit
- ECD 200 Introduction to Early Childhood
Education 3 credit
- or
- EDU 200 Introduction to Education 3 credit
- ECD 250 Child Development I 3 credit
- EDU 198 Internship
(Occupational/Physical Therapy) 1 credit
- EDU 198 Internship (Speech Therapy)..... 1 credit
- EDU 202 Occupational/Physical Therapy
Educational Assistant..... 3 credit
- EDU 203 Speech Therapy Educational Assistant.... 3 credit
- LAN 160 Beginning American Sign Language..... 3 credit

■ Required Electives • 12 credits

Select 12 **unduplicated** credits, 100 level or higher, from ECD/EDU/EMT/LAN/SPA courses as electives.

Index of AGS/AAS/CAS/CP Programs

AGS - Associate of General Studies • AAS - Associate of Applied Science • CAS - Certificate of Applied Science

CP - Certificate of Proficiency • CRT - Certificate of Completion

Program	Awards
Administrative Information Services (AIS)	
Administrative Information Services	AAS/CAS/CP
Administrative Office Management. . . . .	.AAS/CAS
Legal Office . . . . .	.AAS/CAS
Legal Office Fundamentals . . . . .	.CP
Medical Office Fundamentals. . . . .	.CP
Medical Office Procedures . . . . .	.AAS/CAS
Medical Transcription.	AAS/CAS/CP
Modern Office Fundamentals. . . . .	.CP
Records and Information Management . . . . .	.AAS/CAS
Records Management/Data Processing Fundamentals. .CP	
Word Processing Fundamentals. . . . .	.CP
Automotive Technology (ATO)AAS/CAS	
Brake and Transmission Systems . . . . .	.CP
Drive Train, Suspension and Steering, HVAC . . . . .	.CP
Electrical and Electronics Systems . . . . .	.CP
Engine Performance. . . . .	.CP
Engine Repair . . . . .	.CP
Business (BUS)	
Accounting	AAS/CAS/CP
General Business Management	AAS/CAS/CP
Native American Enterprise. . . . .	.AAS/CAS
Public Administration.	AAS/CAS/CP
Small Business Management	AAS/CAS/CP
Computer Information Systems (CIS)	
Commercial Graphics Fundamentals. . . . .	.CP
Computer Information Systems. . . . .	.AAS/CAS
Graphic Design	AAS/CAS/CP
Network and PC Support . . . . .	.CP
Software Quality Assurance. . . . .	.CP
Web Design	AAS/CAS/CP
Web Development. . . . .	.AAS/CAS
Cosmetology (COS)AAS/CAS/CP	
Cosmetology Instructor . . . . .	.CP
Nail Technician . . . . .	.CP
Early Childhood Development (ECD)	
Early Childhood Management	AGS/AAS/CAS
Family Care	AAS/CAS/CP
Infant/Toddler	AGS/AAS/CAS/CP
Preschool	AGS/AAS/CAS/CP
School Age	AAS/CAS/CP
Special Needs	AAS/CAS/CP

Program	Awards
Education (EDU)	
Educational Assistant	CAS/CP
Special Needs Educational Assistant	AGS/AAS/CAS/CP
Fire ScienceAAS/CAS/CP	
Heavy Equipment Operations (HQO)AAS/CAS	
Backhoes and Dozers . . . . .	.CP
Cranes & Rigging. . . . .	.CP
Earthmoving Equipment and Trucks . . . . .	.CP
Loaders and Forklifts . . . . .	.CP
Motor Graders. . . . .	.CP
Rollers and Scrapers. . . . .	.CP
Human Services (HUS)	
Residential Child/Youth Care Assistant	AAS/CAS/CP
Substance Abuse Counseling . . . . .	.CP
Industrial Maintenance and Operations	
Electrical	AAS/CAS/CP
Industrial Plant Operation . . . . .	.CP
Instrumentation.	AAS/CAS/CP
Maintenance Fundamentals. . . . .	.AAS/CAS
Mechanical Maintenance . . . . .	.CP
Operations/Maintenance.	AAS/CAS/CP
Power Fundamentals . . . . .	.AAS/CAS
Wastewater Collection and Treatment . . . . .	.CP
Water Supply and Treatment . . . . .	.CP
Medical Assistant (MDA)AAS/CAS	
Nursing (NUR)AAS	
Practical Nursing . . . . .	.CAS
Nursing Assistant (NAT)CRT	
Paramedicine (EMT)AAS/CAS/CP	
Photography Technician (PHO).AAS/CAS	
Black and White Photography . . . . .	.CP
Color Photography . . . . .	.CP
Photography Marketing . . . . .	.CP
Welding (WLD)AAS/CAS	
Gas Metal Arc Welding (MIG) . . . . .	.CP
Gas Tungsten Arc Welding (TIG). . . . .	.CP
Plastic Welding . . . . .	.CP
Shielded Metal Arc Welding (ARC). . . . .	.CP
Welding Level I – Entry Level Welder . . . . .	.CP
Welding Level II – Advanced Welder . . . . .	.CP

Applied Science Degree and Certificate Programs

About these Degrees/Certificates

- **Associate of Applied Science (AAS)** degrees are awarded at the completion of programs designed to prepare the graduate for employment.
- **Certificates of Applied Science (CAS)** are awarded upon completion of specific program courses designed for employment skills.
- **Certificates of Proficiency (CP)** are awarded for some shorter programs with a narrow focus to prepare students for specific employment-related skills.
- **Certificates of Completion (CRT)** are awarded for the fulfillment of competency requirements in certain occupation-specific courses.

It should be noted that all applied science degree or certificate programs are not available at all Northland locations, nor are they available in their entirety each year. Some courses are offered only on demand. All NPC applied science programs are “competency based,” providing graduates with the skills necessary for entry-level employment.

Although many courses within these programs may transfer to four-year colleges and universities, students should not assume that all courses will transfer.

NPC Requirements

- The **Associate of Applied Science (AAS) degree** requires a minimum of **64 hours of course credits** with a cumulative grade point average of 2.0 on a 4.0 scale.
- Some courses have **placement requirements** or **prerequisites** that may result in coursework beyond 64 credits. These courses, too, require a grade of “C” [or “P”] or better. For information about prerequisites, see *Part IV, Course Descriptions*, or consult an NPC academic adviser.
- The **Certificate of Applied Science** requires a minimum of 24 credits in a single area of specialization and six specified units of general education.
- **Certificate of Proficiency** requirements vary according to the skills demanded for training or retraining in occupational fields. Only programs totaling 32, or more, credit hours are recognized at commencement. Certificates of Proficiency are posted on the student’s transcript.
- **Certificate of Completion** may be awarded for achieving the competencies required in some courses with a ‘C’ grade or higher. These certificates are utilized only for courses which have recognizable and special benefit

for the student. Certificates are issued upon completion of the specified courses.

- In most general education courses, special emphasis is placed on developing written communication skills with intensive writing requirements. Race and ethnic issue awareness is embedded throughout the general education requirements.

Students are encouraged to work closely with their academic adviser to ensure that all studies will apply toward their degree or educational goals.

Degree Requirements • 64 credits

■ General Education Requirements

Most programs require 16 to 19 general education credits in communications, mathematics, sciences and humanities. Specific programs may designate or limit course options, and general education requirements in certain programs may exceed 19 credits. Always consult with an NPC academic adviser to ensure you meet ALL program/degree requirements.

Communications • 6 credits

ENL 101 College Composition I	3 credit
Plus one of the following based on program options.:	
ENL 102 College Composition II.....	3 credit
ENL 109 Technical Writing.....	3 credit
SPT 120 Public Speaking.....	3 credit

Mathematics • 3 to 6 credits

See specific program for requirements.

Discipline Studies • 7 credits

Select one course from the Physical and Biological Sciences and one course from either the Arts and Humanities or Social and Behavioral Sciences, unless otherwise noted in the specific program description.

Arts and Humanities • 3 credits

Select one course from the following:

ART 101 Understanding Art.....	3 credit
ART 115 Art History I.....	3 credit
ART 116 Art History II.....	3 credit
ENL 220 World Literature I	3 credit
ENL 221 World Literature II	3 credit
ENL 224 English Literature I.....	3 credit
ENL 225 English Literature II	3 credit
ENL 230 American Literature I.....	3 credit
ENL 231 American Literature II	3 credit
HUM 150 Humanities in the Western World I.....	3 credit
HUM 151 Humanities in the Western World II	3 credit
MUS 150 Music Appreciation	3 credit
PHL 101 Introduction to Philosophy	3 credit
PHL 105 Introduction to Ethics.....	3 credit
SPT 130 Introduction to Theatre.....	3 credit
SPT 150 Introduction to Film	3 credit
SPT 155 History of Television	3 credit

Physical and Biological Sciences • 4 credits

Select one course from the following:

- BIO 100 Biology Concepts4 credit
- BIO 105 Environmental Biology4 credit
- BIO 160 Introduction to Human Anatomy
and Physiology I.....4 credit
- BIO 181 General Biology I.....4 credit
- BIO 182 General Biology II4 credit
- BIO 201 Human Anatomy and Physiology I.....4 credit
- BIO 202 Human Anatomy and Physiology II4 credit
- CHM 130 Fundamental Chemistry4 credit
- CHM 151 General Chemistry I.....4 credit
- CHM 152 General Chemistry II4 credit
- GEO 111 Physical Geography.....4 credit
- GLG 101 Introduction to Geology I - Physical.....4 credit
- GLG 102 Introduction to Geology II - Historical....4 credit
- PHY 113 General Physics I4 credit
- PHY 114 General Physics II4 credit

Social and Behavioral Sciences • 3 credits

Select one course from the following:

- *ANT 102 Cultural Anthropology3 credit
- ANT 120 Buried Cities and Lost Tribes3 credit
- BUS 140 Principles of Economics - Macro.....3 credit
- BUS 141 Principles of Economics - Micro.....3 credit
- *GEO 110 World Regional Geography3 credit
- GEO 120 Human Geography.....3 credit
- *HIS 105 U.S. History to 18773 credit
- *HIS 106 U.S. History since 1877.....3 credit
- *HIS 155 Western Civilization to 1700.....3 credit
- *HIS 156 Western Civilization since 1700.....3 credit
- POS 110 American Government.....3 credit
- PSY 101 Introduction to Psychology3 credit
- PSY 200 Psychology of Adjustment.....3 credit
- PSY 240 Developmental Psychology.....3 credit
- SOC 120 General Sociology.....3 credit
- SOC 121 Social Problems in America.....3 credit
- SOC 130 Racial, Ethnic & Gender Relations
in Modern Society.....3 credit
- SOC 225 Sociology of the Family.....3 credit

Courses marked with an asterisk (*) meet requirements for Contemporary Global/International or Historical Awareness.

Administrative Information Services (AIS) (AAS/CAS/CP)

About this Program

The Administrative Information Services program provides graduates with the knowledge and skills needed in today's modern offices. Areas of study include: medical transcription, legal office, information systems and office management.

Career opportunities exist in and out of the Northland district communities. Graduates are needed by business, industry, government and public and private agencies.

Associate of Applied Science (AAS)

About this Degree • 64 credits

To complete an **Associate of Applied Science degree in Administrative Information Services** a student must complete the 16 general education credits, an area of specialization (26 to 33 credits) and 15 to 22 credits of required electives from the list that follows the description of areas of specialization.

■ **General Education Requirements • 16 credits**

Communications • 6 credits

- ENL 101 College Composition I3 credit
- ENL 109 Technical Writing.....3 credit

Mathematics • 3 credits

- MAT 103 Business Mathematics3 credit

Discipline Studies • 7 credits

Per the AAS Discipline Studies list on page 64-65.

AREAS OF SPECIALIZATION

■ **Administrative Information Services**

■ **Core Requirements • 32 credits**

- AIS 102 Business Grammar.....1 credit
- AIS 105 Developing Your Professionalism1 credit
- AIS 110 Basic Keyboarding and Formatting.....3 credit
- AIS 111 Advanced Keyboarding and
Document Processing.....3 credit
- AIS 112 Proofreading.....1 credit
- AIS 114 Introduction to the Modern Office.....3 credit
- AIS 115 Ten-Key Adding Machine1 credit
- AIS 116 Electronic Calculators.....3 credit
- AIS 130 Machine Transcription3 credit
- AIS 145 Microsoft Word for Windows.....3 credit
- AIS 170 Written Business Communications3 credit
- AIS 180 Records Management3 credit
- AIS 231 Introduction to Microsoft Office.....3 credit
- CIS 103 Introduction to Windows.....1 credit

■ **Required Electives • 16 credits**

In addition to the core requirements, student will complete a minimum of 16 unduplicated credits from the list of AIS Required Electives.

■ **Administrative Office Management**

■ **Core Requirements • 27 credits**

- AIS 150 MS Publisher Basics.....1 credit
- AIS 170 Written Business Communications3 credit
- AIS 202 Customer Service
for the Office Professional1 credit
- AIS 214 Administrative Office Management3 credit

- AIS 231 Introduction to Microsoft Office.....3 credit
- AIS 298 Portfolio 1 credit
- BUS 105 Techniques of Supervision3 credit
- or
- BUS 210 Principles of Modern Management.....3 credit
- BUS 117 Principles of Accounting I-Financial3 credit
- BUS 180 Organizational Behavior3 credit
- BUS 185 Ethics in Management.....3 credit
- BUS 225 Human Resource Management.....3 credit

■ **Required Electives • 21 credits**

In addition to the core requirements student will complete a minimum of 21 unduplicated credits from the list of AIS Required Electives.

■ **Legal Office**

■ **Core Requirements • 31 credits**

- AIS 102 Business Grammar.....1 credit
- AIS 105 Developing Your Professionalism1 credit
- AIS 110 Basic Keyboarding and Formatting3 credit
- AIS 111 Advanced Keyboarding and Document Processing.....3 credit
- AIS 112 Proofreading.....1 credit
- AIS 115 Ten-Key Adding Machine1 credit
- AIS 145 Microsoft Word for Windows.....3 credit
- AIS 170 Written Business Communications3 credit
- AIS 180 Records Management3 credit
- AIS 190 Legal Terminology3 credit
- AIS 191 Introduction to Law Office Procedures.....3 credit
- AIS 192 Legal Document Processing1 credit
- AIS 198 Internship.....1 credit
- or
- AIS 298 Portfolio1 credit
- BUS 112 Fundamentals of Bookkeeping for Business.....3 credit
- or
- BUS 117 Principles of Accounting I - Financial3 credit
- CIS 103 Introduction to Windows1 credit

■ **Required Electives • 17 credits**

In addition to the core requirements, student will complete a minimum of 17 unduplicated credits from the list of AIS Required Electives.

■ **Medical Office Procedures**

■ **Core Requirements • 33 credits**

- AIS 102 Business Grammar.....1 credit
- AIS 105 Developing Your Professionalism1 credit
- AIS 110 Basic Keyboarding and Formatting3 credit
- AIS 111 Advanced Keyboarding and Document Processing.....3 credit
- AIS 112 Proofreading.....1 credit
- AIS 115 Ten-Key Adding Machine1 credit
- AIS 118 MediSoft Billing.....3 credit
- AIS 119 Medical Office Procedures.....3 credit

- AIS 123 Vocabulary for the Medical Office3 credit
- AIS 127 Medical Office Insurance and Coding.....3 credit
- AIS 180 Records Management3 credit
- AIS 198 Internship.....1 credit
- or
- AIS 298 Portfolio 1 credit
- AIS 231 Introduction to Microsoft Office.....3 credit
- BUS 112 Fundamentals of Bookkeeping for Business.....3 credit
- or
- BUS 117 Principles of Accounting I - Financial3 credit
- CIS 103 Introduction to Windows.....1 credit

■ **Required Electives • 15 credits**

In addition to the core requirements student will complete a minimum of 15 unduplicated credits from the list of AIS Required Electives.

■ **Medical Transcription**

■ **Core Requirements • 26 credits**

- AIS 102 Business Grammar.....1 credit
- AIS 111 Advanced Keyboarding and Document Processing.....3 credit
- AIS 112 Proofreading.....1 credit
- AIS 118 MediSoft Billing.....3 credit
- AIS 119 Medical Office Procedures.....3 credit
- AIS 135 Introduction to Medical Transcription3 credit
- AIS 198 Internship.....1 credit
- or
- AIS 298 Portfolio1 credit
- AIS 231 Introduction to Microsoft Office.....3 credit
- AIS 235 Advanced Transcription - Medical I.....4 credit
- AIS 236 Advanced Transcription - Medical II4 credit

■ **Required Electives • 22 credits**

In addition to the core requirements, student will complete a minimum of 22 unduplicated credits from the list of AIS Required Electives.

■ **Records and Information Management**

■ **Core Requirements • 27 credits**

- AIS 102 Business Grammar.....1 credit
- AIS 105 Developing Your Professionalism1 credit
- AIS 110 Basic Keyboarding and Formatting3 credit
- AIS 112 Proofreading.....1 credit
- AIS 114 Introduction to the Modern Office3 credit
- AIS 115 Ten-Key Adding Machine1 credit
- AIS 145 Microsoft Word for Windows.....3 credit
- AIS 180 Records Management3 credit
- AIS 198 Internship.....1 credit
- or
- AIS 298 Portfolio1 credit
- AIS 280 Forms Management and Micrographics3 credit
- BUS 128 Spreadsheet Applications for Business3 credit

BUS 129 Database Applications for Business3 credit
 CIS 103 Introduction to Windows..... 1 credit

■ **Required Electives • 21 credits**

In addition to the core requirements student will complete a minimum of 21 unduplicated credits from the list of AIS Required Electives.

■ **Required Electives for AIS Areas of Specialization**

AIS 102 Business Grammar.....1 credit
 AIS 105 Developing Your Professionalism1 credit
 AIS 110 Basic Keyboarding and Formatting3 credit
 AIS 112 Proofreading.....1 credit
 AIS 113 Basic Memo & Letter Writing1 credit
 AIS 114 Introduction to Modern Office3 credit
 AIS 115 Ten-Key Adding Machine1 credit
 AIS 116 Electronic Calculators.....3 credit
 AIS 118 MediSoft Billing.....3 credit
 AIS 119 Medical Office Procedures.....3 credit
 AIS 123 Vocabulary for the Medical Office3 credit
 AIS 127 Medical Office Insurance & Coding3 credit
 AIS 135 Introduction to Medical Transcription3 credit
 AIS 140 MS Word Basics1 credit
 AIS 145 Microsoft Word for Windows.....3 credit
 AIS 150 MS Publisher Basics.....1 credit
 AIS 153 MS Publisher Complete.....3 credit
 AIS 170 Written Business Communications3 credit
 AIS 180 Records Management3 credit
 AIS 181 Medical Records Management.....1 credit
 AIS 190 Legal Terminology3 credit
 AIS 191 Introduction to Law Office Procedures.....3 credit
 AIS 192 Legal Document Processing1 credit
 AIS 198 Internship..... 1-3 credit
 AIS 199 Workshop..... 1-3 credit
 AIS 202 Customer Service
 for the Office Professional..... 1 credit
 AIS 214 Administrative Office Management3 credit
 AIS 230 Advanced Machine Transcription - Legal ..3 credit
 AIS 231 Introduction to Microsoft Office.....3 credit
 AIS 232 Advanced Microsoft Office3 credit
 AIS 235 Advanced Transcription - Medical I.....4 credit
 AIS 236 Advanced Transcription - Medical II4 credit
 AIS 245 Advanced Microsoft Word3 credit
 AIS 298 Portfolio1 credit
 BUS 100 Introduction to Business.....3 credit
 BUS 103 Success on Your Job.....2 credit
 BUS 112 Fundamentals of Bookkeeping
 for Business.....3 credit
 or
 BUS 117 Principles of Accounting I - Financial3 credit
 BUS 128 Spreadsheet Applications for Business3 credit
 BUS 129 Database Applications for Business3 credit
 BUS 132 Introduction to Public Administration3 credit
 BUS 150 Administrative Policymaking.....3 credit

BUS 180 Organizational Behavior3 credit
 BUS 185 Ethics in Management.....3 credit
 CIS 103 Introduction to Windows..... 1 credit
 CIS 141 Managing and Maintaining
 Your PC I (A+)3 credit
 HES 170 Medical Terminology.....3 credit

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Administrative Information Services** student must complete core requirements in a selected area of specialization, ENL 101 and MAT 103.

Certificates of Proficiency (CP)

■ **Administrative Information Services • 17 credits**

AIS 102 Business Grammar..... 1 credit
 AIS 105 Developing Your Professionalism 1 credit
 AIS 110 Basic Keyboarding and Formatting3 credit
 AIS 112 Proofreading..... 1 credit
 AIS 114 Introduction to the Modern Office.....3 credit
 AIS 115 Ten-Key Adding Machine 1 credit
 AIS 180 Records Management3 credit
 AIS 202 Customer Service
 for the Office Professional 1 credit
 AIS 231 Introduction to Microsoft Office.....3 credit

■ **Legal Office Fundamentals • 16 credits**

AIS 102 Business Grammar..... 1 credit
 AIS 110 Basic Keyboarding and Formatting3 credit
 AIS 112 Proofreading..... 1 credit
 AIS 145 Microsoft Word for Windows.....3 credit
 AIS 190 Legal Terminology3 credit
 AIS 191 Introduction to Law Office Procedures.....3 credit
 AIS 192 Legal Document Processing 1 credit
 CIS 103 Introduction to Windows..... 1 credit

■ **Medical Office Fundamentals • 16 credits**

AIS 102 Business Grammar..... 1 credit
 AIS 110 Basic Keyboarding and Formatting3 credit
 AIS 118 MediSoft Billing.....3 credit
 AIS 119 Medical Office Procedures.....3 credit
 AIS 123 Vocabulary for the Medical Office3 credit
 AIS 127 Medical Office Insurance and Coding.....3 credit

■ **Medical Transcription • 23 credits**

AIS 102 Business Grammar..... 1 credit
 AIS 110 Basic Keyboarding and Formatting3 credit
 AIS 112 Proofreading..... 1 credit
 AIS 123 Vocabulary for the Medical Office3 credit
 or
 HES 170 Medical Terminology.....3 credit

- AIS 135 Introduction to Medical Transcription3 credit
or
- AIS 130 Machine Transcription3 credit
- AIS 145 Microsoft Word for Windows.....3 credit
- AIS 235 Advanced Transcription - Medical I.....4 credit
- AIS 236 Advanced Transcription - Medical II4 credit
- CIS 103 Introduction to Windows 1 credit

■ **Modern Office Fundamentals**
• 17 credits

- AIS 102 Business Grammar.....1 credit
- AIS 105 Developing Your Professionalism1 credit
- AIS 110 Basic Keyboarding and Formatting3 credit
- AIS 112 Proofreading.....1 credit
- AIS 114 Introduction to Modern Office3 credit
- AIS 115 Ten-Key Adding Machine1 credit
- AIS 145 Microsoft Word for Windows.....3 credit
- AIS 180 Records Management3 credit
- CIS 103 Introduction to Windows 1 credit

■ **Records Management/Data Processing Fundamentals** • 17 credits

- AIS 102 Business Grammar.....1 credit
- AIS 105 Developing Your Professionalism1 credit
- AIS 110 Basic Keyboarding and Formatting3 credit
- AIS 112 Proofreading.....1 credit
- AIS 115 Ten-Key Adding Machine1 credit
- AIS 145 Microsoft Word for Windows.....3 credit
- AIS 180 Records Management3 credit
- BUS 129 Database Applications for Business3 credit
- CIS 103 Introduction to Windows 1 credit

■ **Word Processing Fundamentals**
• 15 credits

- AIS 102 Business Grammar.....1 credit
- AIS 105 Developing Your Professionalism1 credit
- AIS 110 Basic Keyboarding and Formatting3 credit
- AIS 112 Proofreading.....1 credit
- AIS 115 Ten-Key Adding Machine1 credit
- AIS 145 Microsoft Word for Windows.....3 credit
- AIS 231 Introduction to Microsoft Office.....3 credit
- CIS 103 Introduction to Windows1 credit
- AIS 198 Internship.....1 credit
or
- AIS 298 Portfolio 1 credit

Automotive Technology (ATO)

(AAS/CAS/CP)



About this Program

This program is for students who are seeking a career in the automotive repair industry. It offers a combination of self-guided, computer-aided instruction, guided instruction and hands-on laboratory learning. Students will perform numerous repairs on a combination of training modules, practice and live vehicles. All repairs and tasks will follow ASE guidelines to prepare students to become ASE certified in eight areas of repair. These areas are: electronics and electrical systems; engine performance; suspension and steering; brakes; heating and air-conditioning; engine repair; manual transmissions and axles; and automatic transmissions. Students will then be encouraged to participate in the ASE testing process to obtain certifications in their area of interest.

Upon completion of the program, the student will receive an **Associate of Applied Science degree in Automotive Technology**. This degree, coupled with the ASE certifications, will enhance career opportunities for a student as an Automotive Service technician in the automotive industry.

Preceding the A.A.S. degree, students are afforded the opportunity to obtain a **Certificate of Applied Science in Automotive Technology** or **Certificates of Proficiency**.

Associate of Applied Science (AAS)

About this Degree • 64 credits

To complete an **Associate of Applied Science degree in Automotive Technology** a student must complete the 16 general education requirement credits, and 48 credits of core requirements.

■ **General Education Requirements • 16 credits**

Communications • 6 credits

- ENL 101 College Composition I3 credit
- Plus one of the following:
- ENL 102 College Composition II.....3 credit
- ENL 109 Technical Writing.....3 credit
- SPT 120 Public Speaking.....3 credit

Mathematics • 3 credits

MAT 101 or MAT 103 or MAT 105 or MAT 109 or MAT 112 or any mathematics course for which MAT 112 is a prerequisite.

Discipline Studies • 7 credits

Per the AAS Discipline Studies list on page 64-65.

■ **Core Requirements • 48 credits**

Level 1

ATO 103 Safety and Hazardous Materials	2 credit
ATO 207 Electrical and Electronics Systems I.....	3 credit
ATO 208 Electrical and Electronics Systems II	3 credit
ATO 209 Electrical and Electronic Systems III	3 credit

Level 2

ATO 107 Engine Repair I.....	3 credit
ATO 108 Engine Repair II	2 credit
ATO 109 Engine Performance I.....	3 credit
ATO 110 Engine Performance II.....	3 credit

Level 3

ATO 111 Engine Performance III.....	3 credit
ATO 112 Automatic Transmission Systems I.....	3 credit
ATO 113 Automatic Transmission Systems II	3 credit
ATO 205 Suspension and Steering Systems.....	4 credit

Level 4

ATO 114 Brake Systems I	3 credit
ATO 115 Brake Systems II.....	2 credit
ATO 210 Heating and Air Conditioning Systems ...	4 credit
ATO 212 Manual Drive Train and Axles.....	4 credit

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Automotive Technology**, a student must complete the Level 1 and Level 2 core requirements. Additionally, the student must complete ATO 111, ENL 101 and MAT 101 or MAT 103 or MAT 105 or MAT 109 or MAT 112 or any mathematics class for which MAT 112 is a prerequisite.

Certificates of Proficiency (CP)

■ **Brake and Transmission Systems • 13 credits**

ATO 103 Safety and Hazardous Materials	2 credit
ATO 112 Automatic Transmission Systems I.....	3 credit
ATO 113 Automatic Transmission Systems II	3 credit
ATO 114 Brake Systems I	3 credit
ATO 115 Brake Systems II.....	2 credit

■ **Drive Train, Suspension and Steering, HVAC • 14 credits**

ATO 103 Safety and Hazardous Materials	2 credit
ATO 205 Suspension and Steering	4 credit
ATO 210 Heating and Air Conditioning Systems ...	4 credit
ATO 212 Manual Drive Train	4 credit

■ **Electrical and Electronics Systems • 11 credits**

ATO 103 Safety and Hazardous Materials	2 credit
ATO 207 Electrical and Electronic Systems I	3 credit
ATO 208 Electrical and Electronic Systems II.....	3 credit
ATO 209 Electrical and Electronic Systems III	3 credit

■ **Engine Performance • 11 credits**

ATO 103 Safety and Hazardous Materials	2 credit
ATO 109 Engine Performance I.....	3 credit
ATO 110 Engine Performance II.....	3 credit
ATO 111 Engine Performance III.....	3 credit

■ **Engine Repair • 7 credits**

ATO 103 Safety and Hazardous Materials	2 credit
ATO 107 Engine Repair I.....	3 credit
ATO 108 Engine Repair II	2 credit

Business (BUS) (AAS/CAS/CP)

About this Program

The Business program provides graduates with knowledge and skills for positions in management, marketing, accounting, supervision, sales, real estate, and small business.

Career opportunities exist both inside and outside the Northland district. Graduates are needed by private business, industry, government, public and private agencies.

Associate of Applied Science (AAS)

About this Degree • 64 credits

To complete an **Associate of Applied Science degree in Business** a student must complete the 16 general education requirement credits, an area of specialization (24 credits) and 21 credits of required electives and three credits of unrestricted electives.

■ **General Education Requirements • 16 credits**

Communications • 6 credits

ENL 101 College Composition I	3 credit
ENL 109 Technical Writing.....	3 credit

Mathematics • 3 credits

MAT 103 Business Mathematics	3 credit
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Discipline Studies • 7 credits

Per the AAS Discipline Studies list on page 64-65.

AREAS OF SPECIALIZATION

■ **Accounting**

■ **Core Requirements • 24 credits**

- BUS 100 Introduction to Business..... 3 credit
- BUS 114 Legal Environment of Business 3 credit
- BUS 117 Principles of Accounting I - Financial..... 3 credit
- BUS 120 Principles of Accounting II - Financial 3 credit
- BUS 121 Principles of Accounting - Managerial..... 3 credit
- BUS 122 Computer Accounting..... 3 credit
- BUS 123 Income Tax Procedures 3 credit
- BUS 125 Payroll Accounting..... 3 credit

■ **Required Electives • 21 credits**

Student must complete nine credits from the following courses and 12 credits from the List of Additional Required Electives.

- AIS 231 Introduction to Microsoft Office..... 3 credit
- BUS 106 Techniques of Personal Finance..... 3 credit
- BUS 115 Business Law..... 3 credit
- BUS 128 Spreadsheet Applications for Business 3 credit
- BUS 129 Database Applications for Business 3 credit
- BUS 198 Internship 1-4 credit
- BUS 260 Fundamentals of Business Finance..... 3 credit
- BUS 270 Intermediate Accounting I..... 3 credit
- BUS 271 Intermediate Accounting II..... 3 credit

■ **General Business Management**

■ **Core Requirements • 24 credits**

- BUS 100 Introduction to Business..... 3 credit
- BUS 105 Techniques of Supervision 3 credit
- BUS 114 Legal Environment of Business 3 credit
- BUS 117 Principles of Accounting I - Financial..... 3 credit
- BUS 140 Principles of Economics - Macro 3 credit
- BUS 210 Principles of Modern Management..... 3 credit
- BUS 220 Principles of Marketing 3 credit
- CIS 105 Computer Applications and Information Technology 3 credit

■ **Required Electives • 21 credits**

Student must complete nine credits from the following courses and 12 credits from the List of Additional Required Electives.

- AIS 231 Introduction to Microsoft Office..... 3 credit
- BUS 106 Techniques of Personal Finance..... 3 credit
- BUS 115 Business Law..... 3 credit
- BUS 120 Principles of Accounting II - Financial 3 credit
- BUS 198 Internship 3 credit
- BUS 225 Human Resource Management..... 3 credit

■ **Native American Enterprise**

■ **Core Requirements • 24 credits**

Student must complete 24 credits from the following list:

- AIS 231 Introduction to Microsoft Office..... 3 credit
- BUS 100 Introduction to Business..... 3 credit

- BUS 105 Techniques of Supervision 3 credit
- BUS 112 Fundamentals of Bookkeeping for Business..... 3 credit
- BUS 114 Legal Environment of Business 3 credit
- BUS 220 Principles of Marketing 3 credit
- BUS 225 Human Resource Management..... 3 credit
- SBM 111 Effective Business Communication 3 credit
- SBM 112 Native American Entrepreneurship..... 3 credit
- SBM 113 Building Your Winning Business on the Reservation 3 credit

■ **Required Electives • 21 credits**

Student must complete nine credits from the following courses and 12 credits from the List of Additional Required Electives.

- BUS 128 Spreadsheet Applications for Business 3 credit
- BUS 198 Internship 3 credit
- SBM 157 Team Building for Native American Enterprise..... 1 credit
- SBM 165 Politics and Tribal Government..... 1 credit
- SBM 167 Budgeting for the Native American Enterprise 1 credit
- SBM 169 Applying for Grants 1 credit
- SBM 175 Financing for Native American Enterprise 1 credit
- SBM 177 Feasibility Studies..... 1 credit.

■ **Public Administration**

■ **Core Requirements • 24 credits**

- BUS 114 Legal Environment of Business 3 credit
- BUS 132 Introduction to Public Administration 3 credit
- BUS 140 Principles of Economics-Macro 3 credit
- BUS 145 Governmental Fund Accounting 3 credit
- BUS 150 Administrative Policymaking..... 3 credit
- BUS 180 Organizational Behavior 3 credit
- BUS 210 Principles of Modern Management..... 3 credit
- BUS 235 Governmental Budgeting 3 credit

■ **Required Electives • 21 credits**

Student must complete nine credits from the following courses and 12 credits from the List of Additional Required Electives.

- AIS 145 Microsoft Word for Windows..... 3 credit
- AIS 148 Introduction to Corel Office Suite..... 3 credit or
- AIS 170 Written Business Communications 3 credit
- AIS 231 Introduction to Microsoft Office..... 3 credit
- ANT 102 Cultural Anthropology..... 3 credit
- BUS 141 Principles of Economics-Micro 3 credit
- BUS 225 Human Resource Management..... 3 credit
- POS 110 American Government..... 3 credit

■ **Small Business Management**

■ **Core Requirements • 24 credits**

- AIS 231 Introduction to Microsoft Office..... 3 credit
- BUS 105 Techniques of Supervision 3 credit

- BUS 110 Small Business Management3 credit
- BUS 114 Legal Environment of Business3 credit
- BUS 112 Fundamentals of Bookkeeping
for Business.....3 credit
or
- BUS 117 Principles of Accounting I - Financial3 credit
- BUS 122 Computer Accounting.....3 credit
- SBM 150 Building a Winning Business1 credit
- SBM 154 Marketing: From Product to Profit.....1 credit
- SBM 156 Small Business Legal Issues
and Insurance.....1 credit
- SBM 160 Managing the Company Budget.....1 credit
- SBM 162 How to Write a Business Plan.....1 credit
- SBM 164 How to Write a Marketing Plan.....1 credit

■ **Required Electives • 21 credits**

Student must complete nine credits from the following courses and 12 credits from the List of Additional Required Electives.

- BUS 106 Techniques of Personal Finance.....3 credit
- BUS 115 Business Law.....3 credit
- BUS 198 Internship1-4 credit
- BUS 205 Principles of Advertising3 credit
- BUS 225 Human Resource Management.....3 credit
- BUS 280 Introduction to Investments3 credit
- SBM 152 Small Business Management Accounting 2 credit
- SBM 166 Small Business Finance.....1 credit

■ **List of Additional Required Electives:**

In addition to the previously listed required electives within each area of specialization, student must complete 12 unduplicated credits from the following:

- Any Business (BUS) course
- Any Small Business Management (SBM) course
- AIS 145 Microsoft Word for Windows.....3 credit
- AIS 148 Introduction to Corel Office Suite.....3 credit
- AIS 170 Written Business Communications3 credit
- AIS 231 Introduction to Microsoft Office.....3 credit
- CIS 105 Computer Applications and Information
Technology3 credit
- CIS 103 Introduction to Windows1 credit
- CIS 141 Managing and Maintaining your PC I (A+) 3 credit
- POS 112 Navajo Government.....3 credit
- POS 221 Arizona Constitution and Government ...1 credit
- SOC 130 Racial/Ethnic/Gender Relations
in Modern Society.....3 credit

■ **Unrestricted Electives • 3 credits**

Any unduplicated 100 or higher level course

Certificates of Proficiency (CP)

■ **Accounting • 18 credits**

- BUS 117 Principles of Accounting I - Financial3 credit
- BUS 120 Principles of Accounting II - Financial3 credit
- BUS 121 Principles of Accounting – Managerial.....3 credit
- BUS 122 Computer Accounting.....3 credit
- BUS 125 Payroll Accounting3 credit
- BUS 128 Spreadsheet Applications for Business3 credit

■ **General Business Management • 18 credits**

- BUS 100 Introduction to Business.....3 credit
- BUS 105 Techniques of Supervision3 credit
- BUS 117 Principles of Accounting I – Financial.....3 credit
- BUS 140 Principles of Economics – Macro.....3 credit
- BUS 210 Principles of Modern Management.....3 credit
- BUS 220 Principles of Marketing3 credit

■ **Public Administration • 18 credits**

- BUS 132 Introduction to Public Administration3 credit
- BUS 140 Principles of Economics-Macro.....3 credit
- BUS 150 Administrative Policymaking.....3 credit
- BUS 180 Organizational Behavior3 credit
or
- BUS 225 Human Resource Management.....3 credit
- BUS 185 Ethics in Management.....3 credit
or
- BUS 235 Governmental Budgeting.....3 credit
- BUS 210 Principles of Modern Management.....3 credit

■ **Small Business Management • 18 credits**

- AIS 231 Introduction to Microsoft Office.....3 credit
- BUS 105 Techniques of Supervision3 credit
- BUS 110 Small Business Management3 credit
- BUS 112 Fundamentals of Bookkeeping
for Business.....3 credit
or
- BUS 117 Principles of Accounting I – Financial.....3 credit
- BUS 114 Legal Environment of Business3 credit
- BUS 122 Computer Accounting.....3 credit

Computer Information Systems (CIS) (AAS/CAS/CP)

About this Program

The Computer Information Systems program provides students with knowledge and skills in the areas of computer programming languages, graphics in multimedia, database management and information systems.

Career opportunities exist both in and out of the Northland

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Business**, student must successfully complete the core requirements of a selected area of specialization plus nine credits from that specialization's list of required electives, ENL 101 and MAT 103.

district communities. Graduates are needed by business, industry, government, public and private agencies and small business enterprises.

Associate of Applied Science (AAS)

About this Degree • 64 to 65 credits

To complete an **Associate of Applied Science degree in Computer Information Systems** a student must complete the 16 to 17 general education requirement credits, an area of specialization (28 to 30 credit) and 18 to 20 credits of required electives. **Basic keyboarding knowledge is required for successful completion of all CIS courses.**

■ General Education Requirements • 16–17 credits

Communications • 6 credits

- ENL 101 College Composition I 3 credit
- Plus one of the following:
- ENL 102 College Composition II..... 3 credit
- ENL 109 Technical Writing..... 3 credit

Mathematics • 3 or 4 credits

Select one of the following courses.

- MAT 112 Algebra II: Intermediate 3 credit
- MAT 121 Intermediate Algebra..... 4 credit

Discipline Studies • 7 credits

Per the AAS Discipline Studies list on page 64-65.

AREAS OF SPECIALIZATION

■ Computer Information Systems

■ Core Requirements • 30 credits

- CIS 105 Computer Applications and Information Technology 3 credit
- CIS 111 Introduction to Programming 3 credit
- CIS 115 Introduction to Graphic Communication Technology 3 credit
- CIS 125 Effective Communication with Digital Media 3 credit
- CIS 141 Managing and Maintaining Your PC I (A+) 3 credit
- CIS 150 Digital Culture..... 3 credit
- CIS 171 GNU Linux Operating System 3 credit
- CIS 217 JAVA Programming, Introductory..... 3 credit
- CIS 245 Database Management and Concepts 3 credit
- CIS 280 Systems Analysis and Design 3 credit

■ Graphic Design

■ Core Requirements • 28 credits

- ART 103 Basic Design 3 credit
- ART 105 Beginning Drawing I..... 3 credit
- CIS 105 Computer Applications and Information Technology 3 credit
- CIS 115 Introduction to Graphic Communication Technology 3 credit
- CIS 116 Computer Photographic Imaging (Adobe Photoshop)..... 3 credit
- CIS 117 Two-Dimensional Computer Design (Adobe Illustrator)..... 3 credit
- CIS 118 Graphics, Interactive and Animated 3 credit
- CIS 119 Page Layout and Design 3 credit
- CIS 125 Effective Communication with Digital Media 3 credit
- CIS 298 Portfolio 1 credit

■ Web Design

■ Core Requirements • 30 credits

- ART 103 Basic Design 3 credit
- or
- ART 150 Advertising Design..... 3 credit
- CIS 105 Computer Applications and Information Technology 3 credit
- CIS 115 Introduction to Graphic Communication Technology 3 credit
- CIS 116 Computer Photographic Imaging (Adobe Photoshop)..... 3 credit
- CIS 118 Graphics, Interactive and Animated 3 credit
- CIS 113 Multimedia..... 3 credit
- or
- CIS 125 Effective Communication with Digital Media 3 credit
- CIS 150 Digital Culture..... 3 credit
- CIS 168 Web Authoring Tools 3 credit
- CIS 187 Introduction to Web Development 3 credit
- CIS 295 Applied Project for CIS 3 credit

■ Web Development

■ Core Requirements • 30 credits

- CIS 105 Computer Applications and Information Technology 3 credit
- CIS 111 Introduction to Programming 3 credit
- CIS 150 Digital Culture..... 3 credit
- CIS 187 Introduction to Web Development 3 credit
- CIS 243 Database Driven Web Sites 3 credit
- CIS 250 Electronic Commerce 3 credit
- CIS 265 Web Programming..... 3 credit
- CIS 275 Web Server Administration..... 3 credit
- CIS 280 System Analysis and Design 3 credit
- CIS 295 Applied Project for CIS 3 credit

■ **Required Electives • 18 to 20 credits**

In addition to the area of specialization core requirements student must complete 18 to 20 unduplicated credits from this list:

AIS 170 Written Business Communications	3 credit
BUS 110 Small Business Management	3 credit
BUS 112 Fundamentals of Bookkeeping for Business.....	3 credit
or	
BUS 117 Principles of Accounting I - Financial	3 credit
CIS 103 Introduction to Windows	1 credit
CIS 105 Computer Applications and Information Technology	3 credit
CIS 111 Introduction to Programming	3 credit
CIS 113 Multimedia	3 credit
CIS 115 Introduction to Graphic Communication Technology	3 credit
CIS 116 Computer Photographic Imaging (Adobe Photoshop).....	3 credit
CIS 117 Two-Dimensional Computer Design (Adobe Illustrator).....	3 credit
CIS 118 Graphics, Interactive and Animated	3 credit
CIS 119 Page Layout and Design	3 credit
CIS 125 Effective Communication with Digital Media	3 credit
CIS 141 Managing and Maintaining Your PC I (A+)	3 credit
CIS 142 Managing and Maintaining Your PC II (A+).....	3 credit
CIS 145 Network+ Certification Preparation.....	3 credit
CIS 150 Digital Culture.....	3 credit
CIS 161 Microsoft Operating System	3 credit
CIS 168 Web Authoring Tools	3 credit
CIS 171 GNU Linux Operating System	3 credit
CIS 183 Introduction to the Internet.....	3 credit
CIS 187 Introduction to Web Development	3 credit
CIS 198 Internship.....	1-3 credit
CIS 199 Workshop.....	1-3 credit
CIS 200 BASIC Programming	3 credit
CIS 217 JAVA Programming, Introductory.....	3 credit
CIS 226 Programming in C++	3 credit
CIS 243 Database-Driven Web sites	3 credit
CIS 245 Database Management and Concepts	3 credit
CIS 250 Electronic Commerce.....	3 credit
CIS 265 Web Programming.....	3 credit
CIS 275 Web Server Administration.....	3 credit
CIS 280 Systems Analysis and Design	3 credit
CIS 286 Educational Technology	3 credit
CIS 298 Portfolio	1 credit
CIS 299 Special Projects	3 credit

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Computer Information Systems** a student must complete the core requirements in one of the areas of specialization, ENL 101 and MAT 112 or MAT 121.

Certificates of Proficiency (CP)

■ **Commercial Graphics
Fundamentals • 12 credits**

CIS 115 Introduction to Graphic Communication Technology	3 credit
CIS 116 Computer Photographic Imaging (Adobe Photoshop).....	3 credit
CIS 117 Two-Dimensional Computer Design (Adobe Illustrator).....	3 credit
CIS 119 Page Layout and Design	3 credit

■ **Graphic Design • 25 credits**

ART 103 Basic Design	3 credit
ART 105 Beginning Drawing I.....	3 credit
CIS 105 Computer Applications and Information Technology	3 credit
CIS 116 Computer Photographic Imaging (Adobe Photoshop).....	3 credit
CIS 117 Two-Dimensional Computer Design (Adobe Illustrator).....	3 credit
CIS 118 Graphics, Interactive and Animated	3 credit
CIS 119 Page Layout and Design	3 credit
CIS 298 Portfolio	1 credit
PHO 101 Digital Photography	3 credit

■ **Network and PC Support • 16 credits**

CIS 105 Computer Applications and Information Technology	3 credit
CIS 141 Managing and Maintaining Your PC I (A+)	3 credit
CIS 142 Managing and Maintaining Your PC II (A+).....	3 credit
CIS 145 Network+ Certification Preparation.....	3 credit
CIS 198 Internship.....	2 credit
CIS 298 Portfolio	2 credit

■ **Software Quality Assurance • 9 credits**

CIS 251 Software Quality	3 credit
CIS 252 Engineering Quality in Software Development.....	3 credit
CIS 253 Software Testing	3 credit

■ **Web Design • 18 credits**

- CIS 113 Multimedia.....3 credit
or
- CIS 125 Effective Communication
with Digital Media3 credit
- CIS 115 Introduction to Graphic Communication
Technology3 credit
- CIS 116 Computer Photographic Imaging
(Adobe Photoshop).....3 credit
- CIS 118 Graphics, Interactive and Animated3 credit
- CIS 168 Web Authoring Tools3 credit
- CIS 187 Introduction to Web Development3 credit

Cosmetology (COS) (AAS/CAS/CP)

About this Program

The Cosmetology program offers exceptional training necessary to prepare prospective students for the Arizona State Board of Cosmetology License Exam This 1600-hour program is offered at three locations – Little Colorado Campus in Winslow, White Mountain Campus in Show Low and the St. Johns Center.

The **Associate of Applied Science degree in Cosmetology** is based on a two-year curriculum. The **Certificate of Applied Science in Cosmetology** requires students to complete the Area of Specialization and designated English and mathematics courses. Completion of the **Certificate of Proficiency** prepares students to meet the state licensure examination requirements.

Prospective students are encouraged to make application to the program, including successful completion of a pre-admission interview. Admission is made on either a full- or part-time basis. Call the cosmetology department at (800) 266-7845, ext. 6161 for information on how to obtain an admissions packet or see an academic adviser at a campus or center near you.

Applicants with the goal of **Cosmetology Instructor Certificate of Proficiency** must have a current Arizona cosmetology license and one year of experience.

Associate of Applied Science (AAS)

About this Degree • 68 credits

To complete an **Associate of Applied Science degree in Cosmetology** a student must complete the 16 general education requirement credits and 52 credits of required electives.

■ **General Education Requirements • 16 credits**

Communications • 6 credits

- ENL 101 College Composition I3 credit
- Plus one of the following:
- ENL 102 College Composition II.....3 credit
- ENL 109 Technical Writing.....3 credit
- SPT 120 Public Speaking.....3 credit

Mathematics • 3 credits

Select MAT 101, MAT 103, MAT 105, MAT 109 or MAT 112 or any math course for which MAT 112 is a prerequisite.

Discipline Studies • 7 credits

Per the AAS Discipline Studies list on page 64-65.

■ **Core Requirements • 52 credits**

- COS 113 Introduction to Cosmetology 10 credit
- COS 114 Theory of Cosmetology II3 credit
- COS 115 Theory of Cosmetology III -
General Science of Cosmetology3 credit
- COS 116 Theory of Cosmetology IV - Hair Care2 credit
- COS 117 Theory of Cosmetology V -
Skin Care and Nail Care.....2 credit
- COS 201 Basic Clinical Practice I.....4 credit
- COS 202 Basic Clinical Practice II.....4 credit
- COS 203 Basic Clinical Practice III4 credit
- COS 204 Advanced Clinical Practice IV4 credit
- COS 205 Advanced Clinical Practice V.....4 credit
- COS 206 Advanced Clinical Practice VI.....4 credit
- COS 207 Advanced Clinical Practice VII.....4 credit
- COS 208 Advanced Clinical Practice VIII4 credit

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Cosmetology**, the student must complete 6 credits of general education requirements: ENL 101 and MAT 101 or MAT 103 or MAT 105 or MAT 109 or MAT 112 or any math class for which MAT 112 is a prerequisite and the 52 credits of core requirements.

Certificates of Proficiency (CP)

To earn a Certificate of Proficiency in Cosmetology the student must complete the requirements as follows:

■ **Cosmetology • 52 credits**

Student must complete the cosmetology program's 52 credits of core requirements.

■ Cosmetology Instructor • 16 credits

- COS 209 Science for Cosmetology Instructors 1 credit
- COS 210 Management for Cosmetology Instructors 3 credit
- COS 211 Instructing in Cosmetology I..... 3 credit
- COS 212 Instructing in Cosmetology II 3 credit
- COS 213 Instructing in Cosmetology III..... 3 credit
- COS 214 Instructing in Cosmetology IV 3 credit

■ Nail Technician • 18 credits

- COS 101 Manicuring I 4 credit
- COS 102 Manicuring II..... 4 credit
- COS 103 Manicuring III..... 4 credit
- COS 104 Manicuring IV 4 credit
- COS 118 Manicuring, Hand and Arm Massage 2 credit

Early Childhood Development

(ECD) (AGS,AAS,CAS,CP)

About this Program

The Early Childhood Development program trains persons to work in or operate preschools, assist primary school teachers as assistants, work in family home provider settings, and work in other areas related to the education and care of young children. Local career opportunities exist in all Northland district communities, as well as statewide.

Associate of Applied Science (AAS)

About this Degree • 64 credits

To complete an **Associate of Applied Science degree in Early Childhood Development** a student must successfully complete the 16 general education requirement credits and 48 credits of core requirements and required electives in the selected area of specialization.

■ General Education Requirements • 16 credits

Communications • 6 credits

- ENL 101 College Composition I 3 credit
- Plus one of the following:
- ENL 102 College Composition II..... 3 credit
- ENL 109 Technical Writing..... 3 credit
- SPT 120 Public Speaking 3 credit

Mathematics • 3 credits

Select one of the math courses shown.

- MAT 103 Business Mathematics 3 credit
- MAT 105 Math for General Education 3 credit
- MAT 112 Algebra II: Intermediate 3 credit
- MAT 142 College Math with Contemporary Applications 3 credit

- MAT 152 Advanced Algebra 3 credit
- MAT 161 Algebra-based Mathematics for Elementary Teachers I 3 credit
- MAT 162 Algebra-based Mathematics for Elementary Teachers II 3 credit

Discipline Studies • 7 credits

Per the AAS Discipline Studies list on page 64-65.

AREAS OF SPECIALIZATION

■ Early Childhood Management

■ Core Requirements • 35 credits

- ECD 100 Providing a Healthy Environment..... 1 credit
- ECD 102 Ensuring a Safe Environment..... 1 credit
- ECD 103 Planned Arrangements and Schedules..... 1 credit
- ECD 105 Guidance Principles for Encouraging Self Discipline 1 credit
- ECD 108 Techniques for Observing Children 1 credit
- ECD 110 Building Relationships With Parents Through Communication..... 1 credit
- ECD 111 Supporting the Growth and Education of Parents 1 credit
- ECD 112 Enhancing Family Involvement..... 1 credit
- ECD 120 Enhancing a Positive Self-Concept..... 1 credit
- ECD 128 Incorporating the Children’s Culture..... 1 credit
- ECD 129 Planning and Implementing a Bilingual Program 1 credit
- ECD 136 Understanding How Children Learn..... 1 credit
- ECD 175 Professionalism..... 1 credit
- ECD 198 Internship (Early Childhood Management) 1 credit
- ECD 200 Introduction to Early Childhood Education 3 credit
- ECD 201 Exploring Early Childhood Program Philosophies 1 credit
- ECD 211 Providing Food and Nutrition Services.... 1 credit
- ECD 231 Planning and Managing an Early Childhood Program 2 credit
- ECD 232 Designing Indoor and Outdoor Environments 2 credit
- ECD 233 Developing Policies and Procedures for Early Childhood Programs 2 credit
- ECD 234 Staffing an Early Childhood Program 2 credit
- ECD 235 Budgeting and Financial Management..... 2 credit
- ECD 236 Marketing the Early Childhood Program 2 credit
- ECD 237 Evaluating an Early Childhood Program. 1 credit
- ECD 250 Child Development I..... 3 credit

■ Required Electives • 13 credits

In addition, a minimum of 13 unduplicated credits, 100 level or higher, must be selected as electives. One-half credit to six credits of ECD/EDU/HUS 199s and 299s may be included in the 13 credits.

■ **Family Care**

■ **Core Requirements • 26 credits**

- ECD 100 Providing a Healthy Environment..... 1 credit
- ECD 101 The Child’s Total Learning Environment 1 credit
- ECD 102 Ensuring a Safe Environment..... 1 credit
- ECD 103 Planned Arrangements and Schedules..... 1 credit
- ECD 105 Guidance Principles for Encouraging
Self Discipline 1 credit
- ECD 108 Techniques for Observing Children 1 credit
- ECD 110 Building Relationships With Parents
Through Communication..... 1 credit
- ECD 113 Fostering Communication and
Language Skills..... 1 credit
- ECD 114 Beginning Mathematical Concepts 1 credit
- ECD 116 Sciencing and Discovery 1 credit
- ECD 117 Enhancing Questions and Problem-
Solving Abilities 1 credit
- ECD 120 Enhancing a Positive Self-Concept..... 1 credit
- ECD 123 Music and Creative Movement..... 1 credit
- ECD 124 Dramatic Play i
n Early Childhood Setting..... 1 credit
- ECD 125 Creative Media..... 1 credit
- ECD 126 Large Muscle Development 1 credit
- ECD 127 Small Muscle Development 1 credit
- ECD 136 Understanding How Children Learn..... 1 credit
- *ECD 147 Prenatal and Infant Development..... 1 credit
- *ECD 148 Toddler Development..... 1 credit
- *ECD 149 Development of the Preschool Child..... 1 credit
- ECD 167 Guidance and Discipline of Infants
and Toddlers..... 1 credit
- ECD 175 Professionalism..... 1 credit
- ECD 181 Recordkeeping for the Family Day
Care Provider 1 credit
- ECD 182 Family Day Care as a Small Business 1 credit
- ECD 183 Balancing Work and Family in a Family
Day Care Setting 1 credit
- *ECD 250 Child Development I..... 3 credit
- *ECD 147, 148, 149 may be taken in combination or ECD 250
as a single three-credit class to apply toward the AAS degree.*

■ **Required Electives • 22 credits**

In addition, a minimum of 22 unduplicated credits must be selected as electives. One-half credit to six credits of ECD/EDU/HUS 199s and 299s may be included in the 22 credits.

■ **Infant/Toddler**

■ **Core Requirements • 26 credits**

- ECD 100 Providing a Healthy Environment..... 1 credit
- ECD 102 Ensuring a Safe Environment..... 1 credit
- ECD 103 Planned Arrangements and Schedules..... 1 credit
- ECD 108 Techniques for Observing Children 1 credit
- ECD 110 Building Relationships With Parents
Through Communication..... 1 credit

- ECD 112 Enhancing Family Involvement..... 1 credit
- ECD 115 Nutrition in Early Childhood 1 credit
- ECD 143 Inclusion of Children with Special Needs 2 credit
- *ECD 147 Prenatal and Infant Development..... 1 credit
- *ECD 148 Toddler Development..... 1 credit
- *ECD 149 Development of the Preschool Child..... 1 credit
- ECD 154 Environments for Infants and Toddlers... 1 credit
- ECD 155 Curriculum and Learning Materials
for Infants..... 1 credit
- ECD 156 Curriculum and Learning Materials
for Toddlers 1 credit
- ECD 158 Developing and Utilizing Observation
Skills in Infant and Toddler Programs 1 credit
- ECD 159 Recordkeeping Skills for Infant/
Toddler Care..... 1 credit
- ECD 163 Cognitive Development of Infants
and Toddlers..... 1 credit
- ECD 164 Practical Applications of
Cognitive Development 1 credit
- ECD 165 Language Development of Infants
and Toddlers..... 1 credit
- ECD 166 Encouraging Autonomy and Positive
Self-Concept 1 credit
- ECD 167 Guidance and Discipline of Infants
and Toddlers..... 1 credit
- ECD 168 Enhancing Social Competence of
Infants/Toddlers 1 credit
- ECD 169 Sensorimotor Learning in Infancy
and Toddlerhood..... 1 credit
- ECD 172 Physical Development in Infancy
and Toddlerhood..... 1 credit
- ECD 175 Professionalism..... 1 credit
- *ECD 250 Child Development I..... 3 credit
- *ECD 147, 148, 149 may be taken in combination or ECD 250
as a single three-credit class to apply toward the AAS degree.*

■ **Required Electives • 22 credits**

In addition, a minimum of 22 unduplicated credits must be selected as electives. One-half credit to six credits of ECD/EDU/HUS 199s and 299s may be included in the 22 credits.

■ **Preschool**

■ **Core Requirements • 26 credits**

- ECD 100 Providing a Healthy Environment..... 1 credit
- ECD 101 The Child’s Total Learning Environment 1 credit
- ECD 102 Ensuring a Safe Environment..... 1 credit
- ECD 103 Planned Arrangements and Schedules..... 1 credit
- ECD 105 Guidance Principles for Encouraging
Self Discipline 1 credit
- ECD 108 Techniques for Observing Children 1 credit
- ECD 110 Building Relationships With Parents
Through Communication..... 1 credit
- ECD 112 Enhancing Family Involvement..... 1 credit
- ECD 113 Fostering Communication and
Language Skills..... 1 credit

- ECD 114 Beginning Mathematical Concepts 1 credit
- ECD 115 Nutrition in Early Childhood 1 credit
- ECD 116 Sciencing and Discovery 1 credit
- ECD 117 Enhancing Questions and Problem-Solving Abilities 1 credit
- ECD 118 Blocks in Early Childhood Program 1 credit
- ECD 120 Enhancing a Positive Self-Concept..... 1 credit
- ECD 123 Music and Creative Movement..... 1 credit
- ECD 124 Dramatic Play in Early Childhood Setting..... 1 credit
- ECD 125 Creative Media..... 1 credit
- ECD 126 Large Muscle Development 1 credit
- ECD 127 Small Muscle Development 1 credit
- ECD 136 Understanding How Children Learn..... 1 credit
- *ECD 147 Prenatal and Infant Development..... 1 credit
- *ECD 148 Toddler Development..... 1 credit
- *ECD 149 Development of the Preschool Child..... 1 credit
- ECD 175 Professionalism..... 1 credit
- ECD 216 Transitions..... 1 credit
- *ECD 250 Child Development I..... 3 credit
- *ECD 147, 148, 149 may be taken in combination or ECD 250 as a single three-credit class to apply toward the AAS degree.*

■ **Required Electives • 22 credits**

In addition, a minimum of 22 unduplicated credits must be selected as electives. One-half credit to six credits of ECD/EDU/HUS 199s and 299s may be included in the 22 credits.

■ **School Age**

■ **Core Requirements • 26 credits**

- ECD 100 Providing a Healthy Environment..... 1 credit
- ECD 102 Ensuring a Safe Environment..... 1 credit
- ECD 103 Planned Arrangements and Schedule 1 credit
- ECD 107 Collecting, Organizing, and Using Teaching Aids..... 1 credit
- ECD 108 Techniques for Observing Children 1 credit
- ECD 110 Building Relationships With Parents Through Communication..... 1 credit
- ECD 115 Nutrition in Early Childhood 1 credit
- ECD 116 Sciencing and Discovery 1 credit
- ECD 117 Enhancing Questions and Problem-Solving Abilities 1 credit
- ECD 120 Enhancing a Positive Self-Concept..... 1 credit
- ECD 123 Music and Creative Movement..... 1 credit
- ECD 124 Dramatic Play in Early Childhood Setting..... 1 credit
- ECD 125 Creative Media..... 1 credit
- ECD 127 Small Muscle Development 1 credit
- ECD 136 Understanding How Children Learn..... 1 credit
- *ECD 147 Prenatal and Infant Development..... 1 credit
- *ECD 148 Toddler Development..... 1 credit
- *ECD 149 Development of the Preschool Child..... 1 credit
- ECD 150 Middle Childhood Years 1 credit
- ECD 151 Math for School Agers 1 credit

- ECD 152 Learning Environment for School Agers. 1 credit
- ECD 153 Guidance Principles for School Agers..... 1 credit
- ECD 175 Professionalism..... 1 credit
- ECD 216 Transitions..... 1 credit
- ECD 217 Early Literacy..... 1 credit
- *ECD 250 Child Development I..... 3 credit
- EDU 139 Assisting in Teaching Elementary School Physical Education 1 credit
- *ECD 147, 148, 149 may be taken in combination or ECD 250 as a single three-credit class to apply toward the AAS degree.*

■ **Required Electives • 22 credits**

In addition, a minimum of 22 unduplicated credits must be selected as electives. One-half credit to six credits of ECD/EDU/HUS 199s and 299s may be included in the 22 credits.

■ **Special Needs**

■ **Core Requirements • 43 credits**

- ECD 100 Providing a Healthy Environment..... 1 credit
- ECD 101 The Child’s Total Learning Environment 1 credit
- ECD 102 Ensuring a Safe Environment..... 1 credit
- ECD 103 Planned Arrangements and Schedules..... 1 credit
- ECD 105 Guidance Principles for Encouraging Self Discipline 1 credit
- ECD 108 Techniques for Observing Children 1 credit
- ECD 110 Building Relationships With Parents Through Communication..... 1 credit
- ECD 112 Enhancing Family Involvement..... 1 credit
- ECD 113 Fostering Communication and Language Skills..... 1 credit
- ECD 114 Beginning Mathematical Concepts 1 credit
- ECD 115 Nutrition in Early Childhood 1 credit
- ECD 116 Sciencing and Discovery 1 credit
- ECD 117 Enhancing Questions and Problem-Solving Abilities 1 credit
- ECD 118 Blocks in Early Childhood Program 1 credit
- ECD 120 Enhancing a Positive Self-Concept..... 1 credit
- ECD 123 Music and Creative Movement..... 1 credit
- ECD 124 Dramatic Play in Early Childhood Setting..... 1 credit
- ECD 125 Creative Media..... 1 credit
- ECD 126 Large Muscle Development 1 credit
- ECD 127 Small Muscle Development 1 credit
- ECD 136 Understanding How Children Learn..... 1 credit
- ECD 175 Professionalism..... 1 credit
- ECD 200 Introduction to Early Childhood Education 3 credit
- ECD 216 Transitions..... 1 credit
- ECD 222 Young Children With Special Needs 3 credit
- ECD 250 Child Development I..... 3 credit
- EDU 202 Occupational/Physical Therapy Educational Assistant..... 3 credit
- EDU 198 Internship (Occupational/Physical Therapy)..... 1 credit

- EDU 203 Speech Therapy Educational Assistant.....3 credit
- EDU 198 Internship (Speech Therapy)..... 1 credit
- LAN 160 Beginning American Sign Language.....3 credit

■ **Required Electives • 5 credits**

In addition, a minimum of five unduplicated credits must be selected as electives. One-half credit to five credits of ECD/EDU/HUS 199s and 299s may be included in the five credits.

Certificates of Applied Science (CAS)

To complete a **Certificate of Applied Science in Early Childhood Development** a student must complete the core requirements, ENL 101, and one of the following mathematics courses: MAT 103, MAT 105, MAT 112, MAT 142, MAT 152, MAT 161 or MAT 162.

To complete a **Certificate of Applied Science in Early Childhood Special Needs**, a student must complete ENL 101 and one of the following mathematics courses: MAT 103, MAT 105, MAT 112, MAT 142, MAT 152, MAT 161, MAT 162 and the following credits:

- Certificate of Proficiency
(see below for courses in CP) 16 credit
 - ECD 200 Introduction to Early Childhood
Education 3 credit
 - ECD 250 Child Development I 3 credit
 - Required Electives** 4 credit
- **Four unduplicated credits must be selected as electives. One-half credit to four credits of ECD/EDU/HUS 199s and 299's may be included in the selection of the four credits.*

**Certificate of Proficiency (CP)
Early Childhood – Special Needs**

To complete a **Certificate of Proficiency in Early Childhood Special Needs**, a student must complete the following 16 credits.

- ECD 102 Ensuring a Safe Environment..... 1 credit
- ECD 136 Understanding How Children Learn..... 1 credit
- ECD 222 Young Children With Special Needs 3 credit
- EDU 202 Occupational/Physical Therapy
Educational Assistant..... 3 credit
- EDU 198 Internship
(Occupational/Physical Therapy) 1 credit
- EDU 203 Speech Therapy Educational Assistant.... 3 credit
- EDU 198 Internship (Speech Therapy)..... 1 credit
- LAN 160 Beginning American Sign Language..... 3 credit

Certificate of Proficiency (CP)

To complete a **Certificate of Proficiency in Early Childhood Family Care, Infant/Toddler, Preschool or School Age**, a student must complete the 26 core requirement credits in the area of specialization.

Education (EDU) (AAS/CAS/CP)

About this Program

The Education Program trains persons to assist in elementary school settings as assistants, volunteers, and/or substitutes and to work in other areas related to the education of children. Local career opportunities exist in all Northland district communities, as well as statewide.

Associate of Applied Science (AAS)

About this Degree • 64 credits

To complete an **Associate of Applied Science degree in Education** a student must successfully complete the 16 general education requirement credits, and 48 credits of core requirement and required electives in a selected area of specialization.

■ **General Education Requirements • 16 credits**

Communications • 6 credits

- ENL 101 College Composition I 3 credit
- Plus one of the following:
- ENL 102 College Composition II..... 3 credit
- ENL 109 Technical Writing..... 3 credit
- SPT 120 Public Speaking..... 3 credit

Mathematics • 3 credits

- MAT 105 Mathematics for General Education..... 3 credit

Discipline Studies • 7 credits

One course from the Arts and Humanities section, and one course from the Physical and Biological Sciences section of the AAS Discipline Studies list on page 64-65.

AREAS OF SPECIALIZATION

■ **Special Needs Educational Assistant**

■ **Core Requirements • 40 credits**

- ECD 108 Techniques for Observing Children 1 credit
- ECD 136 Understanding How Children Learn..... 1 credit
- ECD 222 Young Children with Special Needs 3 credit
- ECD 250 Child Development I 3 credit
- ECD 251 Child Development II..... 2 credit
- EDU 136 Introduction to Reading Programs 1 credit
- EDU 137 Principles of Child Guidance..... 1 credit
- EDU 138 Managing Children's Behavior..... 1 credit
- EDU 139 Assisting in Teaching Elementary
School Physical Education 1 credit
- EDU 140 Assisting in Teaching Elementary
School Writing 1 credit
- EDU 143 Assisting in Teaching Elementary
School Math 1 credit

EDU 144 Assisting in Teaching Elementary School Science.....	1 credit
EDU 145 Assisting in Teaching Elementary School Social Studies	1 credit
EDU 146 Assisting in Teaching Elementary School Music	1 credit
EDU 147 Assisting in Teaching Elementary School Reading.....	1 credit
EDU 148 Assisting in Teaching Elementary School Art	1 credit
EDU 149 Use of Bulletin Boards and Classroom Decorations.....	1 credit
EDU 198 Internship (Internship, Speech, and Occupational/Physical Therapy)	3 credit
EDU 200 Introduction to Education I.....	3 credit
EDU 201 Substitute Teaching in the Schools.....	3 credit
EDU 202 Occupational/Physical Therapy Educational Assistant.....	3 credit
EDU 203 Speech Therapy Educational Assistant....	3 credit
LAN 160 Beginning American Sign Language.....	3 credit

■ **Required Electives • 8 credits**

In addition, eight unduplicated credits (100 level or higher) must be selected from ECD/EDU/EMT/LAN/SPA courses as electives. One-half credit to 6 credits of ECD/EDU/EMT/LAN/SPA 199's and one-half credit to six credits of ECD 299's may be included in the selection of the eight credits.

Certificate of Applied Science (CAS)

■ **Educational Assistant**

To complete a **Certificate of Applied Science in the Educational Assistant** program, a student must complete the Certificate of Proficiency below and ENL 101 and one of the following mathematics courses: MAT 103, 105, 112, 142, 152, 161 or 162.

■ **Special Needs Educational Assistant**

To complete a **Certificate of Applied Science in Special Needs Education Assistant** a student must complete ENL 101, one of the following mathematics courses: MAT 103, 105, 112, 142, 152, 161 or 162 and the following credits:

Certificate of Proficiency (listed below)	16 credit
ECD 250 Child Development I.....	3 credit
EDU 200 Introduction to Education	3 credit
EDU Required Electives as described above.....	4 credit

Certificate of Proficiency (CP)

■ **Educational Assistant**

To earn an **Educational Assistant Certificate of Proficiency** a student must complete the following 26 credits:

ECD 108 Techniques for Observing Children	1 credit
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ECD 250 Child Development I.....	3 credit
ECD 251 Child Development II.....	2 credit
EDU 136 Introduction to Reading Programs	1 credit
EDU 137 Principles of Child Guidance.....	1 credit
EDU 138 Managing Children's Behavior.....	1 credit
EDU 139 Assisting in Teaching Elementary School Physical Education	1 credit
EDU 140 Assisting in Teaching Elementary School Writing	1 credit
EDU 143 Assisting in Teaching Elementary School Math	1 credit
EDU 144 Assisting in Teaching Elementary School Science.....	1 credit
EDU 145 Assisting in Teaching Elementary School Social Studies	1 credit
EDU 146 Assisting in Teaching Elementary School Music	1 credit
EDU 147 Assisting in Teaching Elementary School Reading.....	1 credit
EDU 148 Assisting in Teaching Elementary School Art	1 credit
EDU 149 Use of Bulletin Boards and Classroom Decorations.....	1 credit
EDU 198 Internship (Speech, or Occupational/Physical Therapy).....	2 credit
EDU 200 Introduction to Education I.....	3 credit
EDU 201 Substitute Teaching in the Schools.....	3 credit

■ **Special Needs Educational Assistant**

To earn a **Special Needs Educational Assistant Certificate of Proficiency** a student must complete the following 16 credits:

ECD 102 Ensuring a Safe Environment.....	1 credit
ECD 222 Young Children With Special Needs	3 credit
ECD 136 Understanding How Children Learn.....	1 credit
EDU 202 Occupational/Physical Therapy Educational Assistant.....	3 credit
EDU 198 Internship (Occupational/Physical Therapy)	1 credit
EDU 198 Internship (Speech Therapy)	1 credit
EDU 203 Speech Therapy Educational Assistant....	3 credit
LAN 160 Beginning American Sign Language.....	3 credit

Emergency Medical Technology (EMT)

See *Paramedicine on page 87*

Fire Science (FRS) (AAS/CAS/CP)

About this Program

The Fire Science program, through cooperation with the State Fire Marshal's Office and fire departments throughout Northland's district and service area, trains fire department personnel in firefighting operations and in the use of equipment. Employment areas related to firefighting include fire inspectors, arson investigators, fire prevention specialists, insurance investigators, hazardous materials specialists, business/industry fire protection system engineers and others.

To obtain information on training opportunities and classes, contact the program coordinator at the Jake Flake Emergency Services Training Center in Taylor, (928) 536-2462.

Associate of Applied Science (AAS)

About this Degree • 64 credits

To earn an **Associate of Applied Science degree in Fire Science**, a student must complete the 18 general education requirement credits, 37-44 core requirement credits and 2-9 credits of unrestricted electives as described.

■ General Education Requirements • 18 credits

Communications • 6 credits

- ENL 101 College Composition I 3 credit
- Plus one of the following:
- ENL 102 College Composition II 3 credit
- ENL 109 Technical Writing 3 credit
- SPT 120 Public Speaking 3 credit

Mathematics • 3 credits

Select one of the listed courses, or any mathematics course for which MAT 152 is a prerequisite.

- MAT 101 Basic Technical Mathematics 3 credit
- MAT 152 Advanced Algebra 3 credit

Discipline Studies • 9 credits

Per the Arts and Humanities and/or Social and Behavioral Sciences sections of the AAS Discipline Studies list on page 64-65.

■ Core Requirements • 37–44 credits

- FRS 104 Firefighter I and II 10 credit
- FRS 110 Hazardous Materials First Responder 2 credit
- FRS 115 Principles of Fire Prevention 3 credit
- FRS 136 Fire Apparatus, Equipment
and Hydraulics 3 credit
- FRS 137 Strategies and Tactics 3 credit
- FRS 141 Fire Service Communication 3 credit
- FRS 150 Wildland Firefighter 2 credit
- FRS 207 Fire Service Building Construction 3 credit
- FRS 210 Incident Safety Officer 3 credit

- FRS 211 Leadership I 1 credit
- FRS 212 Leadership II 1 credit
- FRS 213 Leadership III 1 credit
- And one course from the following:
- EMT 120 Emergency Medical Responder 3 credit
- EMT 132 Emergency Medical Technician-Basic 9 credit
- FRS 102 Fire Service First Responder 2 credit

■ Unrestricted Electives • 2 to 9 credits

Any unduplicated course(s) at the 100 or higher level.

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Fire Science**, a student must complete the core requirements, ENL 101 and MAT 101 or MAT 152 or any mathematics class for which MAT 152 is a prerequisite.

Certificate of Proficiency (CP)

To complete a **Certificate of Proficiency in Fire Science**, a student must complete the following courses:

- FRS 104 Firefighter I and II 10 credit
- FRS 110 Hazardous Materials First Responder 2 credit
- FRS 150 Wildland Firefighter 2 credit
- FRS 102 Fire Service First Responder 2 credit
- or
- EMT 120 Emergency Medical Responder 3 credit

Heavy Equipment Operations (HQP) (AAS/CAS/CP)

About this Program

The Heavy Equipment Program is designed to teach incremental levels of heavy equipment operations skills which enable students to achieve nationally recognized certifications NCCER Level 1 & 2 Entry Level Heavy Equipment and Level 3 & 4 Intermediate Heavy Equipment and Advanced Heavy Equipment that certifies at least 30 hours of operation time with a particular piece of equipment. Each certificate level is acknowledged by industry markets as proof of acquired skills in various forms of heavy equipment operation, safety, daily inspections, proper start up and shut down procedures, operations, career opportunities and professional work ethics.

This prepares students for certification tests in the use of heavy equipment operations for equipment such as dozer, backhoe, skid-steer, roller, forklift, crane, dump truck and motor grader. In addition to national heavy equipment certifications, students are afforded the opportunity to obtain **Certificates of Proficiency**, a **Certificate of Applied Science** and an **Associate of Applied Science degree**. Certification levels from Northland Pioneer College enhance career opportunities for graduates as certified Heavy Equipment Operators throughout the nation.

Associate of Applied Science (AAS)

About this Degree • 64 credits

To earn an **Associate of Applied Science degree in Heavy Equipment Operations** the student must complete the 16 credits of general education requirements and 48 credits of core requirements.

■ **General Education Requirements • 16 credits**

Communications • 6 credits

- ENL 101 College Composition I 3 credit
- Plus one of the following:
- ENL 102 College Composition II 3 credit
- ENL 109 Technical Writing 3 credit
- SPT 120 Public Speaking 3 credit

Mathematics • 3 credits

Select one of these mathematics courses.

- MAT 101 Basic Technical Mathematics 3 credit
- MAT 152 Advanced Algebra 3 credit

■ **Discipline Studies • 7 credits**

Per the AAS Discipline Studies list on page 64-65.

■ **Core Requirements • 48 credits**

LEVEL I: 12 credits

- HQO 108 Core Review 4 credit
- HQO 109 Basic Operations 3 credit
- HQO 111 Orientation to Trade/Equipment 3 credit
- HQO 113 Grades Part One 2 credit

LEVEL II: 12 credits

- HQO 119 Introduction to Earthmoving/Trucks 3 credit
- HQO 121 Rollers/Scrapers 3 credit
- HQO 122 Loaders/Forklifts 3 credit
- HQO 123 Excavation Math 3 credit

LEVEL III: 12 credits

- HQO 210 Grades Part Two/Civil Blueprints 4 credit
- HQO 211 Backhoes/Dozers 4 credit
- HQO 212 Introduction to Crew Leaders/
Excavators 4 credit

LEVEL IV: 12 credits

- HQO 230 Motor Graders 4 credit
- HQO 231 Advanced Operation Techniques/
MSHA 3 credit
- HQO 232 Finish Grades/Soils 3 credit
- HQO 233 Cranes/Rigging 2 credit

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Heavy Equipment Operations**, a student must complete Levels I and II of the core requirements and ENL 101 and MAT 101.

Certificate of Proficiency (CP)

All certificates of proficiency require successful completion of HQO 108 Core Review or a waiver from the instructor.

■ **Backhoes & Dozers • 10 credits**

- HQO 109 Basic Operations 3 credit
- HQO 111 Orientation to Trade/Equipment 3 credit
- HQO 211 Backhoes & Dozers 4 credit

■ **Cranes & Rigging • 8 credits**

- HQO 109 Basic Operations 3 credit
- HQO 111 Orientation to Trade/Equipment 3 credit
- HQO 233 Cranes/Rigging 2 credit

■ **Earthmoving Equipment & Trucks • 9 credits**

- HQO 109 Basic Operations 3 credit
- HQO 111 Orientation to Trade/Equipment 3 credit
- HQO 119 Introduction to Earthmoving/Trucks 3 credit

■ **Loaders & Forklifts • 9 credits**

- HQO 109 Basic Operations 3 credit
- HQO 111 Orientation to Trade/Equipment 3 credit
- HQO 122 Loaders/Forklifts 3 credit

■ **Motor Graders • 10 credits**

- HQO 109 Basic Operations 3 credit
- HQO 111 Orientation to Trade/Equipment 3 credit
- HQO 230 Motor Graders 4 credit

■ **Rollers & Scrapers • 9 credits**

- HQO 109 Basic Operations 3 credit
- HQO 111 Orientation to Trade/Equipment 3 credit
- HQO 121 Rollers/Scrapers 3 credit

Human Services (HUS) (AAS/CAS/CP)

About this Program

The Residential Child/Youth Care Assistant Program is designed for individuals working with children in residential settings such as boarding schools, dormitories or group homes. Courses leading to the program degree are combined from several disciplines.

Associate of Applied Science (AAS)

■ **Residential Child/Youth Care Assistant**

About this Degree • 64 credits

To earn an **Associate of Applied Science degree in Residential Child/Youth Care Assistant** the student must complete 16 credits of general education requirements, 35 credits of core requirements and 13 credits of required electives.

■ **General Education Requirements • 16 credits**

Communications • 6 credits

- ENL 101 College Composition I 3 credit
- Plus one of the following:
- ENL 102 College Composition II 3 credit
- ENL 109 Technical Writing 3 credit
- SPT 120 Public Speaking 3 credit

Mathematics • 3 credit

Select one of these mathematics courses.

- MAT 103 Business Mathematics 3 credit
- MAT 105 Mathematics for General Education 3 credit

Discipline Studies • 7 credits

Per the AAS Discipline Studies list on page 64-65.

■ **Core Requirements • 35 credits**

- CIS Any two 3-credit courses 6 credit
- ECD 100 Providing a Healthy Environment 1 credit
- ECD 102 Ensuring a Safe Environment 1 credit
- ECD 108 Techniques for Observing Children 1 credit
- ECD 110 Building Relationships with Parents
Through Communication 1 credit
- ECD 143 Inclusion of Children with Special Needs 2 credit
- ECD 152 Learning Environment for School Ageds . 1 credit
- ECD 153 Guidance Principles for School Ageds 1 credit
- ECD 175 Professionalism 1 credit
- ECD 221 Stress Management for Educators 2 credit
- ECD 250 Child Development I 3 credit
- ECD 251 Child Development II 2 credit
- ECD or EDU Internship 1 credit
- EDU 137 Principles of Child Guidance 1 credit
- EDU 138 Managing Children’s Behavior 1 credit
- HUS 180 Cross Cultural Helping Skills 2 credit
- HUS 251 Developing a Culture of Care 2 credit
- HUS 252 Building Relationships 2 credit
- HUS 253 Teaching Discipline 2 credit
- HUS 256 Understanding Child Development 2 credit

■ **Required Electives • 13 credits**

An additional 13 unduplicated credits must be selected from any 100-level or above courses. Up to six credits of 199 workshops may be included in this total.

Certificate of Applied Science (CAS)

To earn a **Certificate of Applied Science in Residential Child/Youth Care Assistant**, a student must complete ENL 101, MAT 103 or MAT 105, and the following 30 credits:

- CIS: Any three-credit course 3 credit
- ECD 100 Providing a Healthy Environment 1 credit
- ECD 102 Ensuring a Safe Environment 1 credit
- ECD 108 Techniques for Observing Children 1 credit
- ECD 110 Building Relationships with Parents
Through Communication 1 credit

- ECD 143 Inclusion of Children with Special Needs 2 credit
- ECD 152 Learning Environment for School Ageds . 1 credit
- ECD 153 Guidance Principles for School Ageds 1 credit
- ECD 175 Professionalism 1 credit
- ECD 250 Child Development I 3 credit
- ECD 251 Child Development II 2 credit
- EDU 137 Principles of Child Guidance 1 credit
- EDU 138 Managing Children’s Behavior 1 credit
- HUS 251 Developing a Culture of Care 2 credit
- HUS 252 Building Relationships 2 credit
- HUS 253 Teaching Discipline 2 credit
- HUS 256 Understanding Child Development 2 credit

An additional three **unduplicated** credits (100 level or higher) must be selected from ECD/EDU/EMT/HDE/HUS/CIS/HPE/ANT/LAN courses. Up to three credits of 199 workshops may be used.

Certificates of Proficiency (CP)

■ **Child/Youth Care • 19 credits**

To earn a **Certificate of Proficiency in Child/Youth Care** the student must take the following courses:

- ECD 100 Providing a Healthy Environment 1 credit
- ECD 102 Ensuring a Safe Environment 1 credit
- ECD 108 Techniques for Observing Children 1 credit
- ECD 110 Building Relationships with Parents
Through Communication 1 credit
- ECD 143 Inclusion of Children with Special Needs 2 credit
- ECD 152 Learning Environment for School Ageds . 1 credit
- ECD 153 Guidance Principles for School Ageds 1 credit
- ECD 175 Professionalism 1 credit
- EDU 137 Principles of Child Guidance 1 credit
- EDU 138 Managing Children’s Behavior 1 credit
- HUS 251 Developing a Culture of Care 2 credit
- HUS 252 Building Relationships 2 credit
- HUS 253 Teaching Discipline 2 credit
- HUS 256 Understanding Child Development 2 credit

■ **Substance Abuse Counseling • 15 credits**

The **Certificate of Proficiency in Substance Abuse Counseling** is a series of seven courses linked together to provide training and skills necessary for an individual to work as part of a substance abuse program providing support for individuals involved with substance abuse or issues surrounding substance abuse.

- HUS 111 Foundations of Chemical Dependency 3 credit
- HUS 112 Biosystems/Pharmacology of
Chemical Dependency 3 credit
- HUS 210 Family Dynamics and
Chemical Dependency 3 credit
- HUS 211 Recovery and Relapse 2 credit
- HUS 212 Case Report Writing 1 credit
- HUS 215 Professional Ethics and Counseling 1 credit
- HUS 218 Dual Diagnosis 2 credit

Industrial Maintenance & Operations (IMO) (AAS/CAS)CP

About this Program

The Industrial Maintenance & Operations program prepares students to be technicians and operators capable of understanding the entire system with which they work. Core courses cover the complex related mechanical, pneumatic, hydraulic, electrical, thermal and sensory control systems used in modern industry.

Local career opportunities exist in all Northland district communities and throughout the state and nation. Technical employers include power plants, paper mills, saw mills, various utilities and communications companies and small to medium manufacturing companies.

For additional information about the Industrial Maintenance & Operations Program, contact the Program Coordinator at the Painted Desert Campus, (800) 266-7845, ext. 7360.

Associate of Applied Science (AAS)

About this Degree • 64 credits

To earn an **Associate of Applied Science degree in Industrial Maintenance & Operations** the student must complete 19 credits of general education requirements, 24 or 28 credits in an area of specialization, 15 credits of required electives, and two or six credits of unrestricted electives.

■ General Education Requirements • 19 credits

Communications • 6 credits

- ENL 101 College Composition I3 credit
- Plus one of the following:
- ENL 102 College Composition II.....3 credit
- ENL 109 Technical writing.....3 credit

Mathematics • 3 credits

Select one of the listed mathematics courses, or any course for which MAT 109 is a prerequisite.

- MAT 101 Basic Technical Mathematics3 credit
- MAT 109 Algebra I: Introductory3 credit

Computer Science • 3 credits

- CIS 106 Computer Literacy3 credit

Arts and Humanities • 3 credits

Select one course from the Arts and Humanities section of the AAS Discipline Studies list on page 64-65.

Physical and Biological Science • 4 credits

Select one course from the Physical and Biological Sciences section of the AAS Discipline Studies list on page 65.

AREAS OF SPECIALIZATION

■ Electrical

■ Core Requirements • 24 credits

- IMO 151 Electrical Level I.....6 credit
- IMO 152 Electrical Level II6 credit
- IMO 153 Electrical Level III.....6 credit
- IMO 154 Electrical Level IV.....6 credit

■ Instrumentation

■ Core Requirements • 28 credits

- IMO 155 Instrumentation Level I.....7 credit
- IMO 156 Instrumentation Level II7 credit
- IMO 157 Instrumentation Level III7 credit
- IMO 158 Instrumentation Level IV.....7 credit

■ Maintenance Fundamentals

■ Core Requirements • 24 credits

- IMO 230 Mechanical Maintenance I.....6 credit
- IMO 231 Mechanical Maintenance II.....6 credit
- IMO 232 Mechanical Maintenance III.....6 credit
- IMO 233 Mechanical Maintenance IV6 credit

■ Operations/Maintenance

■ Core Requirements • 28 credits

- IMO 201 Introduction to Industrial Maintenance..4 credit
- IMO 210 Power Principles I.....6 credit
- IMO 211 Power Principles II.....6 credit
- IMO 230 Mechanical Maintenance I.....6 credit
- IMO 231 Mechanical Maintenance II.....6 credit

■ Power Fundamentals

■ Core Requirements • 24 credits

- IMO 210 Power Principles I.....6 credit
- IMO 211 Power Principles II.....6 credit
- IMO 212 Power Principles III6 credit
- IMO 213 Power Principles IV6 credit

■ Required Electives • 15 credits

All areas of specialization require student to complete a minimum of 15 credits from the list of required electives:

- AIS 114 Introduction to Modern Office3 credit
- AIS 231 Introduction to Microsoft Office.....3 credit
- BUS 103 Success on Your Job.....2 credit
- BUS 105 Techniques of Supervision3 credit
- Any unduplicated IMO courses at 100 or higher level

■ Unrestricted Electives • 2 or 6 credits

Select 2 or 6 credits (depending on selected area of specialization or Certificate of Proficiency) from any unduplicated 100 or higher level courses

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Electrical, Instrumentation, Maintenance Fundamentals, Operations/Maintenance, or Power Fundamentals**, student must complete the core requirements in an area of specialization, ENL 101 or ENL 109 and MAT 101 or MAT 109.

Certificates of Proficiency (CP)

■ Electrical • 24 credits

IMO 151 Electrical Level I.....	6 credit
IMO 152 Electrical Level II.....	6 credit
IMO 153 Electrical Level III.....	6 credit
IMO 154 Electrical Level IV.....	6 credit

■ Industrial Plant Operations • 24 credits

IMO 210 Power Principles I.....	6 credit
IMO 211 Power Principles II.....	6 credit
IMO 212 Power Principles III.....	6 credit
IMO 213 Power Principles IV.....	6 credit

■ Instrumentation • 28 credits

IMO 155 Instrumentation Level I.....	7 credit
IMO 156 Instrumentation Level II.....	7 credit
IMO 157 Instrumentation Level III.....	7 credit
IMO 158 Instrumentation Level IV.....	7 credit

■ Mechanical Maintenance • 24 credits

IMO 230 Mechanical Maintenance I.....	6 credit
IMO 231 Mechanical Maintenance II.....	6 credit
IMO 232 Mechanical Maintenance III.....	6 credit
IMO 233 Mechanical Maintenance IV.....	6 credit

■ Operations/Maintenance • 28 credits

IMO 201 Introduction to Industrial Maintenance..	4 credit
IMO 210 Power Principles I.....	6 credit
IMO 211 Power Principles II.....	6 credit
IMO 230 Mechanical Maintenance I.....	6 credit
IMO 231 Mechanical Maintenance II.....	6 credit

■ Wastewater Collection and Treatment • 18 credits

IMO 140 Wastewater Collection and Treatment I..	6 credit
IMO 141 Wastewater Collection and Treatment II..	6 credit
IMO 142 Wastewater Collection and Treatment III	6 credit

■ Water Supply Treatment • 18 credits

IMO 130 Water Supply and Treatment I.....	6 credit
IMO 131 Water Supply and Treatment II.....	6 credit
IMO 132 Water Supply and Treatment III.....	6 credit

Medical Assistant (MDA) (AAS/CAS)

About this Program

The Medical Assistant program provides training in basic anatomy, physiology, and medical terminology. Administrative training includes courses in software application, word processing, medical transcription, insurance billing and coding. Students engage in laboratory training in phlebotomy, medication administration, electrocardiography, vital sign measurement, and preparation for physical and specialty exams. This program meets or exceeds the Arizona State Board of Medical Examiners requirements (R4-15-301 and R4-16-302).

The Medical Assistant program is available at the Winslow – Little Colorado and Show Low – White Mountain campuses and at other locations to meet community needs.

Associate of Applied Science (AAS)

About this Degree • 64 credits

To complete an **Associate of Applied Science degree in Medical Assistant** a student must complete 25 general education requirement credits, 30 program core requirements credits and nine credits of required electives.

■ General Education Requirements • 25 credits

Communications • 6 credits

ENL 101 College Composition I.....	3 credit
Plus one of the following:	
ENL 102 College Composition II.....	3 credit
ENL 109 Technical Writing.....	3 credit

Mathematics • 3 credits

MAT 103 Business Math.....	3 credit
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Discipline Studies • 16 credits

Per the AAS Discipline Studies list on page 64-65.	
Arts and Humanities.....	6 credits
Physical and Biological Sciences.....	4 credits
Social and Behavioral Sciences.....	6 credits

■ Core Requirements • 30 credits

BIO 160 Introduction to Human Anatomy and Physiology I.....	4 credit
AIS 127 Medical Office Insurance and Coding.....	3 credit
AIS 231 Introduction to MS Office.....	3 credit
HES 109 Phlebotomy.....	4 credit
HES 170 Medical Terminology.....	3 credit
or	
AIS 123 Vocabulary for the Medical Office.....	3 credit
HES 120 Law and Ethics.....	3 credit
MDA 120 Administrative Office Procedures.....	3 credit
MDA 123 Clinical Procedures.....	4 credit
MDA 198 Administrative/Clinical Internship.....	3 credit

■ **Required Electives • 9 credits**

Select a minimum of nine credits from the following courses:

AIS 102 Business Grammar.....	1 credit
AIS 112 Proofreading.....	1 credit
AIS 113 Basic Memo and Letter Writing.....	1 credit
AIS 115 Ten-key Adding Machine.....	1 credit
AIS 135 Introduction to Medical Transcription.....	3 credit
AIS 235 Advanced Transcription-Medical I.....	4 credit
AIS 236 Advanced Transcription-Medical II.....	4 credit
BUS 210 Principles of Modern Management.....	3 credit
BUS 225 Human Resource Management.....	3 credit
CIS 141 Managing and Maintaining	
Your PC I (A+).....	3 credit

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Medical Assistant**, a student must complete 36 credit hours: 30 core requirement credits, three credits from ENL 101 and three credits from MAT 103.

Nursing (NUR) (AAS/CAS)

About this Program

Northland Pioneer College Nursing Programs include:

- Nursing Assistant Training
- LPN-RN Transition
- Multiple Exit Program
- RN Refresher Program



These nursing programs prepare students to make application to take the certified nursing assistant exam and the National Council Licensing Examination for practical (NCLEX-PN) and/or registered nursing (NCLEX-RN). Successful completion of the certifying exam prepares students for entry-level position in providing direct patient care. Admission to or graduation from the program at any level does not guarantee licensure by the Arizona State Board of Nursing.

Requirements: Graduates must satisfy the licensing requirements of the State Board of Nursing independently of any college requirements per the Arizona Nurse Practice Act. Under Arizona Law, an applicant could be denied certification as a nursing assistant or licensure as a registered or practical nurse if convicted of a felony or addicted to habit-forming drugs, or if the applicant in any other way fails to meet qualifications required by law.

In 1997 the Nursing Program became part of the Healing Community composed of five rural community colleges and Northern Arizona University that work together on a collaborative basis. The Healing Community designed a common curriculum that provides students an opportunity for seamless articulation from an Associate of Applied Science in Nursing Degree (AAS) to a baccalaureate of nursing degree

(BSN). When the graduate becomes a registered nurse, he or she can apply to Northern Arizona University to complete the upper division courses in nursing that apply to a BSN.

Emphasis: Northland Pioneer College’s Multiple Exit Program, approved by the Arizona State Board of Nursing, is offered on the White Mountain (Show Low) and Little Colorado (Winslow) campuses. Many of the required courses for admission and general education courses are available at other NPC campuses and centers. The program of 72 credit hours includes prerequisites and is designed for two academic years dedicated to the study of nursing. After completion of the first year with the addition of the Practical Nurse Completion course, the student nurse can receive a Certificate of Applied Science in Practical Nursing and apply to write the NCLEX-PN. The student nurse may then exit the program or continue on to earn the Associate of Applied Science Degree, and be qualified to take the NCLEX-RN exam.

For the student who is a Licensed Practical Nurse (LPN), who wishes to enter the program to acquire the Associate of Applied Science in Nursing Degree and become a Registered Nurse (RN), the prerequisite requirements are identical to the Multiple Exit Program. The student should meet with an NPC academic adviser and provide evidence of course content and classroom hours for their LPN training. This documentation will be submitted to Records and Registration for determination of assessed credit for NUR 121, NUR 122, and NUR 125. Evaluation and approval of assessed credit does not guarantee admission to the Nursing program. Decisions regarding acceptance are determined by the Nursing Admission Committee. Additional fees may apply for credit by evaluation. Students apply in the fall and complete the LPN to RN transition course in the spring semester. Prerequisites must be complete prior to enrolling in the third semester NUR 221 nursing course. The student is eligible to take the National Council Licensing Examination for Registered Nursing (NCLEX-RN) when the core nursing courses are successfully completed.

■ **Student Nurse Guidelines**

Patient safety dictates that specific Nursing Program student guidelines apply to this program that are more stringent than the general college student policies. A copy of the *Nursing Program Student Handbook* is issued to students admitted to the program. In case of state-mandated changes, curriculum and/or guidelines could change.

Clinical experiences take place in various health care agencies in and outside of Northland’s district. Hours may vary from the class schedule depending on the clinical placement. Travel and overnight stays may be required.

■ **Prerequisites for Program Admission**

Courses

Before the student will be considered eligible to enter the

Nursing Program, certain prerequisites must be met. Successful completion with a 'C' grade or better for each class and a cumulative GPA of 'B' (3.0 on a 4.0 scale) is required.

BIO 181 General Biology	4 credit
BIO 201 Human Anatomy and Physiology I	4 credit
BIO 202 Human Anatomy and Physiology II	4 credit
CHM 130 Fundamental Chemistry	4 credit
BIO 205 Microbiology.....	4 credit
ENL 101 College Composition I	3 credit

Licensing Requirements

Applicants to the nursing program must complete Nursing Assistant Training (NAT 101), or a comparable state-approved course, and must hold a current Arizona Certified Nursing Assistant (CNA) license in good standing.

Applicants to the LPN to RN program must hold a current Arizona Licensed Practical Nurse (LPN) license in good standing.

Applicants to the RN Refresher program must acquire a temporary license from the Arizona State Board of Nursing.

■ **Admission to the Nursing program**

Note: Admission to the college does not guarantee admission to the Nursing Program.

- Students must be admitted to the Nursing Program in order to enroll in nursing courses. (Admission information is available in the academic advising and the nursing program areas.)
- Completed nursing application should be submitted on or before the designated deadline that is noted in the application packet. Late applicants may be accepted on a space-available basis if they meet the admission criteria but not before applicants who submit applications on time.
- All prerequisite courses must be completed prior to the fall semester of admission to the program.
- Admission Selection:
Admission criteria will include: HESI Admission Assessment test composite and cumulative scores, prerequisite GPA, overall GPA, letters of recommendation, applicant statement, and faculty or adviser recommendations. The factors will be weighted by the committee. Significant weight will be given to the HESI composite percentage and prerequisite GPA. Admission is contingent upon completion of program prerequisites by the end of the summer semester.
- General Education and core requirements must be completed as listed on the curriculum outline in the program admission information packet.
- College credits over eight years old may be acceptable. For a determination, provide appropriate documentation to the dean of nursing and allied health.

- Transfer students for second, third or fourth semesters are considered on an individual basis. Criteria include course comparables, GPA, specified examination results, and recommendation from previous program director.

**Associate of Applied Science
Registered Nursing (AAS)**

About this Degree • 72 credits

To earn an Associate of Applied Science Registered Nursing degree, the student must complete the following 72 credits.

■ **General Education Requirements • 32 credits**

Communications • 6 credits

ENL 101 College Composition I	3 credit
ENL 102 College Composition II.....	3 credit

Mathematics

Compass Algebra score of 46 or ASSET Elementary Algebra score of 41 or ACT Math score of 21 within one year prior to application to the nursing program.

Arts and Humanities

No requirements

Physical and Biological Sciences • 20 credits

CHM 130 Fundamental Chemistry	4 credit
BIO 181 General Biology	4 credit
BIO 201 Human Anatomy and Physiology I.....	4 credit
BIO 202 Human Anatomy and Physiology II	4 credit
BIO 205 Microbiology.....	4 credit

Social and Behavioral Sciences • 6 credits

PSY 240 Developmental Psychology.....	3 credit
Plus one of the following:	
ANT 102 Cultural Anthropology.....	3 credit
SOC 120 General Sociology.....	3 credit

■ **Core Requirements • 40 credits**

NUR 117 Pharmacology I.....	2 credit
NUR 118 Pharmacology II.....	2 credit
NUR 121 Nursing I.....	8 credit
NUR 122 Nursing II	8 credit
NUR 125 Practical Nurse Completion	2 credit
NUR 221 Nursing III.....	8 credit
NUR 222 Nursing IV.....	8 credit
NUR 219 NCLEX Review Seminar.....	2 credit

Certificate of Applied Science Practical Nursing (CAS)

To complete the **Certificate of Applied Science in Practical Nursing**, the student must complete a total of 51 credits as follows: 29 General Education Requirements, and 22 credits from Core Requirements.

■ **General Education Requirements • 29 credits**

BIO 181 General Biology.....	4 credit
BIO 201 Human Anatomy and Physiology I.....	4 credit
BIO 202 Human Anatomy and Physiology II.....	4 credit
BIO 205 Microbiology.....	4 credit
CHM 130 Fundamental Chemistry.....	4 credit
ENL 101 College Composition I.....	3 credit
ENL 102 College Composition II.....	3 credit
PSY 240 Developmental Psychology.....	3 credit

■ **Core Requirements • 22 credits**

NUR 117 Pharmacology I.....	2 credit
NUR 118 Pharmacology II.....	2 credit
NUR 121 Nursing I.....	8 credit
NUR 122 Nursing II.....	8 credit
NUR 125 Practical Nurse Completion.....	2 credit

Nursing Assistant (NAT) (CRT)

About this Program

Northland Pioneer College offers nursing assistant training at various campuses/centers. The Nursing Assistant course includes the required course content and hours specified by the Arizona Nurse Practice Act. Upon completion of the course the student is eligible to take the Arizona state test to become a Certified Nursing Assistant (CNA).

Requirements: Under the Arizona Nurse Practice Act, an applicant can be denied certification as a nursing assistant if convicted of a felony or addicted to habit-forming drugs or if the applicant in any other way fails to meet qualifications required by law. Upon passing the course with a grade 'C' or better the Nursing Program awards the student a **Certificate of Completion**.

Certificate of Completion

NAT 101 Nursing Assistant.....	5 credit
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Paramedicine (EMT) (AAS/CAS/CP)

About this Program

The Paramedicine program, under the regulations of the Arizona Department of Health Services (DHS) with the cooperation of local, state and private medical institutions and emergency medical services agencies, educates EMT Basics up to the level of Paramedic. The program utilizes the most current standards of the National Association of EMS Educators.

The NPC Paramedicine program also fulfills the Arizona Department of Health Services mandatory requirement of 500 hours of didactic training with 500 hours of clinical and vehicular training.

To obtain further information, contact the Paramedicine Program at the White Mountain Campus in Show Low, (800) 266-7845, ext. 6715.

Associate of Applied Science (AAS)

About this Degree • 70 credits

The **Associate of Applied Science degree in Paramedicine** requires 18 general education credits and 52 credit hours of core requirements. The core requirement credits are divided into the preparatory course of Basic Electrocardiogram (ECG) and Pharmacology followed by completion of Paramedic Training I and II.

Prerequisites to qualify for acceptance into the program include: (1) be an Arizona certified EMT-Basic with a minimum of one year experience. (2) Meet NPC placement requirements for ENL 101 (College Composition I) and MAT 101 (Basic Technical Mathematics). (3) Have successfully completed a hazardous materials first responder course (minimum 24 clock hours). (4) have a TB skin test within six months of the start of the program and MMR and hepatitis B immunization or waiver.

In addition, applicant must pass a written exam, a practical skills test and an oral interview.

■ **General Education Requirements • 18 credits**

Communications • 6 credits

ENL 101 College Composition I.....	3 credit
Plus one of the following:	
ENL 102 College Composition II.....	3 credit
ENL 109 Technical Writing.....	3 credit
SPT 120 Public Speaking.....	3 credit

Mathematics • 3 credits

Select one of these mathematics courses, or any course for which MAT 112 is a prerequisite.

- MAT 101 Basic Technical Mathematics3 credit
- MAT 103 Business Mathematics3 credit
- MAT 105 Mathematics for General Education.....3 credit
- MAT 109 Algebra I: Introductory3 credit
- MAT 112 Algebra II: Intermediate3 credit

Arts and Humanities • 3 credits

Select one Arts and Humanities course from the AAS Discipline Studies list on page 64-65. (PHL 105 is recommended but not required).

Social and Behavioral Sciences • 6 credits

- PSY 101 Introduction to Psychology3 credit and
- Any course from the Social and Behavioral Sciences AAS Discipline Studies list on page 65.....3 credit

■ Core Requirements • 52 credits

- EMT 240 Basic ECG and Pharmacology3 credit
 - EMT 244 Paramedic Training I23 credit
 - EMT 245 Paramedic Training II.....26 credit
- Plus 500 clinical and vehicular hours are mandatory for completion of any paramedic program per AZDHS.*

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Paramedicine** a student must complete the 52 core requirement credits, ENL 101, and MAT 101 or MAT 103 or MAT 105 or MAT 109 or MAT 112 or any mathematics course for which MAT 112 is a prerequisite.

Certificate of Proficiency (CP)

To complete the Certificate of Proficiency in Paramedicine, the student must complete the following 52 credits:

- EMT 240 Basic ECG and Pharmacology3 credit
 - EMT 244 Paramedic Training I23 credit
 - EMT 245 Paramedic Training II.....26 credit
- Plus 500 clinical and vehicular hours are mandatory for completion of any paramedic program per AZDHS.*

Photography Technician (PHO)

(AAS/CAS/CP)

About this Program

The Photography Technician program prepares graduates to apply technical skills and aesthetics in photography. Photographers and camera operators use camera and film to portray people, places and events much as writers use words.

Salaried jobs for photographers are found, for the most part, in photographic or commercial art studios. About half of all photographers and camera operators are self-employed. Many are freelance photographers who do individual projects on a one-time only or occasional basis.

Local career opportunities exist in all Northland district communities in varying degrees, but career opportunities also exist in suburban and metropolitan areas throughout the state and nation. Related occupations include visual artists, illustrators, designers, painters, sculptors, and graphic communications technicians.

Career opportunities exist in the private and public sectors, both locally and nationally. Computer technology continues to expand in our economy.

The Photography Technician program at NPC is available at the White Mountain Campus in Show Low, Painted Desert Campus in Holbrook and the Springerville/Eagar Center. Interested persons from other communities will probably need to attend part or most of the program at these Northland locations.

Associate of Applied Science (AAS)

About this Degree • 64 credits

To earn an **Associate of Applied Science degree in Photography Technician** the student must complete 16 general education credits, 27 core requirement credits, 15 credits of required electives, and six credits of unrestricted electives.

■ General Education Requirements • 16 credits

Communications • 6 credits

- ENL 101 College Composition I3 credit
- Plus one of the following:
- ENL 102 College Composition II.....3 credit
- ENL 109 Technical Writing.....3 credit
- SPT 120 Public Speaking3 credit

Mathematics • 3 credits

- MAT 101 Basic Technical Mathematics3 credit

Discipline Studies • 7 credits

Per the AAS Discipline Studies list on page 64-65.

■ **Core Requirements • 27 credits**

PHO 100 Beginning Photography.....	3 credit
PHO 115 Pictorial Journalism.....	3 credit
PHO 200 Intermediate Photography.....	3 credit
PHO 212 Color Photography I.....	3 credit
PHO 213 Color Photography II.....	3 credit
PHO 220 Advanced Photography.....	3 credit
PHO 230 View Camera Photography.....	3 credit
PHO 240 Photography Portfolio.....	3 credit
PHO 250 Photography As An Art Medium.....	3 credit

■ **Required Electives • 15 credits**

Select a minimum of 15 credits from the following list:

ART 103 Basic Design.....	3 credit
BUS 100 Introduction to Business.....	3 credit
BUS 110 Small Business Management.....	3 credit
PHO 198 Internship.....	1-8 credit
PHO 199 Workshop.....	0.5-6 credit
PHO 299 Special Problems.....	1-3 credit

■ **Unrestricted Electives • 6 credits**

Select any unduplicated 100 or higher level courses.

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Photography Technician**, a student must complete the core requirement credits, ENL 101 and MAT 101.

Certificates of Proficiency (CP)

■ **Black and White Photography • 17 credits**

PHO 100 Beginning Photography.....	3 credit
PHO 115 Pictorial Journalism.....	3 credit
PHO 200 Intermediate Photography.....	3 credit
PHO 220 Advanced Photography.....	3 credit
PHO 230 View Camera Photography.....	3 credit
PHO 280 Photography Practicum.....	2 credit

■ **Color Photography • 16.5–21 credits**

PHO 100 Beginning Photography.....	3 credit
PHO 200 Intermediate Photography.....	3 credit
PHO 212 Color Photography I.....	3 credit
PHO 213 Color Photography II.....	3 credit
PHO 245 Photography Desktop Publishing.....	3 credit
PHO 199 Workshop.....	0.5-3 credit
PHO 299 Special Problems.....	1-3 credit

■ **Photography Marketing • 18 credits**

PHO 100 Beginning Photography.....	3 credit
PHO 200 Intermediate Photography.....	3 credit
PHO 212 Color Photography I.....	3 credit
PHO 240 Photography Portfolio.....	3 credit
PHO 245 Photography Desktop Publishing.....	3 credit
PHO 270 Freelance/Stock Photography.....	3 credit

Welding (WLD) (AAS/CAS/CP)

About this Program

The Welding Program is designed to teach incremental levels of welding skills, which enable students to achieve nationally recognized certifications (NCCER/AWS Level 1 Entry Level Welder and Level 2 Advanced Level Welder). Industry markets acknowledge each certificate level is proof of acquired skills in various forms of welding, cutting, base metal preparation, welding inspection, safety, and metallurgy. This prepares students for certification tests in specific welding code applications, such as AWS, API, and ASME Sec IX.

In addition to welder certifications, students are afforded the opportunity to obtain Certificates of Proficiency, Certificate of Applied Science and an Associate of Applied Science degree.

Certification Levels from Northland enhance career opportunities for graduates as certified welders throughout the nation.

Associate of Applied Science (AAS)

About this Degree • 64 credits

To earn an **Associate of Applied Science degree in Welding** the student must complete 16 general education requirement credits, 45 credits of core requirements, and three credits of required electives.

■ **General Education Requirements • 16 credits**

Communications • 6 credits

ENL 101 College Composition I.....	3 credit
Plus one of the following:	
ENL 102 College Composition II.....	3 credit
ENL 109 Technical Writing.....	3 credit
SPT 120 Public Speaking.....	3 credit

Mathematics • 3 credits

MAT 101 Basic Technical Mathematics.....	3 credit
MAT 152 Advanced Algebra.....	3 credit

Discipline Studies • 7 credits

Select Per the AAS Discipline Studies list on page 64-65.

■ **Core Requirements • 45 credits**

LEVEL I (19 credits)

WLD 100 Safety and Mathematics.....	2 credit
WLD 150 Symbols, Drawings/Metal Preparation...2 credit	
WLD 151 Cutting Process and Welding Quality	3 credit
WLD 152 SMAW Plate I.....	3 credit
WLD 153 SMAW Plate II.....	3 credit
WLD 154 GMAW Plate.....	3 credit
WLD 155 GTAW Plate.....	3 credit

Level II (26 credits)

WLD 260 Weld Fit Up/Inspection/Metallurgy	2 credit
WLD 261 SMAW Open V-Butts/Plate I.....	3 credit
WLD 262 SMAW Open V-Butts/Plate II	3 credit
WLD 263 SMAW Open Root/Pipe I	3 credit
WLD 264 SMAW Open Root/Pipe II.....	3 credit
WLD 265 GMAW Pipe	3 credit
WLD 266 FCAW Pipe.....	3 credit
WLD 267 GTAW Pipe I	3 credit
WLD 268 GTAW Pipe II.....	3 credit

■ **Required Electives • 3 credits**

Student must complete a minimum of three credits from the following:

WLD 156 AWS Level 1 (Certification Preparation) 2 credit	
WLD 157 AWS Level 1 Certification (Entry Level Welder).....	4 credit
WLD 240 Intro to Plastics.....	2 credit
WLD 241 Plastic Welding.....	2 credit
WLD 242 Fabrication of Plastics	2 credit
WLD 243 Plastic Welding	2 credit
WLD 290 Welding Fabrication	3 credit
WLD 291 Internship for Welding	2 credit

■ **Plastic Welding • 8 credits**

WLD 240 Intro to Plastics.....	2 credit
WLD 241 Plastic Welding.....	2 credit
WLD 242 Fabrication of Plastics	2 credit
WLD 243 Plastic Welding	2 credit

■ **Shielded Metal Arc Welding (Arc)**

• **12 credits**

WLD 152 SMAW Plate I	3 credit
WLD 153 SMAW Plate II.....	3 credit
WLD 261 SMAW Open V-Butts/Plate I.....	3 credit
WLD 262 SMAW Open V-Butts/Plate II	3 credit

■ **Welding Level I –**

Entry Level Welder • 19 credits

WLD 100 Safety and Math.....	2 credit
WLD 150 Symbols, Drawings/Metal Preparation... 2 credit	
WLD 151 Cutting Process and Welding Quality 3 credit	
WLD 152 SMAW Plate I	3 credit
WLD 153 SMAW Plate II.....	3 credit
WLD 154 GMAW Plate	3 credit
WLD 155 GTAW Plate	3 credit

■ **Welding Level II –**

Advanced Welder • 26 credits

Student must complete all of the requirements for Welding Level I and receive a **Certificate of Proficiency** for Level I before receiving the Welding Level II certificate.

WLD 260 Weld Fit Up/Inspection/Metallurgy	2 credit
WLD 261 SMAW Open V-Butts/Plate I.....	3 credit
WLD 262 SMAW Open V-Butts/Plate II	3 credit
WLD 263 SMAW Open Root/Pipe I	3 credit
WLD 264 SMAW Open Root/Pipe II.....	3 credit
WLD 265 GMAW Pipe	3 credit
WLD 266 FCAW Pipe.....	3 credit
WLD 267 GTAW Pipe I	3 credit
WLD 268 GTAW Pipe II.....	3 credit

Certificate of Applied Science (CAS)

To complete a **Certificate of Applied Science in Welding**, a student must complete the core requirements, ENL 101 and MAT 101.

Certificates of Proficiency (CP)

■ **Gas Tungsten Arc Welding (TIG)**

• **9 credits**

WLD 155 GTAW Plate	3 credit
WLD 267 GTAW Pipe I	3 credit
WLD 268 GTAW Pipe II.....	3 credit

■ **Gas Metal Arc Welding (MIG)**

• **6 credits**

WLD 154 GMAW Plate	3 credit
WLD 265 GMAW Pipe	3 credit