### Programs and Degrees

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Instructional Divisions and Programs

Mark Vest, Vice President for Learning and Student Services

Arts and Sciences
Dr. Eric Henderson, Dean

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

Career and Technical Education
Ms. Peggy Belknapp, Dean

Administration of Justice Studies
Automotive Technology
Business
Community and Corporate Learning
Computer Information Systems
Construction Technology
  Drafting
Cosmetology
  Cosmetology
  Cosmetology Instructor
  Nail Technician
Dept. of Corrections
Fire Science
Health and Physical Education
Industrial Arts Technology
Industrial Maintenance
  and Operations
Law Enforcement Academy
Mechatronics Engineering Technology
Welding
Carl Perkins Vocational Funding
Get Into Energy – Arizona Sun Corridor Consortium Grant

Nursing and Allied Health
Ms. Peg Erdman, Dean

Allied Health – HES
  Direct Care Worker
  Pharmacy Technician (PHT)
  Phlebotomy
Medical Assistant
Nursing Program
  RN
  LPN to RN
  Paramedic to RN
Continuing Nursing Education
Nursing Assistant Training
Paramedicine (EMT)

Apache County Programs
Ms. Tamara Martin, Coordinator

Center Programming
  (Apache County)
Springerville/Eagar
St. Johns
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 assuring and improving the quality of higher education.

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).
Assessment Continued

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.

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 (see AGEC, page 83) for these degrees are specifically designed to transfer to Arizona’s public universities, fulfilling their lower division general education requirements.

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 should work with their NPC academic adviser to facilitate a smooth and efficient transfer to a four-year college or university.

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. Information about degrees and pathways, common courses, Course Equivalency Guides, transfer guides and Arizona college and university catalogs is available through an NPC academic adviser or at www.AZTransfer.com.
University Transfer Agreements

NPC partners with other regionally-accredited colleges and universities, both within and outside of Arizona, through articulation agreements that assist students make a smooth transition from NPC to a participating four-year institution without having to duplicate coursework. NPC students participating in transfer agreements are able to fulfill the four-year college’s requirements by completing articulated courses at NPC.

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](http://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 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](http://www.azsunsystem.com).

SUN course numbers are included on your college transcript for courses completed after January 2012.

Definitions

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

**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** are awarded to students in some courses for successfully satisfying class requirements.

**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.
Programs and Degrees

**DEGREES:** AA – Associate of Arts • AAEE – Associate of Arts Elementary Education • ABus – Associate of Business
AS – Associate of Science • AGEC – Arizona General Education Curriculum • AGS – Associate of General Studies
AAS – Associate of Applied Science

**CERTIFICATES:** CAS – Certificate of Applied Science • CP – Certificate of Proficiency

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<td>Drive Train, Suspension and Steering, HVAC</td>
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<td>Electrical and Electronics Systems</td>
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<td>Engine Repair</td>
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<td>Retail Management Fundamentals</td>
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<td><strong>Computer Information Systems (CIS)</strong></td>
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<td>Commercial Graphics Fundamentals</td>
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<td>Computer Information Systems</td>
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<td>Graphic Design</td>
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<td>Network and PC Support</td>
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<td>Web Design</td>
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<td>Web Development</td>
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<td><strong>Construction Technology (CON)</strong></td>
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<td>Drafting (DRF)</td>
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<td><strong>Cosmetology (COS)</strong></td>
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<td><strong>Welding (WLD)</strong></td>
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<td>Gas Metal ARC Welding (MIG)</td>
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<td>Shielded Metal ARC Welding (ARC)</td>
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<td>Welding Level I – Entry Level Welder</td>
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<td>Welding Level II – Advanced Welder</td>
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What is AGEC?

AGEC stands for Arizona General Education Curriculum, a state-wide 35-credit block of lower division courses that fulfill general education requirements at Arizona’s public community colleges, Northern Arizona University (NAU), Arizona State University (ASU), and the University of Arizona (U of A).

In most cases, all courses used to satisfy the AGEC will apply to graduation requirements of the university major for which the AGEC was designed. AGEC is the best way to make your credits count for most transfer degrees.

• AGEC-A satisfies ALL lower-division requirements in many liberal arts majors, as well as other majors that articulate with the Associate of Arts, (e.g., social sciences, fine arts, humanities) 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.

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 the college or university will accept ALL transferable courses. Please see an adviser to discuss which courses will be counted toward the university's graduation requirements.
• 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 AGEC. An academic adviser can assist in determining whether those credits can be applied toward AGEC requirements.
• Students transferring to NPC from other institutions must complete a minimum of 15 credits of AGEC courses at NPC.

What happens if you don’t complete an AGEC 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.

AGEC Completion

Students who satisfactorily complete ALL AGEC courses will have the AGEC designation noted on their transcripts. Students may also apply for an AGEC Award of Completion. Your academic adviser can help you apply for the AGEC designation.

AGEC Requirements

To fulfill AGEC General Education requirements, you must complete 35-36 credits from the list on page 84:

**AGEC-A • 35 credits** See AA Degree, page 85

- Communications ............................................. 6 credits
- Mathematics.................................................... 3 credits
- Arts and Humanities ...................................... 9 credits
- Physical and Biological Sciences ..................... 8 credits
- Social and Behavioral Sciences ....................... 9 credits

**AGEC-B • 36 credits** See ABus Degree, page 90

- Communications ............................................. 6 credits
- Mathematics.................................................... 4 credits
- Arts and Humanities ...................................... 6 credits
- Physical and Biological Sciences ..................... 8 credits
- Social and Behavioral Sciences ....................... 6 credits
- Computer Science .......................................... 3 credits
- General Electives ........................................... 3 credits

An unduplicated course from either the Arts and Humanities or Social and Behavioral Sciences lists.

**AGEC-S • 36 credits** See AS Degree, page 87

- Communications ............................................. 6 credits
- Mathematics.................................................... 4 credits
- Arts and Humanities ...................................... 6 credits
- Physical and Biological Sciences ..................... 8 credits

Two courses from the SAME discipline.

- Social and Behavioral Sciences ....................... 6 credits
- Science/Mathematics Option ............................ 6 credits

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

General Education Requirements

Completion of the required general education course credits fulfills requirements for the Arizona General Education Curriculum (AGEC) for the Associate of Arts (AA), Associate of Arts in Elementary Education (AAEE), Associate of Business (ABus) and Associate of Science (AS) degrees. (see What is AGEC? – page 83)

**Communications** ........................................ 6 credits

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

**OR** from the options listed under a specific degree.

**Mathematics** ........................................... 3-4 credits

Mathematics requirements are listed under each degree.

**Discipline Studies**

**Arts and Humanities** ............................... 6-9 credits

Select courses from at least two different disciplines, as listed under a specific degree.

- ART 101 Understanding Art ....................... 3 credits
- ART 115 Art History I .............................. 3 credits
- ART 116 Art History II ........................... 3 credits
- ART 215 Native American Art .................... 3 credits

- ENL 220 World Literature I ....................... 3 credits
- ENL 221 World Literature II ...................... 3 credits

- ENL 224 English Literature I .................... 3 credits
- ENL 225 English Literature II ..................... 3 credits

- ENL 230 American Literature I .................. 3 credits
- ENL 231 American Literature II ................. 3 credits

- HUM 150 Humanities in the Western World I .... 3 credits
- HUM 151 Humanities in the Western World II ... 3 credits

- MUS 150 Music Appreciation ..................... 3 credits

- PHL 101 Introduction to Philosophy .......... 3 credits

- PHL 105 Introduction to Ethics .................. 3 credits

- SPT 150 Introduction to Film .................... 3 credits

- SPT 155 History of Television ................... 3 credits

**Physical and Biological Science**

Select courses, as listed under a specific degree. 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 credits
- BIO 105 Environmental Biology ............... 4 credits
- BIO 160 Introduction to Human Anatomy and Physiology ......................... 4 credits

- BIO 181 General Biology I ...................... 4 credits
- BIO 182 General Biology II ..................... 4 credits

**Social and Behavioral Sciences** ........... 6-9 credits

Select courses from at least two different disciplines, as listed under a specific degree. Select at least one asterisk (*) course to meet requirements for Contemporary Global, International or Historical Awareness.

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

- *GEO 110 World Regional Geography ........... 3 credits
- *GEO 120 Human Geography ..................... 3 credits

- *HIS 105 U.S. History to 1877 ................. 3 credits
- *HIS 106 U.S. History since 1877 ............... 3 credits
- *HIS 155 Western Civilization to 1700 ....... 3 credits
- *HIS 156 Western Civilization since 1700 ....... 3 credits

- *POS 110 American Government ................. 3 credits
- *PSY 101 Introduction to Psychology .......... 3 credits
- *PSY 200 Psychology of Adjustment .......... 3 credits
- *PSY 240 Developmental Psychology ........... 3 credits

**Electives**

Choose carefully based on lower division and common course requirements for majors at the college or university to which you plan to transfer. To ensure you are selecting appropriate courses, see your academic adviser. 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.
## Transfer Degree

### Associate of Arts (AA) Degree

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

The AA degree is 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 the requirements of the Arizona General Education Curriculum (AGEC-A), which when completed, will transfer to any of the three public Arizona state universities as a block meeting all lower division general education requirements. (see What is AGEC? – page 83)

### 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.

### Associate of Arts (AA) • 64 credits

Completion of the 35 general education course credits fulfills requirements for the Arizona General Education Curriculum (AGEC-A) for the Associate of Arts degree. (see What is AGEC? – page 83)

#### General Education courses

**Communications** ................................................................. 6 credits
(Per the list on page 84)

**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 credits
MAT 152 Advanced Algebra .................................................. 3 credits

#### Discipline Studies

**Arts and Humanities** ......................................................... 9 credits
(Select three courses from at least two disciplines from the list on page 84)

**Physical and Biological Science** ..................................... 8 credits
(Select two courses from the list on page 84)

**Social and Behavioral Sciences** ....................................... 9 credits
(Select three courses from at least two disciplines from the list on page 84)

**AND**

**Electives** ........................................................................ 29 credits

Choose carefully based on lower division and common course requirements for majors at the college or university to which you plan to transfer. To ensure you are selecting appropriate course, see your academic adviser. 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](http://www.AZTransfer.com).
General Degree

Associate of General Studies (AGS) Degree

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 while enhancing your personal development with the equivalent of two years of post-high school education.

While an AGS degree does not totally fulfill all AGEC transfer requirements (see page 83), many courses transfer directly to the three Arizona public universities. Work with your NPC academic adviser to ensure courses meet your specific goals.

NPC Requirements

- The Associate of General Studies (AGS) degree requires a minimum of 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, listed at right.
- Some courses have placement requirements or prerequisites that may result in coursework beyond the minimum credits. For information about prerequisites, see an NPC academic adviser.
- Students with 12 or more credits must meet with an NPC academic adviser to select a program of study to best meet the student’s goals.
- Students with an associate or higher degree will not be considered for this degree.
- 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.

All AGS degrees require completion of these 31 general education course credits:

### General Education courses

- **Communications** ................................................. 6 credits
  - ENL 101 College Composition I ................................................. 3 credits
  - ENL 102 College Composition II ................................................ 3 credits
  - ENL 109 Technical Writing ....................................................... 3 credits
- **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 credits
  - MAT 112 Algebra II: Intermediate .............................................. 3 credits

### Discipline Studies

- **Arts and Humanities** .............................................. 6 credits
  - Select two courses from at least two disciplines from the list on page 84
- **Physical and Biological Science** ....................................... 4 credits
  - Select one course from the list on page 84
- **Social and Behavioral Sciences** ......................................... 6 credits
  - Select two courses from at least two disciplines from the list on page 84
- **Additional Discipline Studies** ........................................... 6 credits
  - Select a minimum of six additional credits from the Discipline Studies list on page 84, or from these courses:
  - **Foreign Language**
    - FRE 101 Elementary French I ................................................... 4 credits
    - FRE 102 Elementary French II .................................................. 4 credits
    - GER 101 Elementary German I .................................................. 4 credits
    - GER 102 Elementary German II ................................................ 4 credits
    - SPA 101 Elementary Spanish I .................................................. 4 credits
    - SPA 102 Elementary Spanish II ................................................ 4 credits
  - **Computer Science**
    - CIS 105 Computer Applications and Information Technology ........ 3 credits
  - **Verbal Communications**
    - SPT 120 Public Speaking ......................................................... 3 credits

**AND**

- **Required Electives** .................................................. 33 credits
  - From any unduplicated courses at 100 or higher level.

In addition to the Associate of General Studies (AGS) degree, NPC offers three specialized AGS degrees in Early Childhood Development (see pages 110, 115 and 118) and one in Special Needs Educational Assistant (see page 126).
Transfer Degree

Associate of Science (AS) 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 electives component must consist of credits that will transfer to all three Arizona public universities. Check with your academic adviser on transferability.

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.

### Associate of Science (AS) • 64 credits

Completion of the 36 general education course credits fulfills requirements for the Arizona General Education Curriculum (AGEC-S) for the Associate of Science degree. (see What is AGEC? – page 83)

**General Education courses**

**Communications** (Per the list on page 84) ........................................6 credits

**Mathematics**...........................................................................4 credits

- MAT 221 Calculus I .................................................................4 credits
- Or any mathematics course for which MAT 221 is a prerequisite.

**Discipline Studies**

**Arts and Humanities**...............................................................6 credits

(Select two courses from at least two disciplines from the list on page 84)

**Physical and Biological Science**.............................................8 credits

(Select two courses from the SAME discipline)

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

**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 from the list on page 84)

**Science/Mathematics Option**...............................................6 credits

(Select two courses not taken to satisfy Physical and Biological Sciences requirements listed above.)

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

**Electives** (Per the description on page 84) ................................28 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 105 Environmental Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 160 Introduction to Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 181 General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 182 General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>CHM 151 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHM 152 General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>GEO 111 Physical Geography</td>
<td>4</td>
</tr>
<tr>
<td>GLG 101 Introduction to Geology I - Physical</td>
<td>4</td>
</tr>
<tr>
<td>GLG 102 Introduction to Geology II - Historical</td>
<td>4</td>
</tr>
<tr>
<td>MAT 231 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MAT 241 Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MAT 261 Introduction to Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHY 113 General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHY 114 General Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

Northland Pioneer College 2014 – 15 Catalog
Also available online at www.npc.edu/college-catalog

Programs and Degrees
Automotive Technology (ATO)
Certificate Options – CP & CAS

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.

Cost & Time for Completion
The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/automotive.

Certificates of Proficiency (CP)

Brake and Transmission Systems (CP) • 13 credits
- ATO 103 Safety and Hazardous Materials ...................................2 credits
- ATO 112 Automatic Transmission Systems I ..............................3 credits
- ATO 113 Automatic Transmission Systems II .............................3 credits
- ATO 114 Brake Systems I .........................................................3 credits
- ATO 115 Brake Systems II .........................................................2 credits

Drive Train, Suspension and Steering, HVAC (CP) • 14 credits
- ATO 103 Safety and Hazardous Materials ...................................2 credits
- ATO 205 Suspension and Steering .............................................4 credits
- ATO 210 Heating and Air Conditioning Systems .......................4 credits
- ATO 212 Manual Drive Train ....................................................4 credits

Electrical and Electronics Systems (CP) • 11 credits
- ATO 103 Safety and Hazardous Materials ...................................2 credits
- ATO 207 Electrical and Electronic Systems I .............................3 credits
- ATO 208 Electrical and Electronic Systems II ...........................3 credits
- ATO 209 Electrical and Electronic Systems III ..........................3 credits

Engine Performance (CP) • 11 credits
- ATO 103 Safety and Hazardous Materials ...................................2 credits
- ATO 109 Engine Performance I .................................................3 credits
- ATO 110 Engine Performance II ...............................................3 credits
- ATO 111 Engine Performance III ...............................................3 credits

Engine Repair (CP) • 7 credits
- ATO 103 Safety and Hazardous Materials ...................................2 credits
- ATO 107 Engine Repair I .........................................................3 credits
- ATO 108 Engine Repair II .........................................................2 credits

Certificate of Applied Science (CAS) • 31 credits

Complete the Electrical and Electronics Systems CP ..........................11 credits
Complete the AAS Level 2 courses .............................................11 credits
- ATO 111 Engine Performance III ...............................................3 credits
- ENL 101 College Composition I .................................................3 credits

Mathematics .................................................................................3 credits
- MAT 101 or 103 or 105 or 109 or 112 or any mathematics course for which MAT 112 is a prerequisite.
Automotive Technology (ATO)

Associate of Applied Science (AAS) Degree

Why Study Automotive Technology?
Cars are getting more sophisticated and today’s auto dealerships and repair facilities want trained workers who can adapt to new technologies and repair techniques. Individuals without formal training and national certification will face stiff competition for entry-level employment opportunities.

Career Opportunities
There will be steady employment in the auto services industry due to the need for maintenance and repairs as car owners keep vehicles longer than in the past. Added to this is the need to replace retiring mechanics, rapidly changing hybrid-fuel technologies, as well as mandates for improved vehicle performance standards.

The U.S. Bureau of Labor Statistics reports the median annual salary for certified mechanics is $38,200 (North Arizona nonmetropolitan area) with higher pay for specialized service technicians working for auto dealerships. (May 2012, SOC 49.3023)

Need help paying for classes?
Many students can qualify for financial aid if they take the time to submit the Free Application for Federal Student Aid (FAFSA), available online at http://fafsa.ed.gov.

Apply early, as the process can take 4-6 weeks. You should have all of your paperwork submitted to the Financial Aid Office by the Priority Deadlines:
- April 15 for Fall Semester
- October 15 for Spring
- March 15 for Summer

Automotive Technology (AAS) • 64 credits

General Education courses

Communications .................................................................6 credits
ENL 101 College Composition I ...........................................3 credits
Plus one of the following:
ENL 102 College Composition II .........................................3 credits
ENL 109 Technical Writing ................................................3 credits
SPT 120 Public Speaking ................................................3 credits

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
(Select one course from the Physical and Biological Sciences list and one course from either the Arts and Humanities or Social and Behavioral Sciences lists on page 84.)

Core Requirements .........................................................48 credits

Level 1
Complete the Electrical and Electronic Systems CP ............11 credits

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

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

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

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Transfer Degree

Associate of Business (ABus) 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 AGEC-B will transfer to the three Arizona public universities as a block that meets all lower division general education requirements. (see What is AGEC? – page 83)

NPC Requirements

- The Associate of Business (ABus) degree requires a minimum of 64 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.

Associate of Business (ABus) • 64 credits

Completion of the 36 general education course credits fulfills requirements for the Arizona General Education Curriculum (AGEC-B) for the Associate of Business degree. (see What is AGEC? – page 83)

General Education courses

**Communications** ................................................................. 6 credits  
ENL 101 College Composition I ................................................. 3 credits  
ENL 102 College Composition II ................................................ 3 credits

**Mathematics** ................................................................. 4 credits  
MAT 211 Technical Calculus (Or MAT 221 or higher mathematics course for which MAT 211 is a prerequisite)

Discipline Studies

**Arts and Humanities** ................................................................. 6 credits  
(Select two courses from at least two disciplines from the list on page 84)

**Physical and Biological Science** ................................................ 8 credits  
(Select two courses from the list on page 84)

**Social and Behavioral Sciences** ................................................................. 6 credits  
(Select two courses from at least two disciplines from the list on page 84. Make at least one selection an asterisk (*) course to meet requirements for Contemporary Global, International or Historical Awareness.)

**Computer Science** ................................................................. 3 credits  
CIS 105 Computer Applications and Information Technology........ 3 credits

**General Electives Options** ....................................................... 3 credits  
(Select one additional unduplicated course from either the Arts and Humanities or Social and Behavioral Sciences lists on page 84 to satisfy the requirements of 36 general education credits.)

**AND**

**Electives** ........................................................................... 28 credits  
Choose carefully based on lower division and common course requirements for majors at the college or university to which you plan to transfer. To ensure you are selecting appropriate course, see your academic adviser. 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.
# Business Studies (BUS)

## Accounting Specialization

Bookkeeping, accounting, and auditing clerks produce financial records for organizations. They record financial transactions, update statements, and check financial records for accuracy. Employment in these occupations is projected to grow 11 percent from 2012 to 2022, about as fast as the average for all occupations. The median annual salary in nonmetropolitan north Arizona is $35,170 (2112).

As the number of organizations increases and financial regulations become stricter, there will be greater demand for these workers to maintain books and provide accounting services.

**Cost & Time for Completion**

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at [www.npc.edu/business-studies](http://www.npc.edu/business-studies).

### Need help paying for classes?

Many students can qualify for financial aid if they take the time to submit the Free Application for Federal Student Aid (FAFSA), available online at [http://fafsa.ed.gov](http://fafsa.ed.gov).

Apply early, as the process can take 4-6 weeks. You should have all of your paperwork submitted to the Financial Aid Office by the Priority Deadlines:

- April 15 for Fall Semester
- October 15 for Spring
- March 15 for Summer

### Accounting Fundamentals (CP) • 18 credits

- BUS 100 Introduction to Business ............................................3 credits
- BUS 103 Success on Your Job ..................................................2 credits
- BUS 117 Principles of Financial Accounting I .......................3 credits
- BUS 122 Computerized Accounting with QuickBooks .............3 credits
- BUS 125 Payroll Accounting ...................................................3 credits
- BUS 128 Microsoft Excel Applications for Business ...............3 credits
- BUS 202 Professional Customer Service .................................1 credit

### Accounting (CAS) • 30 credits

Complete the Accounting Fundamentals CP ................................18 credits

**PLUS**

- BUS 120 Principles of Financial Accounting II ....................3 credits
- BUS 123 Income Tax Procedures ..........................................3 credits
- ENL 101 College Composition I ............................................3 credits

**Mathematics** ........................................................................3 credits
- MAT 103 or MAT 152 or any mathematics course for which MAT 152 is a prerequisite

### Accounting (AAS) • 64 credits

Complete the Accounting CAS ..................................................30 credits

**PLUS these General Education courses**

**Communications** .................................................................3 credits
- Select one of the following:
  - ENL 102 College Composition II ........................................3 credits
  - ENL 109 Technical Writing ...............................................3 credits

**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 lists on page 84.)

**AND**

- BUS 115 Business Law .........................................................3 credits
- BUS 121 Principles of Accounting – Managerial ....................3 credits
- BUS 140 Principles of Economics – Macro ............................3 credits
- BUS 141 Principles of Economics – Micro .............................3 credits
- BUS 185 Ethics in Management .............................................3 credits
- BUS 210 Principles of Management ......................................3 credits

**AND**

**Unrestricted Electives** ..........................................................6 credits

(Choose from any unduplicated courses at the 100-level or above)

---

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science

(AAS) Associate of Applied Science Degree
Entrepreneurship plays a vital role in the growth of the U.S. economy. The number of new business establishments (establishments that are less than 1 year old in any given year) tends to rise and fall with the business cycle of the overall economy. The number of new establishments for the year ending in March 2010 was at the lowest level since data collection began in 1994. Since most entrepreneurs are self-employed, no median annual salary statistics are available.

If you are considering starting your own business, consider contacting NPC’s Small Business Development Center for free consultation and assistance in preparing Small Business Administration loan applications.

Entrepreneurship Fundamentals (CP) • 19 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BUS 100 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105 Techniques of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUS 110 Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 112 Fundamentals of Bookkeeping</td>
<td>3</td>
</tr>
<tr>
<td>BUS 202 Professional Customer Service</td>
<td>1</td>
</tr>
<tr>
<td>BUS 220 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 240 Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

Entrepreneurship (CAS) • 31 credits

*Complete the Entrepreneurship Fundamentals CP.......................... 19 credits *

PLUS

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 106 Techniques of Personal Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUS 210 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>ENL 101 College Composition I</td>
<td>3</td>
</tr>
</tbody>
</table>

Mathematics..................................................................3 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 103 Business Math or MAT 152 Advanced Algebra or any mathematics course for which MAT 152 is a prerequisite.</td>
<td></td>
</tr>
</tbody>
</table>

Entrepreneurship (AAS) • 64 credits

*Complete the Entrepreneurship CAS.................................31 credits *

PLUS these General Education courses

Communications ..................................................................3 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>ENL 102 College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ENL 109 Technical Writing</td>
<td>3</td>
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</table>

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 lists on page 84.)

AND

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 115 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 122 Computerized Accounting with QuickBooks</td>
<td>3</td>
</tr>
<tr>
<td>BUS 128 Microsoft Excel Applications for Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 140 Principles of Economics – Macro</td>
<td>3</td>
</tr>
<tr>
<td>BUS 141 Principles of Economics – Micro</td>
<td>3</td>
</tr>
</tbody>
</table>

AND

Unrestricted Electives....................................................8 credits

(Choose from any unduplicated courses at the 100-level or above)

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Business Studies (BUS)

Management and Leadership Specialization

The Management and Leadership area of specialization prepares graduates for a variety of career options, from administrative services managers, human relations managers, sales managers, marketing specialists, natural science managers, hospitality and food service managers or even school or college administrators.

Career Opportunities

Employment opportunities in the management area are projected to grow 12 percent from 2012 to 2022, about as fast as the average for all occupations. Tasks such as managing facilities and being prepared for emergencies will remain important in a wide range of industries.

The national median annual salaries range from $46,000 to $135,620. (Figures from US BLS May 2012) (SOC 27.1024).

Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at www.npc.edu/business-studies.

Need help paying for classes?

Many students can qualify for financial aid if they take the time to submit the Free Application for Federal Student Aid (FAFSA), available online at https://fafsa.ed.gov.

Apply early, as the process can take 4-6 weeks. You should have all of your paperwork submitted to the Financial Aid Office by the Priority Deadlines:

◊ April 15 for Fall Semester
◊ October 15 for Spring
◊ March 15 for Summer

Management and Leadership Fundamentals (CP) • 16 credits

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BUS 100 Introduction to Business</td>
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<tr>
<td>BUS 180 Organizational Behavior</td>
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</tr>
<tr>
<td>BUS 185 Ethics in Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 202 Professional Customer Service</td>
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</tr>
<tr>
<td>BUS 210 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 230 Organizational Leadership</td>
<td>3</td>
</tr>
</tbody>
</table>

Management and Leadership (CAS) • 28 credits

Complete the Management and Leadership Fundamentals CP......16 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 105 Techniques of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 225 Human Resource Management</td>
<td>3</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 140 Principles of Economics – Macro</td>
<td>3</td>
</tr>
<tr>
<td>ENL 101 College Composition I</td>
<td>3</td>
</tr>
</tbody>
</table>

Mathematics..........................................................................................3 credits

MAT 103 or MAT 152 or any mathematics course for which MAT 152 is a prerequisite

Management and Leadership (AAS) • 64 credits

Complete the Management and Leadership CAS.................................28 credits

PLUS these General Education courses

Communications ..................................................................................3 credits
Select one of the following:
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL 102 College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ENL 109 Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

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 lists on page 84.)

AND

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 115 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 117 Principles of Financial Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 141 Principles of Economics – Micro</td>
<td>3</td>
</tr>
<tr>
<td>BUS 150 Administrative Policymaking</td>
<td>3</td>
</tr>
<tr>
<td>BUS 220 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>CIS 105 Computer Applications and Information Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

AND

Unrestricted Electives........................................................................8 credits
(Choose from any unduplicated courses at the 100-level or above)

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Medical Office Technologies Specialization

Medical records and health information technicians organize and manage health information data. They ensure its quality, accuracy, accessibility, and security in both paper and electronic systems. They use various classification systems to code and categorize patient information for insurance reimbursement purposes, for databases and registries, and to maintain patients’ medical histories.

Employment of health information technicians is projected to grow 22 percent from 2012 to 2022, much faster than the average for all occupations. The demand for health services is expected to increase as the population ages.


Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/business-studies.

Need help paying for classes?

Many students can qualify for financial aid if they take the time to submit the Free Application for Federal Student Aid (FAFSA), available online at https://fafsa.ed.gov.

Apply early, as the process can take 4-6 weeks. You should have all of your paperwork submitted to the Financial Aid Office by the Priority Deadlines:

◊ April 15 for Fall Semester
◊ October 15 for Spring
◊ March 15 for Summer

(CP) Certificate of Proficiency
(CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree

Medical Office Technologies Fundamentals (CP) • 18 credits

- BUS 101 Business Grammar .................................................. 1 credit
- BUS 104 Developing Your Professionalism ................................. 1 credit
- BUS 108 Basic Keyboarding and Document Processing ............... 3 credits
- BUS 118 Computerized Medical Billing ..................................... 3 credits
- BUS 119 Medical Office Administrative Procedures .................... 3 credits
- BUS 126 Vocabulary for the Medical Office ............................... 3 credits
- BUS 183 Electronic Medical Records ....................................... 3 credits
- BUS 202 Professional Customer Service .................................. 1 credit

Medical Office Technologies (CAS) • 29 credits

Complete the Medical Office Technologies Fundamentals CP ........... 18 credits
- BUS 102 Proofreading Mastery ............................................. 1 credit
- BUS 227 Medical Coding ..................................................... 4 credits
- ENL 101 College Composition I ............................................. 3 credits

Mathematics ............................................................................. 3 credits
- MAT 103 or MAT 152 or any mathematics course

for which MAT 152 is a prerequisite.

Medical Office Technologies (AAS) • 64 credits

Complete the Medical Office Technologies CAS .......................... 29 credits

PLUS these General Education courses

Communications ........................................................................ 3 credits
- Select one of the following:
  - ENL 102 College Composition II ........................................... 3 credits
  - ENL 109 Technical Writing .................................................. 3 credits

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 lists on page 84.

AND
- BUS 100 Introduction to Business ......................................... 3 credits
- BUS 106 Techniques of Personal Finance ................................. 3 credits
- BUS 111 Ten-Key Skill Mastery .............................................. 1 credit
- BUS 112 Fundamentals of Bookkeeping ................................. 3 credits
- BUS 155 Microsoft Word Level I ......................................... 3 credits
- BUS 181 Medical Records Management .................................. 1 credit
- BUS 231 Microsoft Office Level I ......................................... 3 credits
- CIS 103 Introduction to Windows ......................................... 1 credit

AND

Unrestricted Electives ............................................................... 7 credits
- (Choose from any unduplicated courses at the 100-level or above)
Medical Transcription Specialization

Medical transcriptionists listen to voice recordings that physicians and other healthcare professionals make and convert them into written reports. They may also review and edit medical documents created using speech recognition technology. Transcriptionists interpret medical terminology and abbreviations in preparing patients’ medical histories, discharge summaries, and other documents.

Medical transcriptionists typically need postsecondary training. Prospective medical transcriptionists must have an understanding of medical terminology, anatomy and physiology, grammar, and word-processing software.

The median annual wage for medical transcriptionists was $34,020 in May 2012.

Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at www.npc.edu/business-studies.

Need help paying for classes?

Many students can qualify for financial aid if they take the time to submit the Free Application for Federal Student Aid (FAFSA), available online at https://fafsa.ed.gov.

Apply early, as the process can take 4-6 weeks. You should have all of your paperwork submitted to the Financial Aid Office by the Priority Deadlines:

- April 15 for Fall Semester
- October 15 for Spring
- March 15 for Summer

Medical Transcription Fundamentals (CP) • 16 credits

- BUS 101 Business Grammar ...................................................... 1 credit
- BUS 102 Proofreading Mastery .................................................. 1 credit
- BUS 103 Success on Your Job ................................................... 2 credit
- BUS 108 Basic Keyboarding and Document Processing 3 credits
- BUS 126 Vocabulary for the Medical Office 3 credits
- BUS 131 Medical Transcription Fundamentals 3 credits
- BUS 155 Microsoft Word Level I ................................. 3 credits

Medical Transcription (CAS) • 30 credits

Complete the Medical Transcription Fundamentals CP 16 credits

- BUS 108 Basic Keyboarding and Document Processing 3 credits
- BUS 202 Professional Customer Service .................................... 1 credit
- BUS 236 Advanced Medical Transcription I ............................ 4 credits
- ENL 101 College Composition I ........................................... 3 credits

Mathematics ........................................................................... 3 credits

MAT 103 or MAT 152 or any mathematics course for which MAT 152 is a prerequisite.

Medical Transcription (AAS) • 64 credits

Complete the Medical Transcriptions CAS 30 credits

PLUS these General Education courses

Communications ........................................................................ 3 credits

Select one of the following:

- ENL 102 College Composition II .......................................... 3 credits
- ENL 109 Technical Writing ................................................... 3 credits

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 lists on page 84.)

AND

- BUS 100 Introduction to Business ........................................... 3 credits
- BUS 119 Medical Office Administrative Procedures 3 credits
- BUS 170 Written Business Communication 3 credits
- BUS 237 Advanced Medical Transcription II ......................... 4 credits

AND

Unrestricted Electives ............................................................. 11 credits

(Choose from any unduplicated courses at the 100-level or above)
Modern Office Technologies Specialization

Secretaries and administrative assistants perform routine clerical and administrative duties. They organize files, draft messages, schedule appointments, and support other staff. Graduates with basic office and computer skills usually qualify for entry-level positions. Although most secretaries learn their job in several weeks, many legal and medical secretaries require several months of training to learn industry-specific terminology. Executive secretaries usually need several years of related work experience.

Career Opportunities

Employment of secretaries and administrative assistants is projected to grow 12 percent from 2012 to 2022, about as fast as the average for all occupations. Many job openings will result from the need to replace workers who leave the occupation. Those with a combination of work experience and computer skills should have the best job prospects.


Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/business-studies.

Modern Office Technologies Fundamentals (CP) • 18 credits

- BUS 101 Business Grammar ............................................. 1 credit
- BUS 102 Proofreading Mastery ......................................... 1 credit
- BUS 103 Success on Your Job ............................................. 2 credit
- BUS 108 Basic Keyboarding and Document Processing ...... 3 credits
- BUS 144 Professional Office Skills ................................... 3 credits
- BUS 155 Microsoft Word Level I ...................................... 3 credits
- BUS 182 Records Management ........................................ 3 credits
- BUS 202 Professional Customer Service ......................... 1 credit
- CIS 103 Introduction to Windows .................................... 1 credit

Modern Office Technologies (CAS) • 28 credits

Complete the Modern Office Technologies Fundamentals CP .......... 18 credits
- BUS 104 Developing Your Professionalism ....................... 1 credit
- BUS 231 Microsoft Office Level I .................................... 3 credits
- ENL 101 College Composition I ....................................... 3 credits
- MAT 103 or MAT 152 or any mathematics class
  for which MAT 152 is a prerequisite.

Mathematics ...................................................................... 3 credits

Modern Office Technologies (AAS) • 64 credits

Complete the Modern Office Technologies CAS ................. 28 credits

PLUS these General Education courses

Communications .............................................................. 3 credits
  Select one of the following:
  - ENL 102 College Composition II ................................ 3 credits
  - ENL 109 Technical Writing .......................................... 3 credits

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 lists on page 84.)

AND

- BUS 100 Introduction to Business .................................... 3 credits
- BUS 106 Techniques of Personal Finance ......................... 3 credits
- BUS 109 Advanced Keyboarding & Document Processing .... 3 credits
- BUS 111 Ten-Key Skill Mastery ..................................... 1 credit
- BUS 112 Fundamentals of Bookkeeping ............................ 3 credits
- BUS 149 Microsoft Publisher Basics ............................... 1 credit
- BUS 170 Written Business Communication .................... 3 credits

AND

Unrestricted Electives ....................................................... 9 credits
  (Choose from any unduplicated courses at the 100-level or above)
The Retail Management area of specialization provides fundamentals for small business owners and those working for larger corporations. Retail managers direct organizations’ sales teams. They set sales goals, analyze data, and develop training programs for organizations’ sales representatives.

**Career Opportunities**
Employment of retail managers is projected to grow 8 percent from 2012 to 2022, about as fast as the average for all occupations. Employment growth of these managers will depend primarily on growth or contraction in the industries that employ them.


**Cost & Time for Completion**
The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at www.npc.edu/business-studies.

**Need help paying for classes?**
Many students can qualify for financial aid if they take the time to submit the Free Application for Federal Student Aid (FAFSA), available online at https://fafsa.ed.gov.

Apply early, as the process can take 4-6 weeks. You should have all of your paperwork submitted to the Financial Aid Office by the Priority Deadlines:
- ◊ April 15 for Fall Semester
- ◊ October 15 for Spring
- ◊ March 15 for Summer

### Retail Management Specialization

#### Retail Management Fundamentals

**(CP) • 16 credits**

- BUS 100 Introduction to Business ............................................3 credits
- BUS 105 Techniques of Supervision ..........................................3 credits
- BUS 202 Professional Customer Service .....................................1 credit
- BUS 215 Principles of Retail Management .................................3 credits
- BUS 216 Merchandising Practices and Policies ..........................3 credits
- BUS 220 Principles of Marketing ..............................................3 credits

#### Retail Management (CAS) • 28 credits

*Complete the Retail Management Fundamentals CP .....................16 credits*

- BUS 140 Principles of Economics – Macro .................................3 credits
- BUS 210 Principles of Management ..........................................3 credits
- ENL 101 College Composition I .................................................3 credits

*Mathematics..........................................................................3 credits*

- MAT 103 or MAT 152 or any mathematics course for which MAT 152 is a prerequisite.

#### Retail Management (AAS) • 64 credits

*Complete the Retail Management CAS ........................................28 credits*

*PLUS these General Education courses*

- Communications ........................................................................3 credits
  - Select one of the following:
  - ENL 102 College Composition II ................................................3 credits
  - ENL 109 Technical Writing .......................................................3 credits

- 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** lists on page 84.)

*AND*

- BUS 115 Business Law ............................................................3 credits
- BUS 117 Principles of Financial Accounting I ............................3 credits
- BUS 141 Principles of Economics – Micro ..................................3 credits
- BUS 180 Organizational Behavior
- or BUS 230 Organizational Leadership .......................................3 credits
- BUS 185 Ethics in Management ...............................................3 credits

*AND*

**Unrestricted Electives...........................................................11 credits**

(Choose from any unduplicated courses at the 100-level or above)

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Computer Information Systems (CIS)

Computer Information Systems Specialization

Nearly every kind of business organization relies on computing and computer technology to operate efficiently, and those organizations continue to adopt increasingly sophisticated technologies. Employers may train you in their business, but they expect you to know your “business” – computer systems and how to develop them and keep them running smoothly. Northland’s Computer Information Systems program provides knowledge and skills in the areas of computer programming languages, graphics in multimedia, database management and information systems.

Career Opportunities

According to the U.S. Bureau of Labor Statistics (2012), employment of computer analysts, programmers and software engineers is projected to increase faster than average for all occupations for the next decade with job prospects best for those with degrees and relevant experience. Average salaries for programmers and analysts in rural Arizona range from $31,580 to $53,900, but are generally higher in metropolitan areas.

Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at [www.npc.edu/computer-information-systems](http://www.npc.edu/computer-information-systems).

Computer Information Systems (CAS) • 36 credits

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

**PLUS**

- ENL 101 College Composition I ……………………………………… 3 credits
- MAT 112 Algebra II: Intermediate …………………………………… 3 credits

Computer Information Systems (AAS) • 64 credits

**Complete the Computer Information Systems CAS …………..36 credits**

**PLUS these General Education courses**

**Communications** …………………………………………………… 3 credits

Select one of the following:

- ENL 102 College Composition II …………………………………… 3 credits
- ENL 109 Technical Writing ………………………………………….. 3 credits

**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 lists on page 84.)

**AND**

**Required Electives** ………………………………………………… 18 credits

From the list on page 103

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science

(AAS) Associate of Applied Science Degree
Computer Information Systems (CIS)

Graphic Design Specialization

Are you creative with a good eye for detail? Do you have computer aptitude and the ability to communicate well? If so, these can be the groundwork for an exciting career in computer graphic design.

The graphic design field is an enjoyable and rewarding area in which to work and has become an established field within the computer sciences. Film and publishing industries are no longer the only major sources of employment. Due to the ever-growing Internet, a boom in mobile device applications, gaming, and the increasingly interactive requirements of enterprises in the global marketplace, there is an exploding need for specialists in the computer graphics field.

Career Opportunities

Employment opportunities in the computer graphics area is expected to grow due to the explosion of interactive media. However, competition for jobs will be keen, with an edge going to those with design training and animation experience. Median entry-level salaries in the field average about $26,000. After a few years of experience, most computer graphic specialists can earn about $44,150 a year.


Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at www.npc.edu/computer-information-systems.

Graphic Design (CP) • 22 credits

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

Graphic Design (CAS) • 34 credits

- Complete the Graphic Design Fundamentals CP ........................... 22 credits

Plus

- CIS 115 Introduction to Graphic Communication Technology ...... 3 credits
- CIS 125 Effective Communication with Digital Media ................. 3 credits
- ENL 101 College Composition I ................................................. 3 credits
- MAT 112 Algebra II: Intermediate................................................ 3 credits

Graphic Design (AAS) • 64 credits

- Complete the Graphic Design CAS .............................................. 34 credits

Plus these General Education courses

Communications ........................................................................... 3 credits

Select one of the following:
- ENL 102 College Composition II ................................................ 3 credits
- ENL 109 Technical Writing............................................................. 3 credits

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 lists on page 84.)

AND

Required Electives......................................................................... 20 credits

From the list on page 103

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Computer Information Systems (CIS)

Web Design Specialization

With the phenomenal growth of the Internet has come an equally astounding rise in the career fields of Web page design and Web page development. While the major driving force behind Web page expansion has been e-commerce, it is now the rare institution, association, business or group that doesn’t have a Web page to tell the world about itself. In this rapidly expanding digital world, those organizations are looking for someone to provide them with polished, professional websites.

For those interested in the world of Web design, the Computer Information System program offers degrees and certificates that meld art design courses with foundational instruction in the technical aspects of Web development.

All design and development degrees and certificates include credit hours devoted to creating your professional portfolio.

Career Opportunities

For those gifted with artistic talent, a Web design career offers you a good income while putting that talent to work. According to www.salary.com (6/2011) a Web designer I earns between $32,820 to $57,469 per year.

Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/computer-information-systems.

Web Design (CP) • 18 credits

CIS 113 Multimedia
or CIS 125 Effective Communication with Digital Media ..........3 credits
CIS 115 Introduction to Graphic Communication Technology ......3 credits
CIS 116 Computer Photographic Imaging (Adobe Photoshop) ......3 credits
CIS 118 Graphics, Interactive and Animated .................................3 credits
CIS 168 Web Authoring Tools ....................................................3 credits
CIS 187 Introduction to Web Development ................................3 credits

Web Design (CAS) • 36 credits

Complete the Web Design CP .....................................................18 credits

PLUS

ART 103 Basic Design
or ART 150 Advertising Design................................................3 credits
CIS 105 Computer Applications and Information Technology ....3 credits
CIS 150 Digital Culture ............................................................3 credits
CIS 295 Applied Project for CIS ................................................3 credits
ENL 101 College Composition I .................................................3 credits
MAT 112 Algebra II: Intermediate .............................................3 credits

Web Design (AAS) • 64 credits

Complete the Web Design CAS ...................................................36 credits

PLUS these General Education courses

Communications ........................................................................3 credits
Select one of the following:
ENL 102 College Composition II ..............................................3 credits
ENL 109 Technical Writing .......................................................3 credits

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 lists on page 84.)

AND

Required Electives ....................................................................18 credits
From the list on page 103

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Computer Information Systems (CIS)

Web Development Specialization

With the phenomenal growth of the Internet has come an equally astounding rise in the career fields of Web page design and Web page development. While the major driving force behind Web page expansion has been e-commerce, it is now the rare institution, association, business or group that doesn’t have a Web page to tell the world about itself. In this rapidly expanding digital world, those organizations are looking for someone to provide them with polished, professional websites.

The Web development AAS prepares you for tasks ranging from simple page building and web server administration to the methodologies used for systems analyses and design in the increasingly complex world of e-commerce.

All design and development degrees and certificates include credit hours devoted to creating your professional portfolio.

Career Opportunities

If you are a creative person with technical aptitude, a career in the more technically specialized field of website development can pay handsomely. With a degree and a few years of experience, Web developer salaries average more than $72,000 a year.


Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at www.npc.edu/computer-information-systems.

Web Development (CAS) • 36 credits

CIS 105 Computer Applications and Information Technology........3 credits
CIS 111 Introduction to Programming........................................3 credits
CIS 150 Digital Culture .............................................................3 credits
CIS 187 Introduction to Web Development ..................................3 credits
CIS 243 Database-Driven Web Sites ........................................3 credits
CIS 250 Electronic Commerce .................................................3 credits
CIS 265 Web Programming .......................................................3 credits
CIS 275 Web Server Administration .........................................3 credits
CIS 280 System Analysis and Design .......................................3 credits
CIS 295 Applied Project for CIS ................................................3 credits
ENL 101 College Composition I .................................................3 credits
MAT 112 Algebra II: Intermediate ..............................................3 credits

Web Development (AAS) • 64 credits

Complete the Web Development CAS...........................................36 credits

PLUS these General Education courses

Communications ........................................................................3 credits
Select one of the following:
ENL 102 College Composition II ................................................3 credits
ENL 109 Technical Writing .......................................................3 credits

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 lists on page 84.)

AND

Required Electives .....................................................................18 credits
From the list on page 103

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree

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All design and development degrees and certificates include credit hours devoted to creating your professional portfolio.

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Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at www.npc.edu/computer-information-systems.

Web Development (CAS) • 36 credits

CIS 105 Computer Applications and Information Technology........3 credits
CIS 111 Introduction to Programming........................................3 credits
CIS 150 Digital Culture .............................................................3 credits
CIS 187 Introduction to Web Development ..................................3 credits
CIS 243 Database-Driven Web Sites ........................................3 credits
CIS 250 Electronic Commerce .................................................3 credits
CIS 265 Web Programming .......................................................3 credits
CIS 275 Web Server Administration .........................................3 credits
CIS 280 System Analysis and Design .......................................3 credits
CIS 295 Applied Project for CIS ................................................3 credits
ENL 101 College Composition I .................................................3 credits
MAT 112 Algebra II: Intermediate ..............................................3 credits

Web Development (AAS) • 64 credits

Complete the Web Development CAS...........................................36 credits

PLUS these General Education courses

Communications ........................................................................3 credits
Select one of the following:
ENL 102 College Composition II ................................................3 credits
ENL 109 Technical Writing .......................................................3 credits

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 lists on page 84.)

AND

Required Electives .....................................................................18 credits
From the list on page 103

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree

With the phenomenal growth of the Internet has come an equally astounding rise in the career fields of Web page design and Web page development. While the major driving force behind Web page expansion has been e-commerce, it is now the rare institution, association, business or group that doesn’t have a Web page to tell the world about itself. In this rapidly expanding digital world, those organizations are looking for someone to provide them with polished, professional websites.

The Web development AAS prepares you for tasks ranging from simple page building and web server administration to the methodologies used for systems analyses and design in the increasingly complex world of e-commerce.

All design and development degrees and certificates include credit hours devoted to creating your professional portfolio.

Career Opportunities

If you are a creative person with technical aptitude, a career in the more technically specialized field of website development can pay handsomely. With a degree and a few years of experience, Web developer salaries average more than $72,000 a year.


Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at www.npc.edu/computer-information-systems.

Web Development (CAS) • 36 credits

CIS 105 Computer Applications and Information Technology........3 credits
CIS 111 Introduction to Programming........................................3 credits
CIS 150 Digital Culture .............................................................3 credits
CIS 187 Introduction to Web Development ..................................3 credits
CIS 243 Database-Driven Web Sites ........................................3 credits
CIS 250 Electronic Commerce .................................................3 credits
CIS 265 Web Programming .......................................................3 credits
CIS 275 Web Server Administration .........................................3 credits
CIS 280 System Analysis and Design .......................................3 credits
CIS 295 Applied Project for CIS ................................................3 credits
ENL 101 College Composition I .................................................3 credits
MAT 112 Algebra II: Intermediate ..............................................3 credits

Web Development (AAS) • 64 credits

Complete the Web Development CAS...........................................36 credits

PLUS these General Education courses

Communications ........................................................................3 credits
Select one of the following:
ENL 102 College Composition II ................................................3 credits
ENL 109 Technical Writing .......................................................3 credits

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 lists on page 84.)

AND

Required Electives .....................................................................18 credits
From the list on page 103

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Computer Information Systems (CIS)

Certificate of Proficiency (CP) Options

If you are interested in information technology as a career, A+ and Network+ certifications could be foundational to your success. NPC offers a series of courses that focus on the information needed to pass the CompTIA examinations. In addition, the program provides you the opportunity of gaining the equivalent knowledge of the recommended 500 hours of hands-on experience. Let NPC’s own CompTIA-certified instructors carefully guide you through the topics covered by the three A+ Essentials, A+ Practical Application and Network + examinations.

Commercial Graphics Fundamentals is a 12-credit course of study featuring graphics communication technology, Adobe Photoshop, Adobe Illustrator and layout and design.

Career Opportunities
CompTIA A+ and Network+ certifications can open many career doors and, according to www.payscale.com (6/2011), entry-level salaries average $27,880 for certified IT support techs and $28,558 for network + certified support technicians.

Employment in the computer graphics area is expected to grow due to the explosion of interactive media. However, competition for jobs will be keen, with an edge going to those with design training and animation experience. Median entry-level salaries in the field average about $26,000.

Cost & Time for Completion
The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/computer-information-systems.

Commercial Graphics Fundamentals (CP) • 12 credits

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

Network and PC Support (CP) • 16 credits

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

A+, N+ Exams now at NPC

You can now take the CompTIA A+ and N+ certification exams at NPC Testing Sites in Holbrook and Show Low.

If you take CIS 141, CIS 142 or CIS 145 at NPC, your test fee is included in your course fee and you will be given a voucher to use as payment for the test at the time of registration.

To register, schedule and pay for your test, go to www.comptiastore.com.

Other Information Technology Exams
NPC is also an approved testing site for other Information Technology (IT) certification exams. Go to www.pearsonvue.com and search for the desired IT exam, then register, schedule and pay for your test.

A photo ID is required to access the testing area.
The NPC Computer Information Systems (CIS) program is “competency based,” ensuring that you graduate job-ready with the skills necessary for entry-level employment. Learn on state-of-the-art equipment in small class settings where you receive personal attention from highly trained and experienced CIS faculty members.

NPC offers courses that train you to use industry standard programs such as: Windows operating system, Linux/Unix operating system, Microsoft Office, Adobe Photoshop, Illustrator, Indesign, Flash, Microsoft Publisher, BASIC, C and C++ language, PHP, MySQL, JavaScript.

Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at [www.npc.edu/computer-information-systems](http://www.npc.edu/computer-information-systems).

Need help paying for classes?

Many students can qualify for financial aid if they take the time to submit the Free Application for Federal Student Aid (FAFSA), available online at [http://fafsa.ed.gov](http://fafsa.ed.gov).

Apply early, as the process can take 4-6 weeks. You should have all of your paperwork submitted to the Financial Aid Office by the Priority Deadlines:

- April 15 for Fall Semester
- October 15 for Spring
- March 15 for Summer

To meet the requirements for the Computer Information Systems Associate of Applied Science degree, students must complete 18 to 20 unduplicated credits from this list:

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

Certificate Options – CP & CAS

The Construction Technology program emphasizes general residential and commercial construction by teaching basic hands-on skills applicable across a wide range of industrial and manufacturing processes.

If you are thinking about a building trades career, consider these benefits of the NPC Construction Technology program:

- Highly qualified and experienced construction professionals provide instruction in small, personalized classroom and workshop settings.
- Hands-on classes take place in the Painted Desert Campus (Holbrook) NPC Skills Center. This state-of-the-art facility is an ideal setting for learning construction skills basics.
- NPC tuition and fees are among the lowest in the entire state. And you may even qualify for federal grants to help defray your education-related expenses!
- OSHA-10 construction certification to prepare you for entry into the workforce is standard.
- Coursework is geared to fulfill the requirements of NCCER, the national agency for standardized construction training and credentialing. Successful completion provides a portable certification of skills that heightens employability in any location.

For more information regarding this program, contact the program chair at (800) 266-7845, ext. 7456.

Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/construction.

Drafting CP

Drafting (CP) • 21 credits

The Drafting CP is currently only available as a dual enrollment option at participating area high schools.

CON 100 Construction Math and Safety* ...................................3 credits
CON 110 Plan Reading, Site Layout, Communication and Employment .................................................................3 credits
DRF 120 Technical Drafting I ....................................................3 credits
DRF 130 Architectural Drafting I ...............................................3 credits
DRF 150 AutoCAD I ................................................................3 credits
DFR 230 Architectural Drafting II ..............................................3 credits
DFR 250 AutoCAD II ................................................................3 credits

Construction CP & CAS

Construction Technology (CP) • 22 credits

CON 100 Construction Math and Safety* ...................................3 credits
CON 110 Plan Reading, Site Layout, Communication and Employment .................................................................3 credits
CON 124 Masonry Systems* .....................................................3 credits
CON 125 Concrete Systems* ....................................................3 credits
CON 126 Framing Systems* .....................................................4 credits
CON 145 Roofing, Thermal and Moisture Protection Systems* .............................................................................3 credits
CON 227 Electrical, Mechanical and Plumbing Systems* ..................................................................................3 credits

Construction Technologies (CAS) • 28 credits

Complete the Construction Technologies CP ...........................................22 credits

PLUS

ENL 101 College Composition I ...............................................3 credits
MAT 101 Basic Technical Mathematics or MAT 103, MAT 105 or MAT 109 or MAT 112 or any mathematics course for which MAT 112 is a prerequisite........3 credits

* NCCER Certified Course

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Construction Technology (CON)

Associate of Applied Science (AAS) Degree

Why Study Construction Technology
The economic downturn that has slowed the construction industry in Arizona the past few years is easing. Prospects for the building trades are greatly improved and increasing every day! Now is the opportune time to learn construction technology skills that will serve you a lifetime.

At NPC, you’ll find a degree program that emphasizes building fundamentals for any number of career fields including: masonry and concrete systems, framing, roofing, thermal and moisture protection, electrical, mechanical and plumbing systems. Effective communication and job success strategies are emphasized throughout the program.

Career Opportunities
According to the U.S. Bureau of Labor Statistics, entry-level construction positions in North Arizona nonmetropolitan area average nearly $40,140 per year (May 2012). With experience in specialized areas of construction, salaries rise along with increases in skill and expertise.

Some typical annual salaries for skilled construction workers in Arizona as listed by the BLS:

• Highway maintenance worker: $32,990
• Cement masons/concrete finishers: $32,440
• Carpenters: $30,930
• Electricians: $56,680
• Construction/building inspectors: $42,630


Construction Technology (AAS) • 64 credits

Complete the Construction Technologies CAS........................................28 credits

AND these Core Courses.................................................................15 credits
CON 105 Engineering Principles and Construction Methods........3 credits
CON 140 Computer Applications in Construction.........................3 credits
CON 200 Integrated Construction Management/Design Laboratory 3 credits
CON 230 Sustainable Construction..............................................3 credits
CON 263 Estimating, Scheduling and Planning.............................3 credits

PLUS these General Education courses
Communications ............................................................................3 credits
Select one of the following:
ENL 102 College Composition II..................................................3 credits
ENL 109 Technical Writing............................................................3 credits
SPT 120 Public Speaking..............................................................3 credits

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 lists on page 84.)

AND
Required Electives.........................................................................11 credits
Select a minimum of 11 credits from the following:
CON 180 Construction Service Learning......................................3 credits
CON 198 Construction Internship................................................1 to 16 credits
CON 223 Heavy Highway Construction*.................................3 credits
CON 241 Electrical Level 1 *........................................................3 credits
CON 242 Electrical Level 2 *........................................................3 credits
Any unduplicated CON course 100 level or higher......................3 credits
BUS 115 Business Law.................................................................3 credits
BUS 117 Principles of Financial Accounting I............................3 credits
BUS 141 Principles of Economics - Micro.................................3 credits
DRF 120 Technical Drafting I......................................................3 credits
DRF 130 Architectural Drafting I................................................3 credits
DRF 150 AutoCAD I.................................................................3 credits
DRF 230 Architectural Drafting II................................................3 credits
DRF 250 AutoCAD II.................................................................3 credits
HQO any unduplicated 100 level or higher course..............up to 11 credits
MAT 125 Introduction to Statistics..........................................3 credits
SPT 220 Technical Theatre.........................................................3 credits
WLD 151 Cutting Process & Welding Quality............................3 credits
WLD 152 SMAW Plate I.............................................................3 credits
WLD 154 GMAW Plate..............................................................3 credits
or any unduplicated 100 level or above course.......................6 credits
Cosmetology (COS)

Certificate of Proficiency (CP) Options

Why Study Cosmetology?
Not many jobs offer you the chance to be creative every day and be paid for your skill and efforts. You generally work in clean, fun surroundings, providing personal care to individuals who appreciate your expertise in making them look their best. Personal care service is a growing field and cosmetology skills are always in demand. If you have an eye for appearance and style, personable communication skills and good hand dexterity, this may be the career field for you.

Cosmetology Instructor
This is a 650-hour training that will prepare an individual in basic instructional methods and techniques for the effective instructing of students in cosmetology or nail technology related management and skills, preparing lesson plans, theory and demonstration methods and the AZ State Board of Cosmetology Laws and Regulations. Upon successful completion you will be prepared to take the AZ State Board of Cosmetology/Nail Technology Instructors Licensing Practical/Written Examinations. A student must have a current cosmetology license.

Nail Technician
This is a 600-hour training that will prepare an individual in nail technology; manicuring, pedicuring, nail enhancements, salon management, customer service and AZ State Board of Cosmetology Laws and Regulations. Upon successful completion the individual will be prepared to take the AZ State Board of Cosmetology Nail Technology Licensing Practical/Written Examinations.

Cosmetology Instructor (CP) • 16 credits
A student must have a current cosmetology license.
- COS 209 Science for Cosmetology Instructors........................................1 credit
- COS 210 Management for Cosmetology Instructors.................................3 credits
- COS 211 Instructing in Cosmetology I.........................................................3 credits
- COS 212 Instructing in Cosmetology II.........................................................3 credits
- COS 213 Instructing in Cosmetology III.........................................................3 credits
- COS 214 Instructing in Cosmetology IV.........................................................3 credits

Nail Technician (CP only) • 20 credits
- COS 130 Nail Technology Theory I............................................................3 credits
- COS 131 Nail Technology Theory II............................................................3 credits
- COS 132 Nail Technology Basic Practicum Practice.................................2 credits
- COS 133 Nail Technology Basic Practicum Practice.................................2 credits
- COS 134 Nail Technology Advanced Practicum Practice .........................2 credits
- COS 135 Nail Technology Advanced Practicum Practice ............................2 credits
- COS 136 Nail Technology Advanced Practicum Practice ............................2 credits
- COS 137 Nail Technology Advanced Practicum Practice ............................2 credits
- COS 138 Nail Technology Advanced Practicum Practice ............................2 credits

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree

Cost & Time for Completion
The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at www.npc.edu/cosmetology.
Cosmetology Certificate & Degree Options

Cosmetology

This is a 1600-hour program that will prepare individuals in hair cutting/styling; nails; facial/scalp treatments; shampooing; chemical applications; salon management; customer service; and Arizona State Laws and Regulations. Upon successful completion you will be prepared to take the AZ State Board of Cosmetology Licensing Practical/Written Examinations. Additional training offered that leads to state board certification and licensing.

Program Locations

NPC’s Cosmetology program is offered at three locations — Little Colorado Campus in Winslow, White Mountain Campus in Show Low and the St. Johns Center. Prospective students make application to the program, including 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 apply or see an academic adviser at a campus or center near you.

Career Opportunities

Job opportunities for licensed, entry-level cosmetologists are very favorable says the U.S. Bureau of Labor Statistics (BLS). The BLS cites growing demand for expert personal appearance care and treatments. Competition for positions may be keen at higher-end salons with the edge going to licensed cosmetologists with training and experience in a range of services.

While the median salary for hairdressers, stylist and cosmetologists in May 2012 was $25,800, with experience a skilled cosmetologist can build an ever-growing and well-paying client base. Opportunities even exist for you to run your own business!


Cosmetology (CP) • 52 credits

- COS 113 Introduction to Cosmetology ........................................ 10 credits
- COS 114 Theory of Cosmetology II ........................................... 3 credits
- COS 115 Theory of Cosmetology III — General Science of Cosmetology ........................................ 3 credits
- COS 116 Theory of Cosmetology IV – Hair Care.......................... 2 credits
- COS 117 Theory of Cosmetology V – Skin Care and Nail Care ...... 2 credits
- COS 215 Basic Practicum Practice I ........................................... 2 credits
- COS 216 Basic Practicum Practice II ........................................... 2 credits
- COS 217 Basic Practicum Practice III ......................................... 2 credits
- COS 218 Basic Practicum Practice IV ........................................... 2 credits
- COS 219 Basic Practicum Practice V ........................................... 2 credits
- COS 220 Basic Practicum Practice VI ........................................... 2 credits
- COS 221 Advanced Practicum Practice VII .................................. 2 credits
- COS 222 Advanced Practicum Practice VIII ................................ 2 credits
- COS 223 Advanced Practicum Practice IX ................................... 2 credits
- COS 224 Advanced Practicum Practice X ................................... 2 credits
- COS 225 Advanced Practicum Practice XI ................................... 2 credits
- COS 226 Advanced Practicum Practice XII .................................. 2 credits
- COS 227 Advanced Practicum Practice XIII ................................ 2 credits
- COS 228 Advanced Practicum Practice XIV ................................ 2 credits
- COS 229 Advanced Practicum Practice XV .................................. 2 credits
- COS 230 Advanced Practicum Practice XVI ................................ 2 credits

Cosmetology (CAS) • 58 credits

Complete the Cosmetology CP .................................................. 52 credits

PLUS

- ENL 101 College Composition I ................................................. 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 ... 3 credits

Cosmetology (AAS) • 68 credits

Complete the Cosmetology CAS .................................................. 58 credits

PLUS these General Education courses

Communications ................................................................. 3 credits

Select one of the following:

- ENL 102 College Composition II ............................................. 3 credits
- ENL 109 Technical Writing .................................................... 3 credits
- SPT 120 Public Speaking ...................................................... 3 credits

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 lists on page 84.)
Why study Early Childhood?
Love working with young children! NPC’s early childhood development programs of study can lead to a national Child Development Associate (CDA) Credential™, the most widely-recognized credential in early childhood education. Based on a core set of competency standards, the CDA Credential™ is a key stepping stone on the path of career advancement for early care professionals as they work toward becoming qualified teachers of young children.

- In Arizona, K-3 teachers are now required to have birth to 8-years-old educator/caregiver experience.

Career Opportunities
Employment of preschool and childcare center directors is projected to grow 17 percent from 2012 to 2022, faster than the average for all occupations. Continued demand for preschool programs and childcare is expected to contribute to growth.
The median national annual salary is $43,950, based on five years of experience in the field.

Certificate is Foundational
The Certificate of Applied Science (CAS) lays the foundation for both the Associate of General Studies (AGS) and Associate of Applied Science (AAS) degrees.
All coursework is competency-based, preparing the student for the national CDA Credential™. You can now take the national CDA exam at NPC Testing Sites in Holbrook and Show Low. Go to www.pearsonassessments.com to register, schedule and pay for the test. A photo ID is required to access the testing area.

Early Childhood Management (CAS) • 41 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 credits
- 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 credits
- ECD 232 Designing Indoor and Outdoor Environments ......................... 2 credits
- ECD 233 Developing Policies and Procedures for Early Childhood Programs ................................................. 2 credits
- ECD 234 Staffing an Early Childhood Program ................................... 2 credits
- ECD 235 Budgeting and Financial Management .................................. 2 credits
- ECD 236 Marketing the Early Childhood Program ................................. 2 credits
- ECD 237 Evaluating an Early Childhood Program ................................ 1 credit
- ECD 250 Child Development I ............................................................. 3 credits

PLUS
- ENL 101 College Composition I ......................................................... 3 credits
- And one of the following mathematics courses:
  - MAT 103, MAT 105, MAT 112, MAT 142, MAT 152,  
  - MAT 161 or MAT 162 ................................................. 3 credits

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science  
(AAS) Associate of Applied Science Degree

Cost & Time for Completion
The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at www.npc.edu/early-childhood-studies.
Early Childhood Management – AAS Degree

Degree Options
Students interested in Early Childhood Management have two degree options – an Associate of General Studies (AGS) or an Associate of Applied Science (AAS). Both build on the foundational Certificate of Applied Science (CAS), varying only in the general education requirements. Check with your academic adviser to ensure classes meet your educational objectives.

The specialized AGS degree can provide you with recognized learning credentials to meet work-related course mandates while also pursuing general education courses that may serve as the foundation for a bachelor’s degree.

The AGS degree offers flexibility if you are considering a possible transfer to a university. However, there is no guarantee the general education requirements for the AGS will transfer to an Arizona public university.

See the full description of the Associate of General Studies (AGS) degree on page 86.

The Associate of Applied Science (AAS) degree is not intended for university transfer, preparing graduates to immediately enter the workforce.

ECD - Early Childhood Management (AAS) • 64 credits

Complete the Early Childhood Management CAS ................................41 credits
PLUS these General Education courses
Communications .................................................................3 credits
    Select one of the following:
    ENL 102 College Composition II ....................................3 credits
    ENL 109 Technical Writing ..............................................3 credits
    SPT 120 Public Speaking ................................................3 credits

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 lists on page 84.)

AND

Required Electives............................................................13 credits
    Select a minimum of 13 unduplicated credits, 100 level or higher.
    One-half to six credits of ECD/EDU/HUS 199s and 299s may be
    included in the 13 credits.

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Early Childhood Management – AGS Degree

Early Childhood Management (AGS) • 66 credits

See AGS degree description on page 86.

Complete these Core courses ............. 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 120 Enhancing Family Involvement .......... 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 credits
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 credits
ECD 232 Designing Indoor and Outdoor Environments .......... 2 credits
ECD 233 Developing Policies and Procedures for Early Childhood Programs .......... 2 credits
ECD 234 Staffing an Early Childhood Program .......... 2 credits
ECD 235 Budgeting and Financial Management .......... 2 credits
ECD 236 Marketing the Early Childhood Program .......... 2 credits
ECD 237 Evaluating an Early Childhood Program .......... 1 credit
ECD 250 Child Development I .......... 3 credits

PLUS

These General Education courses
Communications .................................................. 6 credits
ENL 101 College Composition I .......... 3 credits
ENL 102 College Composition II .......... 3 credits
ENL 109 Technical Writing .......... 3 credits
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 credits
MAT 112 Algebra II: Intermediate .......... 3 credits

Discipline Studies
Arts and Humanities .......................................... 6 credits
(Select two courses from at least two disciplines from the list on page 84)
Physical and Biological Science ................................ 4 credits
(Select one course from the list on page 84)
Social and Behavioral Sciences ................................ 6 credits
(Select two courses from at least two disciplines from the list on page 84)

AND

Additional Discipline Studies .................................. 6 credits
Select a minimum of six additional credits from the Discipline Studies on page 84, or from these courses:
Foreign Language
FRE 101 Elementary French I .......... 4 credits
FRE 102 Elementary French II .......... 4 credits
GER 101 Elementary German I .......... 4 credits
GER 102 Elementary German II .......... 4 credits
SPA 101 Elementary Spanish I .......... 4 credits
SPA 102 Elementary Spanish II .......... 4 credits

Computer Science
CIS 105 Computer Applications and Information Technology .......... 3 credits

Verbal Communications
SPT 120 Public Speaking .......... 3 credits

Northland Pioneer College 2014 – 15 Catalog
Also available online at www.npc.edu/college-catalog
Early Childhood Studies (ECD)

Family Care Specialization

Why study Family Care?
The Family Care area of specialization prepares childcare workers to provide care for children in their own homes when parents and other family members are unavailable. They care for children’s basic needs, such as bathing and feeding. In addition, some help children prepare for kindergarten or help older children with homework.

All NPC early childhood development programs of study can lead to a national Child Development Associate (CDA) Credential™, the most widely-recognized credential in early childhood education. Based on a core set of competency standards, the CDA Credential™ is a key stepping stone on the path of career advancement for early care professionals as they work toward becoming qualified teachers of young children.

You can now take the national CDA exam at NPC Testing Sites in Holbrook and Show Low. Go to www.pearsonassessments.com to register, schedule and pay for the test. A photo ID is required to access the testing area.

- In Arizona, K-3 teachers are now required to have birth to 8-years-old educator/caregiver experience.

Certificate is Foundational

The Certificate of Proficiency (CP) lays the foundation for both the Certificate of Applied Science (CAS) and Associate of Applied Science (AAS) degree.

Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/early-childhood-studies.

ECD – Family Care (CP) • 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 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 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 Family Day Care Setting .................................................... 1 credit
- ECD 250 Child Development I ........................................................... 3 credits

*ECD 147, 148, 149 may be taken in combination or ECD 250 as a single three-credit class.

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
## Early Childhood Studies (ECD)

### Degree Requirements

Students interested in Early Childhood Family Care Associate of Applied Science (AAS) degree must complete the foundational Family Care Certificate of Proficiency (CP) and Certificate of Applied Science (CAS).

Check with your academic adviser to ensure classes meet your educational objectives. The Associate of Applied Science (AAS) degree is not intended for university transfer, preparing graduates to immediately enter the workforce.

### Career Opportunities

Employment of childcare workers is projected to grow 14 percent from 2012 to 2022, about as fast as the average for all occupations. Growth is expected due to increases in the number of children who require childcare and continued demand for preschool programs.

The median national hourly wage was $9.38 in May 2012.


### ECD – Family Care (CAS) • 32 credits

**Complete the ECD – Family Care CP** ............................................ 26 credits

**PLUS**

ENL 101 College Composition I ................................................. 3 credits

And one of the following mathematics courses:

MAT 103, MAT 105, MAT 112, MAT 142, MAT 152,

MAT 161 or MAT 162 .......................................................... 3 credits

### ECD – Family Care (AAS) • 64 credits

**Complete the ECD – Family Care CAS** ............................................ 32 credits

**PLUS** these General Education courses

**Communications** ................................................................. 3 credits

Select one of the following:

ENL 102 College Composition II ................................................ 3 credits

ENL 109 Technical Writing ....................................................... 3 credits

SPT 120 Public Speaking ......................................................... 3 credits

**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 lists on page 84.)

**AND**

**Required Electives** ............................................................... 22 credits

Select a minimum of 22 unduplicated credits. One-half to six credits of ECD/EDU/HUS 199s and 299s may be included in the 22 credits.
### Why study Infant/Toddler?
Research has shown that the time from birth to 3 years of age lays the foundation for all future experiences in a child’s life, with the brain developing at an astonishing rate - quicker than any other time in a person’s life. Positive adult-child interactions and daily routines play a critical role in the development of a child. Infant-Toddler Caregivers have a profound impact on a child’s learning potential.

NPC’s Infant-Toddler Specialization is designed to offer training and support to child care providers that work with children from birth to 3 years of age. All NPC early childhood development programs of study can lead to a national Child Development Associate (CDA) Credential™, the most widely-recognized credential in early childhood education. Based on a core set of competency standards, the CDA Credential™ is a key stepping stone on the path of career advancement for early care professionals as they work toward becoming qualified teachers of young children.

- In Arizona, K-3 teachers are now required to have birth to 8-years-old educator/caregiver experience.

### Certificate is Foundational
The Certificate of Proficiency (CP) lays the foundation for the Certificate of Applied Science (CAS) and the Associate of Applied Science (AAS) degrees. The Associate of General Studies (AGS) degree requires some additional core courses. All coursework is competency-based, preparing the student for the national CDA Credential™. You can now take the national CDA exam at NPC Testing Sites in Holbrook and Show Low. Go to [www.pearsonassessments.com](http://www.pearsonassessments.com) to register, schedule and pay. A photo ID is required to access the testing area.

### ECD – Infant/Toddler (CP) • 26 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECD 100</td>
<td>Providing a Healthy Environment</td>
<td>1</td>
</tr>
<tr>
<td>ECD 102</td>
<td>Ensuring a Safe Environment</td>
<td>1</td>
</tr>
<tr>
<td>ECD 103</td>
<td>Planned Arrangements and Schedules</td>
<td>1</td>
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<td>ECD 108</td>
<td>Techniques for Observing Children</td>
<td>1</td>
</tr>
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<td>ECD 110</td>
<td>Building Relationships With Parents Through Communication</td>
<td>1</td>
</tr>
<tr>
<td>ECD 112</td>
<td>Enhancing Family Involvement</td>
<td>1</td>
</tr>
<tr>
<td>ECD 115</td>
<td>Nutrition in Early Childhood</td>
<td>1</td>
</tr>
<tr>
<td>ECD 143</td>
<td>Inclusion of Children with Special Needs</td>
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<tr>
<td><em>ECD 147, 148, 149</em></td>
<td>Prenatal and Infant Development, Toddler Development</td>
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<tr>
<td>ECD 154</td>
<td>Environments for Infants and Toddlers</td>
<td>1</td>
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<tr>
<td>ECD 155</td>
<td>Curriculum and Learning Materials for Infants</td>
<td>1</td>
</tr>
<tr>
<td>ECD 156</td>
<td>Curriculum and Learning Materials for Toddlers</td>
<td>1</td>
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<tr>
<td>ECD 158</td>
<td>Developing and Utilizing Observation Skills in Infant and Toddler Programs</td>
<td>1</td>
</tr>
<tr>
<td>ECD 159</td>
<td>Recordkeeping Skills for Infant/Toddler Care</td>
<td>1</td>
</tr>
<tr>
<td>ECD 163</td>
<td>Cognitive Development of Infants and Toddlers</td>
<td>1</td>
</tr>
<tr>
<td>ECD 164</td>
<td>Practical Applications of Cognitive Development</td>
<td>1</td>
</tr>
<tr>
<td>ECD 165</td>
<td>Language Development of Infants and Toddlers</td>
<td>1</td>
</tr>
<tr>
<td>ECD 166</td>
<td>Encouraging Autonomy and Positive Self-Concept</td>
<td>1</td>
</tr>
<tr>
<td>ECD 167</td>
<td>Guidance and Discipline of Infants and Toddlers</td>
<td>1</td>
</tr>
<tr>
<td>ECD 168</td>
<td>Enhancing Social Competence of Infants/Toddlers</td>
<td>1</td>
</tr>
<tr>
<td>ECD 169</td>
<td>Sensorimotor Learning in Infancy and Toddlerhood</td>
<td>1</td>
</tr>
<tr>
<td>ECD 172</td>
<td>Physical Development in Infancy and Toddlerhood</td>
<td>1</td>
</tr>
<tr>
<td>ECD 175</td>
<td>Professionalism</td>
<td>1</td>
</tr>
<tr>
<td><em>ECD 250</em></td>
<td>Child Development I</td>
<td>3</td>
</tr>
</tbody>
</table>

*ECD 147, 148, 149 may be taken in combination or ECD 250 as a single three-credit class.

### ECD – Infant/Toddler (CAS) • 32 credits

**Complete the ECD – Infant/Toddler CP ........................................26 credits**

**PLUS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL 101</td>
<td>College Composition I</td>
<td>3</td>
</tr>
</tbody>
</table>

And one of the following mathematics courses:

MAT 103, MAT 105, MAT 112, MAT 142, MAT 152, MAT 161 or MAT 162........................3 credits

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science (AAS) Associate of Applied Science Degree
Degree Options

Students interested in ECD-Infant/Toddler have two degree options – an Associate of General Studies (AGS) or an Associate of Applied Science (AAS). Both build on the foundational Certificate of Applied Science (CAS), varying only in the core and general education requirements.

Check with your academic adviser to ensure classes meet your educational objectives. The specialized AGS degree can provide you with recognized learning credentials to meet work-related course mandates while also pursuing general education courses that may serve as the foundation for a bachelor’s degree.

The AGS degree offers flexibility if you are considering a possible transfer to a university. However, there is no guarantee the general education requirements for the AGS will transfer to an Arizona public university.

See the full description of the Associate of General Studies (AGS) degree on page 86.

The Associate of Applied Science (AAS) degree is not intended for university transfer, preparing graduates to immediately enter the workforce.

Career Opportunities

Employment of childcare workers is projected to grow 14 percent from 2012 to 2022, about as fast as the average for all occupations. Growth is expected due to increases in the number of children who require childcare and continued demand for preschool programs.

The median national hourly wage was $9.38 in May 2012.


ECD – Infant/Toddler (AAS) • 64 credits

Complete the ECD – Infant/Toddler CAS .................................32 credits

PLUS these General Education courses

Communications .................................................................3 credits

Select one of the following:
ENL 102 College Composition II ......................................... 3 credits
ENL 109 Technical Writing .................................................. 3 credits
SPT 120 Public Speaking .................................................... 3 credits

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 lists on page 84.)

AND

Required Electives .............................................................22 credits

Select a minimum of 22 unduplicated credits. One-half to six credits of ECD/EDU/HUS 199s and 299s may be included in the 22 credits.

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science (AAS) Associate of Applied Science Degree

Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at www.npc.edu/early-childhood-studies.
Early Childhood Studies (ECD)

Infant/Toddler – AGS Degree

ECD – Infant/Toddler (AGS)  •  64 credits

See AGS degree description on page 86.

Complete these 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 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 150 Introduction to Early Childhood Education .......... 3 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 200 Introduction to Early Childhood Education .......... 3 credit
ECD 250 Child Development I .......... 3 credit

PLUS

Required Electives ........................................... 4 credits
Four credits of unduplicated electives must be taken from any area (with the exception of 199s and 299s).

PLUS

These General Education courses

Communications ........................................... 6 credits
ENL 101 College Composition I .......... 3 credits
Select one of the following:
ENL 102 College Composition II .......... 3 credits
ENL 109 Technical Writing .......... 3 credits

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 credits
MAT 112 Algebra II: Intermediate .......... 3 credits

Discipline Studies

Arts and Humanities ........................................... 6 credits
(Select two courses from at least two disciplines from the list on page 84)

Physical and Biological Science ........................................... 4 credits
(Select one course from the list on page 84)

Social and Behavioral Sciences ........................................... 6 credits
(Select two courses from at least two disciplines from the list on page 84)

AND

Additional Discipline Studies ........................................... 6 credits
Select a minimum of six additional credits from the Discipline Studies on page 84, or from these courses:

Foreign Language
FRE 101 Elementary French I .......... 4 credits
FRE 102 Elementary French II .......... 4 credits
GER 101 Elementary German I .......... 4 credits
GER 102 Elementary German II .......... 4 credits
SPA 101 Elementary Spanish I .......... 4 credits
SPA 102 Elementary Spanish II .......... 4 credits

Computer Science
CIS 105 Computer Applications and Information Technology .......... 3 credits

Verbal Communications
SPT 120 Public Speaking .......... 3 credits
Early Childhood Studies (ECD)

Preschool Specialization – CP & CAS

Why study Preschool?
Research has shown that the time from birth to 3 years of age lays the foundation for all future experiences in a child’s life, with the brain developing at an astonishing rate - quicker than any other time in a person’s life.
Positive adult-child interactions and daily routines play a critical role in the development of a child. Preschool Caregivers have a profound impact on a child’s learning potential.

NPC’s Preschool Specialization is designed to offer training and support to child care providers that work with children to 5 years of age. All NPC early childhood development programs of study can lead to a national Child Development Associate (CDA) Credential™, the most widely-recognized credential in early childhood education.

Based on a core set of competency standards, the CDA Credential™ is a key stepping stone on the path of career advancement for early care professionals as they work toward becoming qualified teachers of young children.

- In Arizona, K-3 teachers are now required to have birth to 8-years-old educator/caregiver experience.

Certificate is Foundational
The Certificate of Proficiency (CP) lays the foundation for the Certificate of Applied Science (CAS) and the Associate of Applied Science (AAS) degrees. The Associate of General Studies (AGS) degree requires some additional core courses.

All coursework is competency-based, preparing the student for the national CDA Credential™. You can now take the national CDA exam at NPC Testing Sites in Holbrook and Show Low. Go to www.pearsonassessments.com to register, schedule and pay. A photo ID is required to access the testing area.

ECD – Preschool (CP) • 26 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECD 100</td>
<td>Providing a Healthy Environment</td>
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<tr>
<td>ECD 101</td>
<td>The Child’s Total Learning Environment</td>
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<td>ECD 102</td>
<td>Ensuring a Safe Environment</td>
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<td>ECD 103</td>
<td>Planned Arrangements and Schedules</td>
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<tr>
<td>ECD 105</td>
<td>Guidance Principles for Encouraging Self Discipline</td>
<td>1</td>
</tr>
<tr>
<td>ECD 108</td>
<td>Techniques for Observing Children</td>
<td>1</td>
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<tr>
<td>ECD 110</td>
<td>Building Relationships With Parents</td>
<td>1</td>
</tr>
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<td>ECD 111</td>
<td>Nutrition in Early Childhood</td>
<td>1</td>
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<td>ECD 112</td>
<td>Sciencing and Discovery</td>
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<td>ECD 113</td>
<td>Enhancing Questions and Problem-Solving Abilities</td>
<td>1</td>
</tr>
<tr>
<td>ECD 114</td>
<td>Blocks in Early Childhood Program</td>
<td>1</td>
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<tr>
<td>ECD 115</td>
<td>Enhancing Family Involvement</td>
<td>1</td>
</tr>
<tr>
<td>ECD 116</td>
<td>Fostering Communication and Language Skills</td>
<td>1</td>
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<tr>
<td>ECD 117</td>
<td>Beginning Mathematical Concepts</td>
<td>1</td>
</tr>
<tr>
<td>ECD 118</td>
<td>Nutrition in Early Childhood</td>
<td>1</td>
</tr>
<tr>
<td>ECD 119</td>
<td>Music and Creative Movement</td>
<td>1</td>
</tr>
<tr>
<td>ECD 120</td>
<td>Creativity and Discovery</td>
<td>1</td>
</tr>
<tr>
<td>ECD 121</td>
<td>Dramatic Play in Early Childhood Setting</td>
<td>1</td>
</tr>
<tr>
<td>ECD 122</td>
<td>Creative Media</td>
<td>1</td>
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<td>ECD 123</td>
<td>Large Muscle Development</td>
<td>1</td>
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<td>ECD 124</td>
<td>Small Muscle Development</td>
<td>1</td>
</tr>
<tr>
<td>ECD 125</td>
<td>Understanding How Children Learn</td>
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</tr>
<tr>
<td>ECD 126</td>
<td>Development of the Preschool Child</td>
<td>1</td>
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<tr>
<td>ECD 127</td>
<td>Development of the Preschool Child</td>
<td>1</td>
</tr>
<tr>
<td>ECD 128</td>
<td>Professionalism</td>
<td>1</td>
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<td>ECD 129</td>
<td>Transitions</td>
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<td>ECD 130</td>
<td>Prenatal and Infant Development</td>
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<td>ECD 131</td>
<td>Child Development I</td>
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<tr>
<td>ECD 132</td>
<td>250 Child Development I</td>
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ECD – Preschool (CAS) • 32 credits

Complete the ECD – Preschool CP..............................................26 credits

PLUS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>ENL 101</td>
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And one of the following mathematics courses:

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<td>MAT 105</td>
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<td>MAT 112</td>
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<tr>
<td>MAT 152</td>
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<tr>
<td>MAT 161</td>
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<tr>
<td>MAT 162</td>
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</tr>
</tbody>
</table>

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Early Childhood Studies (ECD)

Preschool – AAS Degree

Degree Options

Students interested in ECD – Preschool have two degree options – an Associate of General Studies (AGS) or an Associate of Applied Science (AAS). Both build on the foundational Certificate of Applied Science (CAS), varying only in the core and general education requirements.

Check with your academic adviser to ensure classes meet your educational objectives. The specialized AGS degree can provide you with recognized learning credentials to meet work-related course mandates while also pursuing general education courses that may serve as the foundation for a bachelor’s degree.

The AGS degree offers flexibility if you are considering a possible transfer to a university. However, there is no guarantee the general education requirements for the AGS will transfer to an Arizona public university.

See the full description of the Associate of General Studies (AGS) degree on page 86.

The Associate of Applied Science (AAS) degree is not intended for university transfer, preparing graduates to immediately enter the workforce.

Career Opportunities

Employment of childcare workers is projected to grow 14 percent from 2012 to 2022, about as fast as the average for all occupations. Growth is expected due to increases in the number of children who require childcare and continued demand for preschool programs.

The median national hourly wage was $9.38 in May 2012.


ECD – Preschool (AAS) • 64 credits

Complete the ECD – Preschool CAS.....................................................32 credits

PLUS these General Education courses

Communications .................................................................3 credits

Select one of the following:
ENL 102 College Composition II ................................................ 3 credits
ENL 109 Technical Writing ....................................................... 3 credits
SPT 120 Public Speaking ......................................................... 3 credits

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 lists on page 84.)

AND

Required Electives...............................................................22 credits

Select a minimum of 22 unduplicated credits. One-half to six credits of ECD/EDU/HUS 199s and 299s may be included in the 22 credits.

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science (AAS) Associate of Applied Science Degree

Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/early-childhood-studies.
Early Childhood Studies (ECD)

Preschool – AGS Degree

ECD – Preschool (AGS) • 64 credits

See AGS degree description on page 86.

Core Courses ............................................. 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...........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 121 Music and Creative Movement ...........1 credit
ECD 122 Dramatic Play in Early Childhood Setting ........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 or EDU 200 Introduction to Education ....3 credits
ECD 216 Transitions ....................................1 credit
ECD 250 Child Development I .......................3 credit

PLUS

Communications ............................................. 6 credits
ENL 101 College Composition I ..................3 credits
ENL 102 College Composition II ..............3 credits
ENL 109 Technical Writing ......................3 credits

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 credits
MAT 112 Algebra II: Intermediate.................3 credits

Discipline Studies

Arts and Humanities....................................... 6 credits
(Select two courses from at least two disciplines from the list on page 84)

Physical and Biological Science..................... 4 credits
(Select one course from the list on page 84)

Social and Behavioral Sciences....................... 6 credits
(Select two courses from at least two disciplines from the list on page 84)

AND

Additional Discipline Studies............................... 6 credits
Select a minimum of six additional credits from the Discipline Studies on page 84, or from these courses:

Foreign Language
FRE 101 Elementary French I ......................4 credits
FRE 102 Elementary French II ....................4 credits
GER 101 Elementary German I ....................4 credits
GER 102 Elementary German II ....................4 credits
SPA 101 Elementary Spanish I ....................4 credits
SPA 102 Elementary Spanish II ....................4 credits

Computer Science
CIS 105 Computer Applications and Information Technology ..................3 credits

Verbal Communications
SPT 120 Public Speaking .............................3 credits

PLUS

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 199s and 299s.
EDU 200 Introduction to Education (if not taken as part of core)..................3 credits
EDU 201 Substitute Teaching in the Schools ..3 credits
LAN 120 Conversational Navajo I ..............3 credits
LAN 121 Conversational Navajo II ..............3 credits
LAN 125 Conversational Apache I .............3 credits
LAN 126 Conversational Apache II .............3 credits
LAN 160 Beginning American Sign Language ........................................3 credits
LAN 161 Intermediate American Sign Language .......................................3 credits
POS 221 Arizona Constitution and Government 1 credit
School Age Specialization – CP & CAS

Why study School Age?
The School Age area of specialization is designed for individuals who are working with school age children and want to further develop their knowledge and skills specific to this age group. Learn ways to provide a variety of activities and materials that encourage spontaneous expression and expand children’s imagination.

All NPC early childhood development programs of study can lead to a national Child Development Associate (CDA) Credential™, the most widely-recognized credential in early childhood education. Based on a core set of competency standards, the CDA Credential™ is a key stepping stone on the path of career advancement for early care professionals as they work toward becoming qualified teachers of young children.

- In Arizona, K-3 teachers are now required to have birth to 8-years-old educator/caregiver experience.

Certificate is Foundational
The Certificate of Proficiency (CP) lays the foundation for both the Certificate of Applied Science (CAS) and Associate of Applied Science (AAS) degree.

ECD – School Age (CP) • 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 250 Child Development I .......................................... 1 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.

ECD – School Age (CAS) • 32 credits

Complete the ECD – School Age CP ........................................... 26 credits
PLUS
ENL 101 College Composition I ................................. 3 credits
And one of the following mathematics courses:
    MAT 103, MAT 105, MAT 112, MAT 142, MAT 152,
    MAT 161 or MAT 162 ............................................. 3 credits

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Students interested in Early Childhood School Age Associate of Applied Science (AAS) degree must complete the foundational School Age Certificate of Proficiency (CP) and Certificate of Applied Science (CAS).

Check with your academic adviser to ensure classes meet your educational objectives. The Associate of Applied Science (AAS) degree is not intended for university transfer, preparing graduates to immediately enter the workforce.

Employment of childcare workers is projected to grow 14 percent from 2012 to 2022, about as fast as the average for all occupations. Growth is expected due to increases in the number of children who require childcare and continued demand for preschool programs.

The median national hourly wage was $9.38 in May 2012. 

Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data online at www.npc.edu/early-childhood-studies.
Early Childhood Studies (ECD)

Special Needs Specialization – CP & CAS

Why study Special Needs?
The Early Childhood Special Needs area of specialization is designed for caregivers and educators of children with disabilities, chronic or terminal illnesses. Parents, grandparents and respite givers can also benefit from this training program.

All NPC early childhood development programs of study can lead to a national Child Development Associate (CDA) Credential™, the most widely-recognized credential in early childhood education. Based on a core set of competency standards, the CDA Credential™ is a key stepping stone on the path of career advancement for early care professionals as they work toward becoming qualified teachers of young children.

- In Arizona, K-3 teachers are now required to have birth to 8-years-old educator/caregiver experience.

Certificate is Foundational
The Certificate of Proficiency (CP) lays the foundation for both the Certificate of Applied Science (CAS) and Associate of Applied Science (AAS) degree.

ECD – Special Needs (CP) • 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 credits
- EDU 198 Internship (Occupational/Physical Therapy) .................. 1 credit
- EDU 198 Internship (Speech Therapy) ................................. 1 credit
- EDU 202 Occupational/Physical Therapy Educational Assistant .... 3 credits
- EDU 203 Speech Therapy Educational Assistant .................. 3 credits
- LAN 160 Beginning American Sign Language ...................... 3 credits

ECD – Special Needs (CAS) • 32 credits

*Complete the ECD – Special Needs CP........................................16 credits
- ECD 200 Introduction to Early Childhood Education ............... 3 credits
- ECD 250 Child Development I ............................................. 3 credits

*Required Electives ................................................................4 credits
Four unduplicated credits must be selected as electives. One-half to four credits of ECD/EDU/HUS 199s and 299s may be included in the selection of the four credits

PLUS
- ENL 101 College Composition I .............................................. 3 credits
Select one of the following mathematics courses:
- MAT 103, MAT 105, MAT 112, MAT 142, MAT 152,
- MAT 161 or MAT 162 ................................................. 3 credits

(CP) Certificate of Proficiency  • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree

Cost & Time for Completion
The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/early-childhood-studies.
Early Childhood Studies (ECD)

Special Needs – AAS Degree

Degree Requirements
Students interested in Early Childhood Special Needs Associate of Applied Science (AAS) degree must complete the foundational Special Needs Certificate of Proficiency (CP) and Certificate of Applied Science (CAS).
Check with your academic adviser to ensure classes meet your educational objectives. The Associate of Applied Science (AAS) degree is not intended for university transfer, preparing graduates to immediately enter the workforce.

Career Opportunities
Employment of childcare workers is projected to grow 14 percent from 2012 to 2022, about as fast as the average for all occupations. Growth is expected due to increases in the number of children who require childcare and continued demand for preschool programs.
The median national hourly wage was $9.38 in May 2012.

ECD – Special Needs (AAS) • 64 credits

Complete the ECD – Special Needs CAS ...........................................32 credits

Additional Core Requirements ..................................................21 credits
ECD 100 Providing a Healthy Environment ................................1 credit
ECD 101 The Child's Total Learning 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 175 Professionalism ........................................................1 credit
ECD 216 Transitions ................................................................1 credit

PLUS

These General Education courses

Communications .................................................................3 credits
Select one of the following:
ENL 102 College Composition II ........................................3 credits
ENL 109 Technical Writing ................................................3 credits
SPT 120 Public Speaking ....................................................3 credits

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 lists on page 84.)

AND

Additional Required Elective .................................................1 credit
In addition, a minimum of one unduplicated credit must be selected as an elective. One-half to a total of five credits of ECD/EDU/HUS 199s and 299s may be included as Required Electives toward the AAS degree.

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Transfer Degree

Associate of Arts in Elementary Education (AAEE)

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 transfer degree that provides 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.

Associate of Arts in Elementary Education (AAEE) • 64 credits

Completion of the 35 general education course credits fulfills requirements for the Arizona General Education Curriculum (AGEC-A) for the Associate of Arts in Elementary Education degree. (see What is AGEC? – page 83)

General Education courses ..........................................................35 credits

Communications .......................................................................6 credits
(Select two courses from the list on page 84)

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 credits
MAT 152 Advanced Algebra ......................................................3 credits

Discipline Studies

Arts and Humanities .................................................................9 credits
(Select three courses from at least two disciplines from the list on page 84)

Physical and Biological Science ................................................8 credits
(Select two courses from the list on page 84)

Social and Behavioral Sciences ...................................................9 credits
(Select three courses from at least two disciplines from the list on page 84.)

Core Requirements .................................................................15 credits
You must complete all 5 courses.
EDU 200 Introduction to Education ...........................................3 credits
EDU 220 Diversity in Education ................................................3 credits
EDU 222 Introduction to Special Education ..............................3 credits
MAT 161 Algebra-based Mathematics for Elementary Teachers I...3 credits
MAT 162 Algebra-based Mathematics for Elementary Teachers II..3 credits

AND

Required Electives .................................................................14 credits
You must successfully complete all three of the following courses:
CIS 105 Computer Applications and Information Technology ......3 credits
POS 221 Arizona Constitution ..................................................1 credit
POS 222 U.S. Constitution .........................................................1 credit

PLUS

Successful completion of one of the following:
EDU 272 Educational Psychology ............................................3 credits
EDU 276 Managing the Learning Environment .........................3 credits
EDU 291 Children’s Literature ..................................................3 credits
ENL 291 Children’s Literature ..................................................3 credits

PLUS

Successful completion of six credits of unduplicated electives from the General Education Requirements list on page 84.

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Also available online at www.npc.edu/college-catalog

Programs and Degrees 123
Education Studies (EDU)

Education Professions & Educational Assistant

Why become a Paraprofessional?
School districts are among the largest employers in NPC’s service area. To help supply the workforce required by the 22 public school districts and the 35 Bureau of Indian Education schools, NPC offers both a Certificate of Proficiency (CP) and Certificate of Applied Science (CAS) to train Educational Assistants and a Education Profession Certificate of Proficiency (CP).

The Education Professions CP can be completed in two semesters and prepares students for the national ParaPro Assessment for individuals working as teaching assistants or serving as substitute teachers.

The Educational Assistant programs prepare you to work under the supervision of a teacher to help pupils better understand the material presented in class and adapt the information to their learning style.

Career Opportunities
Employment of teacher assistants is projected to grow 9 percent from 2012 to 2022, about as fast as the average for all occupations. Employment growth is expected due to increases in student enrollment in elementary and secondary schools as well as in childcare and preschool.

The median annual salary for North Nonmetropolitan Arizona was $21,780 in May 2012.


Cost & Time for Completion
The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/education-studies

Education Professions (CP only) • 20 credits

- ECD 250 Child Development I ................................................... 3 credits
- ECD 251 Child Development II .................................................. 2 credits
- EDU 101 Effective Tutoring ....................................................... 1 credit
- EDU 137 Principles of Child Guidance ........................................ 1 credit
- EDU 138 Managing Children’s Behavior ...................................... 1 credit
- EDU 200 Introduction to Education ........................................... 3 credits
- EDU 201 Substitute Teaching in the Schools ................................ 3 credits
- EDU 222 Introduction to Special Education .................................. 3 credits
- EDU/CIS 286 Educational Technology ........................................ 3 credits

Educational Assistant (CP) • 26 credits

- ECD 108 Techniques for Observing Children ................................ 1 credit
- ECD 250 Child Development I ................................................... 3 credits
- ECD 251 Child Development II .................................................. 2 credits
- 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 credits
- EDU 200 Introduction to Education I ......................................... 3 credits
- EDU 201 Substitute Teaching in the Schools ................................ 3 credits

Educational Assistant (CAS) • 32 credits

Complete the Educational Assistant CP ....................................... 26 credits

PLUS

- ENL 101 College Composition I ............................................... 3 credits

Mathematics .............................................................................. 3 credits

Select one of the following mathematics courses:
- MAT 103, MAT 105, MAT 112, MAT 142, MAT 152,
- MAT 161 or MAT 162

Direct to Work
Education Studies (EDU)

Special Needs Educational Assistant

Special Needs Educational Assistant (CP) • 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 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

Special Needs Educational Assistant (CAS) • 32 credits

Complete the Special Needs

**Educational Assistant CP..................... 16 credits**

ECD 250 Child Development I .................... 3 credits
EDU 200 Introduction to Education .............. 3 credits

**Required Electives................................ 4 credits**

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

PLUS

ENL 101 College Composition I ................... 3 credits
And one of the following mathematics courses:
MAT 103, MAT 105, MAT 112, MAT 142, MAT 152, MAT 161 or MAT 162 ......................3 credits

Special Needs Educational Assistant (AAS) • 64 credits

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 credits
ECD 250 Child Development I ................. 3 credits
ECD 251 Child Development II ................... 2 credits
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 credits
EDU 200 Introduction to Education I .......... 3 credits
EDU 201 Substitute Teaching in the Schools ..3 credits
EDU 202 Occupational/Physical Therapy
  Educational Assistant..........................3 credits
EDU 203 Speech Therapy Educational Assistant 3 credits
LAN 160 Beginning American Sign Language .3 credits

PLUS these General Education courses

Communications ...................................... 6 credits
ENL 101 College Composition I ................... 3 credits
Select one of the following:
ENL 102 College Composition II ................... 3 credits
ENL 109 Technical Writing ....................... 3 credits
SPT 120 Public Speaking .......................... 3 credits

Mathematics........................................... 3 credits
MAT 105 Mathematics for General Education .3 credits

Discipline Studies (per the list on page 84) .... 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 lists.)

AND

Required Elective................................. 8 credits

Eight unduplicated credits (100 level or higher) must be selected from ECD/EDU/EMT/LAN/SPA courses as electives. One-half to six credits of ECD/EDU/EMT/ LAN/SPA 199s and one-half credit to six credits of ECD 299s may be included in the selection of the eight credits which are included as Required Electives toward the AAS degree.
Special Needs Educational Assistant – AGS Degree

Why become an Assistant?
The Special Needs Educational Assistant works under the supervision of a teacher with special education students. These students often attend regular classes, and teacher assistants help them understand the material and adapt the information to their learning style. With students who have more severe disabilities, assistants may work with them in separate classes. Teacher assistants help these students with basic needs, such as eating or personal hygiene. With young adults, they may help students with disabilities learn skills necessary for them to find a job or live independently after graduation.

Degree Requirements
Students interested in the Special Needs Educational Assistant Associate of Applied Science (AAS) degree must complete the Special Needs Educational Assistant Certificate of Proficiency (CP) and Certificate of Applied Science (CAS). Check with your academic adviser to ensure classes meet your educational objectives.

The specialized AGS degree can provide you with recognized learning credentials to meet work-related course mandates while also pursuing general education courses that may serve as the foundation for a bachelor’s degree. The AGS degree offers flexibility if you are considering a possible transfer to a university. However, there is no guarantee the general education requirements for the AGS will transfer to an Arizona public university.

See the full description of the Associate of General Studies (AGS) degree on page 86.

Special Needs Educational Assistant (AGS) • 64 credits

Core Requirements ........................................ 21 credits
ECD 136 Understanding How Children Learn .... 1 credit
ECD 200 Introduction to Early Childhood Education or EDU 200 Introduction to Education .... 3 credits
ECD 222 Young Children with Special Needs .. 3 credits
ECD 250 Child Development I ....................... 3 credits
EDU 198 Internship (Occupational/Physical Therapy) ...................... 1 credit
EDU 198 Internship (Speech Therapy) ....................... 1 credit
EDU 202 Occupational/Physical Therapy Educational Assistant ....................... 3 credits

EDU 203 Speech Therapy Educational Assistant ....................... 3 credits
LAN 160 Beginning American Sign Language ... 3 credits
PLU Required Electives .................................. 12 credits
Select 12 unduplicated credits, 100 level or higher, from ECD/EDU/EMT/LAN/SPA as electives.

PLUS
These General Education courses
Communications ........................................... 6 credits
ENL 101 College Composition I ..................... 3 credits
ENL 109 Technical Writing ........................... 3 credits
ENL 102 College Composition II .................... 3 credits

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 credits
MAT 112 Algebra II: Intermediate .................. 3 credits

Discipline Studies ....................................... 16 credits
Arts and Humanities .................................... 6 credits
(Select two courses from at least two disciplines from the list on page 84)
Physical and Biological Science ..................... 4 credits
(Select one course from the list on page 84)
Social and Behavioral Sciences ..................... 6 credits
(Select two courses from at least two disciplines from the list on page 84)

AND
Additional Discipline Studies ....................... 6 credits
Select a minimum of six additional credits from the Discipline Studies on page 84, or from these courses:
Foreign Language
FRE 101 Elementary French I ....................... 4 credits
FRE 102 Elementary French II ...................... 4 credits
GER 101 Elementary German I ..................... 4 credits
GER 102 Elementary German II .................... 4 credits
SPA 101 Elementary Spanish I ...................... 4 credits
SPA 102 Elementary Spanish II .................... 4 credits

Computer Science
CIS 105 Computer Applications and Information Technology ................... 3 credits

Verbal Communications
SPT 120 Public Speaking ............................. 3 credits
Fire Science (FRS)

Certificate Options – CP & CAS

Northland Pioneer College’s Fire Science program is designed to:
1. Prepare students for a career in Fire Science or a related field;
2. Provide students with a better understanding of fire and related hazards and challenges faced in providing public safety services, and
3. Provide training to professional fire service personnel in order that they may perform their duties in the safest, most efficient means possible.

The curriculum is designed after the U.S. Fire Administration’s National Fire Academy (NFA) Fire and Emergency Services Higher Education (FESHE) model in order to provide consistent training as offered in participating colleges around the United States.

Degree Requirements

The Fire Science Certificate of Proficiency (CP) program prepares you for service as a firefighter in rural settings. These certificates emphasize professional firefighting skills corresponding to the everyday demands of the profession. It is designed for both individuals serving in the profession as firefighters and as a preparatory program for those seeking a career in firefighting.

Fire Science (CAS) • 34 credits

FRS 104 Firefighter I & II ..............................................................10 credits
FRS 201 Fire Protection Systems ..................................................3 credits
FRS 202 Principles of Emergency Services ...................................3 credits
FRS 203 Fire Prevention .............................................................3 credits
FRS 207 Building Construction for Fire Prevention ...................3 credits
FRS 208 Principles of Fire and Emergency Services
  Safety and Survival ................................................................3 credits

PLUS
ENL 101 College Composition I ...................................................3 credits

Mathematics .................................................................................3 credits

Complete one of the following mathematics courses, or any mathematics course for which MAT 112 is a prerequisite:
MAT 101 Principles of Fire and
  Emergency Services Administration ........................................3 credits
MAT 138 Legal Aspects of Emergency Services ...........................3 credits

FRS Firefighter (CP) • 18 credits

FRS 104 Firefighter I & II ..............................................................10 credits
FRS 110 Hazardous Materials for First Responders ....................2 credits
FRS 126 Rope Rescue I ...............................................................1 credit
FRS 139 Confined Space Operations ...........................................3 credits
FRS 150 Wildland Firefighter ......................................................2 credits

FRS Driver/Operator (CP) • 24 credits

Complete the Firefighter Certificate of Proficiency (CP) .......................18 credits
FRS 135 Fire Protection Hydraulics and Water Supply ...................3 credits
FRS 137 Strategies and Tactics ....................................................3 credits

FRS Leadership (CP) • 24 credits

Complete the Firefighter Certificate of Proficiency (CP) .......................18 credits
FRS 101 Principles of Fire and
  Emergency Services Administration ........................................3 credits
FRS 138 Legal Aspects of Emergency Services ...........................3 credits

See Paramedicine on page 139
Fire Science (FRS)

Associate of Applied Science (AAS) Degree

First Responders
Not only is fighting fires dangerous and complex, as a firefighter you are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to treat injuries or perform other vital functions. In addition, some firefighters work in hazardous materials units that are specially trained for the control, prevention and cleanup of dangerous substances.

Through cooperation with local fire departments, you’ll train to deal with these and other fire situations, as well as the use of specialized emergency equipment.

Cost & Time for Completion
The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/fire-science.

Career Opportunities
Employment of firefighters is projected to grow 7 percent from 2012 to 2022, slower than the average for all occupations. Competition for jobs will likely be intense. Physically fit applicants with high test scores and paramedic training should have the best job prospects.

The median annual salary for North Nonmetropolitan Arizona was $31,150 in May 2012.


Fire Science (AAS) • 64 credits

Complete the Fire Science CAS ..................................................34 credits

Required Electives...........................................................................9 credits

Complete a minimum of 9 credit hours from the following:

- FRS 101 Principles of Fire and Emergency Services Administration ..................................................3 credits
- FRS 110 Hazardous Materials for First Responder ..............................................................2 credits
- FRS 126 Rope Rescue I ........................................................................................................1 credit
- FRS 127 Rope Rescue II ....................................................................................................1 credit
- FRS 128 Rope Rescue III ..................................................................................................1 credit
- FRS 132 Fire Investigation I ..............................................................................................3 credits
- FRS 135 Fire Protection Hydraulics and Water Supply .........................................................3 credits
- FRS 137 Strategies and Tactics .........................................................................................3 credits
- FRS 138 Legal Aspects of Emergency Services .................................................................3 credits
- FRS 139 Confined Space Operations ..................................................................................3 credits
- FRS 141 Fire Service Communication ...............................................................................3 credits
- FRS 150 Wildland Firefighter ............................................................................................2 credits

Unrestricted Electives........................................................................9 credits

Any unduplicated courses at the 100 or higher level.

PLUS

These General Education courses

Communications .................................................................................3 credits

Select one of the following:

- ENL 102 College Composition II ..................................................................................3 credits
- ENL 109 Technical Writing ..............................................................................................3 credits
- SPT 120 Public Speaking .................................................................................................3 credits

Discipline Studies (per the list on page 84) ..............................................9 credits

Select one course from the Arts and Humanities ......................................3 credits

Social and Behavioral Sciences ...................................................................6 credits

PSY 101 Introduction to Psychology ..............................................................3 credits

and any non-PSY course from the Social and Behavioral Sciences list.

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Why become a Residential Child/Youth Assistant?

Know how to manage time effectively?
Have patience and understanding and good communication skills?
Couple these with working with children and young adults in residential group care facilities, such as boarding schools, dormitories, group homes or even private residences and you might find a rewarding career as a Residential Child/Youth Assistant. The Child/Youth Assistant provides assistance in everyday living and guidance in completing tasks.

NPC’s Residential Child/Youth Care Assistant program combines courses from several disciplines into an Associate of Applied Science (AAS) degree or Certificate of Applied Science (CAS) and Proficiency (CP).

Career Opportunities

Nationally employment of residential child/youth assistants is projected to grow below the average for all occupations. Locally, employment growth tends to be in residential dorms in rural areas, where there are mandated requirements for educational growth for workers.

The median annual salary for residential child/youth assistants ranged from $19,940 to $31,300 in May 2012, with higher ranges being in specialized disability or substance abuse facilities.

Residential Child/Youth Care Assistant (CAS)

• 36 credits

Complete the Child/Youth Care CP .................................................19 credits
Any CIS course ........................................................................3 credits
ECD 250 Child Development I......................................................3 credits
ECD 251 Child Development II....................................................2 credits
Electives .................................................................................3 credits

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.

PLUS

ENL 101 College Composition I.................................................3 credits
Mathematics .............................................................................3 credits

Select one of the following mathematics courses:
MAT 103 Business Mathematics .............................................3 credits
MAT 105 Mathematics for General Education ...................3 credits

Child/Youth Care (CP) • 19 credits

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 credits
ECD 152 Learning Environment for School Agers.....................1 credit
ECD 153 Guidance Principles for School Agers........................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 credits
HUS 252 Building Relationships................................................2 credits
HUS 253 Teaching Discipline ....................................................2 credits
HUS 256 Understanding Child Development............................2 credits
Residential Child/Youth Care – AAS Degree

Cost & Time for Completion
The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/human-services. During 2012-13, no students completed this degree or certificate program.

Need help paying for classes?
Many students can qualify for financial aid if they take the time to submit the Free Application for Federal Student Aid (FAFSA), available online at https://fafsa.ed.gov.

Apply early, as the process can take 4-6 weeks. You should have all of your paperwork submitted to the Financial Aid Office by the Priority Deadlines:
◊ April 15 for Fall Semester
◊ October 15 for Spring
◊ March 15 for Summer

Residential Child/Youth Care Assistant (AAS)
• 64 credits

Complete the Residential Child/Youth Care CAS .........................36 credits
CIS: Any unduplicated course ..........................................................3 credits
These additional Core Requirements ..............................................5 credits
ECD 221 Stress Management for Educators .................................2 credits
ECD or EDU Internship ...................................................................1 credit
HUS 180 Cross-Cultural Helping Skills .........................................2 credits
Additional Required Electives .......................................................10 credits
An additional 10 unduplicated credits must be selected from any 100-level or above courses. Up to six credits of 199 workshops may be included in the AAS degree total of 13 elective credits.

PLUS
These General Education courses
Communications ..............................................................................3 credits
Select one of the following:
ENL 102 College Composition II ...................................................3 credits
ENL 109 Technical Writing .............................................................3 credits
SPT 120 Public Speaking ..................................................................3 credits
Discipline Studies (per the list on page 84) .................................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.

(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Industrial Maintenance & Operations (IMO)

Why study IMO?
Are you a good problem solver with strong mechanical and technical skills? Do you have a familiarity with computers? If so, you might consider a career in the well-paying industrial maintenance and operations field. A degree or certificate from the NPC Industrial Maintenance & Operations program can provide you with that critical edge in landing a job in this field.

NPC’s 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.

Career Opportunities
According to the U.S. Bureau of Labor Statistics (BLS), due to the large number of retirements of baby boom workers in the electric power industry, job opportunities are predicted to be excellent for well-qualified applicants. Most entry-level workers start as helpers or laborers before advancing to more responsible positions such as stationery engineers, boiler operators, dispatchers, distributors and plant operators. The median salary for boiler operators in Arizona is $48,220, plant operators earned a median salary of $58,080 and dispatchers/distributors earned nearly $77,680.

(U.S. BLS, May 2012, SOC 51.8021)

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.

Areas of Specialization

Electrical (CP) • 24 credits
IMO 151 Electrical Level I ........................................................6 credits
IMO 152 Electrical Level II .......................................................6 credits
IMO 153 Electrical Level III ......................................................6 credits
IMO 154 Electrical Level IV ......................................................6 credits

Industrial Plant Operations (CP) • 24 credits
IMO 210 Power Principles I ......................................................6 credits
IMO 211 Power Principles II .....................................................6 credits
IMO 212 Power Principles III ....................................................6 credits
IMO 213 Power Principles IV .....................................................6 credits

Instrumentation (CP) • 28 credits
IMO 155 Instrumentation Level I ...............................................7 credits
IMO 156 Instrumentation Level II ..............................................7 credits
IMO 157 Instrumentation Level III ............................................7 credits
IMO 158 Instrumentation Level IV .............................................7 credits

Mechanical Maintenance (CP) • 24 credits
IMO 230 Mechanical Maintenance I ..........................................6 credits
IMO 231 Mechanical Maintenance II .........................................6 credits
IMO 232 Mechanical Maintenance III ........................................6 credits
IMO 233 Mechanical Maintenance IV ........................................6 credits

Operations/Maintenance (CP) • 28 credits
IMO 201 Introduction to Industrial Maintenance .........................4 credits
IMO 210 Power Principles I ......................................................6 credits
IMO 211 Power Principles II .....................................................6 credits
IMO 230 Mechanical Maintenance I .........................................6 credits
IMO 231 Mechanical Maintenance II .........................................6 credits

Wastewater Collection and Treatment (CP)
• 18 credits
IMO 140 Wastewater Collection and Treatment I .......................6 credits
IMO 141 Wastewater Collection and Treatment II ....................6 credits
IMO 142 Wastewater Collection and Treatment III ....................6 credits

Water Supply Treatment (CP) • 18 credits
IMO 130 Water Supply and Treatment I .....................................6 credits
IMO 131 Water Supply and Treatment II ..................................6 credits
IMO 132 Water Supply and Treatment III .................................6 credits
Industrial Maintenance and Operations (IMO)

Certificate (CAS) & AAS Degree Options

Hybrid Classes
Instructional emphasis is placed on foundational mathematics skills as you learn the basic mechanical, pneumatic, hydraulic, electrical, thermal and sensory control systems found in today's modern industries.

Lecture classes on the "operations" segment of the IMO program are offered online via the Internet; laboratory classes take place one evening a week at the Coronado Generating Station in St. Johns, the Cholla Power Plant in Joseph City, the Navajo Generating Station in Page and the Tucson Electric Power Generating Station in Springerville. (Check current semester’s class schedule for hands-on component scheduling.)

Cost & Time for Completion
The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/industrial-maintenance-operations.

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

Certificate of Applied Science (CAS) • 30-34 credits

Note: A Certificate of Applied Science (CAS) is NOT available in Wastewater Collection & Treatment or Water Supply Treatment

Complete these General Education courses:
ENL 101 College Composition I .................................................3 credits

Mathematics ..................................................................................3 credits
Complete one of the following mathematics courses, or any mathematics course for which MAT 109 is a prerequisite:
MAT 101 Basic Technical Mathematics ......................................3 credits
MAT 109 Algebra I: Introductory ...................................................3 credits

PLUS the CP in your area of specialization:
Electrical CP ..............................................................................24 credits
Industrial Plant Operations CP ..................................................24 credits
Instrumentation CP ......................................................................28 credits
Mechanical Maintenance CP ......................................................24 credits
Operations/Maintenance CP .......................................................28 credits

Associate of Applied Science (AAS) • 64 credits

Complete the CAS in your area of specialization:
Electrical CAS ..............................................................................30 credits
Industrial Plant Operations CAS ..............................................30 credits
Instrumentation CAS .....................................................................34 credits
Mechanical Maintenance CAS ..................................................30 credits
Operations/Maintenance CAS ...................................................34 credits

Additional Required Electives ......................................................15 credits
All areas of specialization require the completion of a minimum of 15 credits from the following:
BUS 103 Success on Your Job ......................................................2 credits
BUS 105 Techniques of Supervision .........................................3 credits
BUS 144 Professional Office Skills ............................................3 credits
BUS 231 Microsoft Office Level 1 ..............................................3 credits
Any unduplicated IMO courses at 100 or higher level ..........4 credits

Unrestricted Electives .................................................................2-6 credits
Select 2 or 6 credits (depending on selected area of specialization) from any unduplicated 100 or higher level courses.

PLUS these General Education courses
Communications ........................................................................3 credits
Select one of the following:
ENL 102 College Composition II ..............................................3 credits
ENL 109 Technical Writing .........................................................3 credits

Computer Science ......................................................................3 credits
CIS 105 Computer Applications & Information Technology ....3 credit

Discipline Studies (per the list on page 84) ..................................7 credits
Select one course from the Arts and Humanities list .............3 credits
Select one course from the Physical and Biological Sciences list ..4 credits

(CP) Certificate of Proficiency
(CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree
Mechatronics (MET)

Mechatronics Engineering Technology AAS Degree

Known by several terms, “mechatronics” or “electro-mechanical technician,” the U.S. Bureau of Labor Statistics (BLS) describes the work as combining mechanical technology with electrical and electronic circuitry. NPC’s Mechatronics Engineering Technology (MET) Program prepares students for careers as engineering technicians in diversified manufacturing. Students gain knowledge and skills in blueprint reading, CAD drawing, mechanics, pneumatics, hydraulics, electricity, motors, motor control, programmable logic controls, robotics and motion control, process control, instrumentation and computer-integrated manufacturing. Emphasis is placed on predictive maintenance, troubleshooting and quality assurance.

Career Opportunities

Mechatronics is one of the new and emerging growth areas for employment opportunities. Local career opportunities exist in all Northland district communities and throughout the state and nation. Technical employers include power plants, mining operations, various utilities, communications companies and small to medium manufacturing companies.

The median annual salary for North Nonmetropolitan Arizona was $54,070 in May 2012.


For additional information about the Mechatronics Engineering Technology Program, visit www.npc.edu/mechatronics, or contact the Program Coordinator at the Painted Desert Campus, (800) 266-7845, ext. 7360.

<table>
<thead>
<tr>
<th>Mechatronics (AAS) • 66 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Requirements</strong></td>
</tr>
<tr>
<td>MET 110 Manufacturing Fundamentals</td>
</tr>
<tr>
<td>MET 120 Industrial Mechanics I</td>
</tr>
<tr>
<td>MET 130 Industrial Electrical Systems</td>
</tr>
<tr>
<td>MET 140 Introduction to Programmable Logic Controllers</td>
</tr>
<tr>
<td>MET 150 Industrial Mechanics II</td>
</tr>
<tr>
<td>MET 160 Rotating Electrical Machines</td>
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<tr>
<td>MET 200 Robotics and Motion Control</td>
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<tr>
<td>MET 210 Process Control &amp; Instrumentation</td>
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<tr>
<td>MET 220 Advanced Programmable Logic Controllers</td>
</tr>
<tr>
<td>MET 230 Integrated Manufacturing Systems</td>
</tr>
<tr>
<td>MET 240 Mechatronics Application Project</td>
</tr>
</tbody>
</table>

**General Education Requirements**

**Communications** 6 credits

ENL 101 College Composition I 3 credits

Plus one of the following:

ENL 102 College Composition II 3 credits
ENL 109 Technical Writing 3 credits

**Mathematics** 3 credits

Any mathematics course for which MAT 109 is a prerequisite

**Computer Science** 6 credits

CIS 105 Computer Literacy 3 credits
CIS 141 Managing and Maintaining Your PC I (A+) 3 credits

**Discipline Studies (per the list on page 84)** 7 credits

Select one course from either the **Arts and Humanities** or **Social and Behavioral Science** list.

Select one course from the **Physical and Biological Sciences** list.

Partial funding for this program provided through a U.S. Department of Labor Arizona Sun Corridor Get Into Energy Consortium Trade Adjustment Assistance Community College and Career Training grant.
Medical Assistant (MDA)

Certificate (CAS) & AAS Degree Options

The Northland Pioneer College Medical Assistant program trains students for a career providing patient care and physician assistance in medical offices and clinics. Classes include front- and back-office theory and procedures, preparing students for national certification examination. A 160-hour externship is required.

The NPC program meets or exceeds the Arizona State Board of Medical Examiners training requirements. You can be certain you are gaining the necessary knowledge to succeed in this rapidly growing field.

Note: The MDA degree and certificate program does NOT lead into the NPC nursing program.

Career Opportunities

Employment of medical assistants is projected to grow 29 percent from 2012 to 2022, much faster than the average for all occupations. The growth of the aging baby-boom population will continue to spur demand for preventive medical services, which are often provided by physicians. As their practices expand, physicians will hire more assistants to perform routine administrative and clinical duties, allowing the physicians to see more patients.

The median annual salary for North Nonmetropolitan Arizona was $29,840 in May 2012.


Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data online at www.npc.edu/medical-assistant.

Medical Assistant (CAS) • 40 credits

Complete these Core courses

- BIO 160 Introduction to Human Anatomy and Physiology ..........4 credits
- BUS 119 Medical Office Administrative Procedures ................3 credits
- BUS 231 MS Office Level I ..............................................3 credits
- HES 109 Phlebotomy .......................................................4 credits
- HES 170 Medical Terminology for Clinical Health Professionals ..3 credits
- HES 180 Basic Pharmacology ..........................................3 credits
- MDA 124 Clinical Procedures I ...........................................5 credits
- MDA 125 Clinical Procedures II .........................................5 credits
- MDA 126 Medical Assistant Externship ..............................4 credits

*See an NPC academic adviser if selecting the BIO 201/202 option

PLUS these General Education courses

- ENL 101 College Composition I .......................................3 credits
- BUS 133 or any mathematics course .................................3 credits

Associate of Applied Science (AAS) • 64 credits

Complete the Medical Assistant Core courses ..........................34 credits

Required Electives ................................................................9 credits

- Select a minimum of nine credits from the following courses:
  - BUS 105 Techniques of Supervision .................................3 credits
  - BUS 112 Fundamentals of Bookkeeping ...........................3 credits
  - CIS 105 Computer Applications and Information Technology ..3 credits
  - HES 120 Law and Ethics of the Health Care Professional ....3 credits
  - HES 145 Nutrition .........................................................3 credits

Unrestricted Electives .........................................................3 credits

Any unduplicated 100 or higher level course ..........................3 credits

PLUS these General Education courses

Communications ................................................................6 credits

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

Mathematics ........................................................................3 credits

- BUS 133 or MAT 103 or MAT 105 or MAT 109 any mathematics course for which MAT 109 is a prerequisite

Discipline Studies (per the list on page 84)

Arts and Humanities ..........................................................3 credits

Select one course from the Arts and Humanities section.

Social and Behavioral Sciences .........................................6 credits

One course from the Social and Behavioral Sciences list ........3 credits

AND PSY 101 Introduction to Psychology .............................3 credits
The Nursing Assistant Certificate of Proficiency (CP) is designed to provide a curriculum to improve student knowledge about the health care field. Successful completion includes the required course content and hours specified by the Arizona Nurse Practice Act making a student eligible to take the Arizona state test to become a Certified Nursing Assistant (CNA).

This certification not only establishes direct-to-work credentials, it is a creditable foundation for students interested in pursuing other, allied health careers. CNA certification is a mandatory requirement for entering the NPC Nursing Program. Students are required to provide fingerprint identification when applying for the CNA license.

Requirements: To earn the Certificate of Proficiency in Nursing Assistant, a student must complete the program with a grade point average of ‘C’ or better. Additionally, 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. To enter any clinical coursework, a current TB skin test must be completed.

Cost & Time for Completion
The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs.

You can access the current data for the Nursing Assistant (CP) Program online at www.npc.edu/CNA_nursing-assistant.

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Nursing Assistant (CP only) • 20 credits

- ENL 101 or higher, with grade C or better ...........................................3 credits
- HES 120 Law and Ethics of the Health Care Professional ..................3 credits
- HES 145 Nutrition ............................................................................3 credits
- HES 170 Medical Terminology .......................................................3 credits
- MAT 103 or MAT 105 or MAT 109 or MAT 112 or any mathematics course for which MAT 112 is a prerequisite, with grade C or better.................................................................3 credits
- NAT 101 .........................................................................................5 credits
Nursing Studies (NUR)

Program Overview

NPC Nursing Programs include:
• Multiple Exit Program – CNA to RN
• LPN to RN Transition
• Paramedic to RN Transition
• RN Refresher Program

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

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. Similar transfer agreements are available for students desiring to continue their undergraduate nursing studies at Arizona State University or Grand Canyon University. Check with your NPC or university academic adviser or visit www.npc.edu/nursing-programs-LPN-RN

Emphasis:

NPC’s Multiple Exit Program, approved by the Arizona State Board of Nursing, is offered on the Show Low – White Mountain and Winslow – Little Colorado campuses. Many of the required courses for admission and general education courses are available at other NPC locations.

CNA to RN

The CNA to RN 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 and 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.

LPN to RN

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. Additional fees may apply for credit by evaluation. Evaluation and approval of assessed credit does not guarantee admission to the Nursing program. Decisions regarding acceptance are determined by the Nursing Admission Committee.

Requirements:

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

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 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.

• Applicants to the CNA to RN nursing program must hold a current Arizona Certified Nursing Assistant (CNA) license in good standing.

• Applicants to the LPN to RN program must hold a valid Arizona Licensed Practical Nurse (LPN) license that is active and in good standing.

• Applicants to the Paramedic to RN Transition program must be an active certified paramedic with a minimum of one year experience as a paramedic.

• Applicants to the RN Refresher program must acquire a temporary license from the Arizona State Board of Nursing upon acceptance into the NPC program.
LPN to RN Continued

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.

Paramedic to RN Transition

For the student who is currently a certified paramedic and wishes to enter the program to acquire the Associate of Applied Science in Nursing Degree and become a Registered Nurse (RN), the prerequisite course requirements are identical to the Multiple Exit CNA to RN pathway, with the exception of the CNA course.

The student should meet with an NPC academic adviser and provide evidence of certification. Decisions regarding acceptance are determined by the Nursing Admission Committee. Additional fees may apply for credit by evaluation. 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.

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 July 1 for admission to the program.

Admission Selection:

Admission criteria will include: Admission Assessment test composite and cumulative scores, prerequisite GPA, and applicant statement. The factors will be weighted by the committee. Significant weight will be given to the Admission Assessment composite percentage and prerequisite GPA. Admission is contingent upon completion of program prerequisites by July 1.

- 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 accepted with appropriate documentation and approval.
- 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.

Why choose NPC’s Nursing Program?

The NPC program provides you with a quality nursing education at a cost far below comparable nursing programs in the state of Arizona. Our holistically-oriented faculty members are careful to provide you with planned experiences and individualized up-to-date evidence-based instruction and are dedicated to helping you achieve your goals in this demanding field.

For five of the past seven years, NPC’s Nursing Program graduates have exceeded the national average pass rate for the national nursing licensing examination. First-time pass rates for our graduates consistently score in the 90th percentile, a rate surpassing both Arizona and national averages.

Career Opportunities

According to the U.S. Bureau of Labor Statistics, employment of registered nurses is expected to grow 26 percent until 2020, faster than the average for all occupations. The demand for registered nurses is projected to generate 711,900 new jobs over the next eight years, with Arizona RN salaries averaging $71,390 per year and LPN’s averaging $50,290. (SOC 29.1141, 29.2061)

Nursing Studies (NUR)

**Prerequisite Courses Required Before Nursing Program Admission**

Before the student will be considered eligible to enter the Nursing Program, completion of the following prerequisites is required. 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 I .................................. 4 credits
- BIO 201 Human Anatomy and Physiology I ...... 4 credits
- BIO 202 Human Anatomy and Physiology II ... 4 credits
- BIO 205 Microbiology .................................. 4 credits
- CHM 130 Fundamental Chemistry ................. 4 credits
- ENL 101 College Composition I ..................... 3 credits

**Practical Nursing (CAS) • 51 credits**

*Complete these General Education courses*

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

*AND these Core Requirements: ....................... 22 credits*

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

**Registered Nursing (RN) AAS General Education Requirements • 32 credits**

*Communications ........................................ 6 credits*

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

*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

**Cost & Time for Completion**

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data for the Licensed Practical Nursing (CAS) Program online at [www.npc.edu/nursing-programs-LPN-RN](http://www.npc.edu/nursing-programs-LPN-RN).

**Physical and Biological Sciences .................. 20 credits**

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

**Social and Behavioral Sciences .................. 6 credits**

- PSY 240 Developmental Psychology ............... 3 credits

*PLUS one of the following:*

- ANT 102 Cultural Anthropology ..................... 3 credits
- SOC 120 General Sociology ......................... 3 credits

**CNA to RN (AAS) • 72 credits**

*Complete the RN (AAS)*

*General Education Requirements ............ 32 credits*

*Plus, these Core Requirements .................... 40 credits*

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

**Paramedic to RN (AAS) • 65 credits**

*Must have current state Paramedic certification, active practice as a paramedic, minimum of one year of experience as a paramedic.*

*Complete the RN (AAS)*

*General Education Requirements ............ 32 credits*

*Plus, these Core Requirements .................... 33 credits*

- NUR 123 Paramedic to Nurse Bridge Course ........ 11 credits
- NUR 117 Pharmacology I .................................. 2 credits
- NUR 118 Pharmacology II .................................. 2 credits
- NUR 221 Nursing III .................................... 8 credits
- NUR 222 Nursing IV .................................... 8 credits
- NUR 219 NCLEX Review Seminar ................. 2 credits
**Paramedicine (EMT)**

**Certificate (CP & CAS) and AAS Degree**

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### How do I start?

**STEP 1:** Students must first enroll in EMT 240 Basic ECG and Pharmacology, and upon successful completion of the course take an entrance exam and interview for acceptance into the paramedic program.

**STEP 2:** When accepted in the program you will take the core requirement course EMT 244 Paramedic Training I, a 23-credit hour course that meets two full days per week for the fall semester.

**STEP 3:** The following spring semester you take the final paramedicine core course, the 26-credit hour EMT 245 Paramedic Training II.

**Note:** Successful completion of the NPC program also fulfills the Arizona Department of Health Services mandatory requirement of 500 hours of clinical and vehicular hours.

### Prerequisites:

Students interested in earning their EMT-Paramedic must also meet a number of requirements to quality for the NPC program. Applicants must:

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 (or waiver) immunizations.

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### Paramedicine (CP) • 52 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMT 240 Basic ECG and Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>EMT 244 Paramedic Training I</td>
<td>23</td>
</tr>
<tr>
<td>EMT 245 Paramedic Training II</td>
<td>26</td>
</tr>
</tbody>
</table>

*Plus 500 clinical and vehicular hours are mandatory for completion of any paramedic program per AZDHS.*

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### Paramedicine (CAS) • 58 credits

**Complete the Paramedicine CP**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENL 101 English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 101 or MAT 103 or MAT 105 or MAY 109 or MAT 112 or any mathematics course for which MAT 112 is a prerequisite</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus,**

- ENL 101 English Composition I               | 3       |
- MAT 101 or MAT 103 or MAT 105 or MAY 109 or MAT 112 or any mathematics course for which MAT 112 is a prerequisite | 3 |

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### Paramedicine (AAS) • 70 credits

**Complete the Paramedicine CAS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL 102 College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ENL 109 Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>SPT 120 Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus**

**These General Education courses**

**Communications**

Complete one of the following:

- ENL 102 College Composition II              | 3       |
- ENL 109 Technical Writing                  | 3       |
- SPT 120 Public Speaking                    | 3       |

**Discipline Studies (per the list on page 84)**

Arts and Humanities                           | 3       |
Select one course from the Arts and Humanities section.

**Social and Behavioral Sciences**

PSY 101 Introduction to Psychology            | 3       |
AND

One additional non-PSY course from the Social and Behavioral Sciences list | 3 |

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### Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data for the Paramedicine (CP & CAS) Program online at [www.npc.edu/paramedicine](http://www.npc.edu/paramedicine).
Welding (WLD)

Certificates of Proficiency (CP)

Why study Welding?
It takes a special person to become a welder. If you have good eyesight, hand-eye coordination, and manual dexterity coupled with good math, problem-solving, and communication skills, this may be the job opportunity of a lifetime.

Northland’s Welding Program is designed to teach incremental levels of welding skills, which enable students to achieve nationally recognized certifications from the National Center for Construction Education and Research (NCCER) and the AWS, the American Welding Society (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 can obtain Certificates of Proficiency, a Certificate of Applied Science and an Associate of Applied Science degree.

The NPC program also teaches leadership and employability strategies, such as career planning, job search basics and how to interview. You develop techniques to enhance your critical thinking and problem solving abilities.

Welding Training Centers
NPC offers Welding training at three locations:
- 1380 East Thorton Road, Show Low
- 2251 E. Navajo Blvd., Holbrook
- 955 W. 13th West, St. Johns

Gas Metal ARC Welding (MIG) (CP) • 6 credits
- WLD 154 GMAW Plate ..................................................3 credits
- WLD 265 GMAW Pipe ..................................................3 credits

Gas Tungsten ARC Welding (TIG) (CP) • 9 credits
- WLD 155 GTAW Plate ..................................................3 credits
- WLD 267 GTAW Pipe I ..................................................3 credits
- WLD 268 GTAW Pipe II ..................................................3 credits

Plastic Welding (CP) • 8 credits
- WLD 240 Intro to Plastics ..............................................2 credits
- WLD 241 Plastic Welding ...............................................2 credits
- WLD 242 Fabrication of Plastics .....................................2 credits
- WLD 243 Plastic Welding ...............................................2 credits

Shielded Metal ARC Welding (ARC) (CP) • 12 credits
- WLD 152 SMAW Plate I .................................................3 credits
- WLD 153 SMAW Plate II ...............................................3 credits
- WLD 261 SMAW Open V-Butts/Plate I .........................3 credits
- WLD 262 SMAW Open V-Butts/Plate II .........................3 credits

Welding Level I – Entry Level Welder (CP) • 19 credits
- WLD 100 Safety and Math ..............................................2 credits
- WLD 150 Symbols, Drawings/Metal Preparation ............2 credits
- WLD 151 Cutting Process and Welding Quality ..........3 credits
- WLD 152 SMAW Plate I .................................................3 credits
- WLD 153 SMAW Plate II ...............................................3 credits
- WLD 154 GMAW Plate ..................................................3 credits
- WLD 155 GTAW Plate ..................................................3 credits

Welding Level II – Advanced Welder (CP) • 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 credits
- WLD 261 SMAW Open V-Butts/Plate I .........................3 credits
- WLD 262 SMAW Open V-Butts/Plate II .........................3 credits
- WLD 263 SMAW Open Root/Plate I ..............................3 credits
- WLD 264 SMAW Open Root/Plate II ..............................3 credits
- WLD 265 GMAW Pipe ..................................................3 credits
- WLD 266 FCAW Pipe ..................................................3 credits
- WLD 267 GTAW Pipe I ..................................................3 credits
- WLD 268 GTAW Pipe II ..................................................3 credits
Certificate (CAS) and AAS Degree Options

Certificate of Applied Science (CAS) • 51 credits

Complete the Welding Level I Entry Level Welder CP.....................19 credits
Complete the Welding Level II Advanced Welder CP......................26 credits

PLUS

ENL 101 College Composition I.................................................3 credits
MAT 101 Basic Technical Mathematics....................................3 credits

Associate of Applied Science (AAS) • 64 credits

Complete the Welding Level I Entry Level Welder CP.....................19 credits
Complete the Welding Level II Advanced Welder CP......................26 credits

PLUS

These General Education courses:

Communications ........................................................................6 credits
ENL 101 College Composition I.................................................3 credits
Complete one of the following:
ENL 102 College Composition II................................................3 credits
ENL 109 Technical Writing .......................................................3 credits
SPT 120 Public Speaking .........................................................3 credits

Mathematics
MAT 101 Basic Technical Mathematics
or MAT 152 Advanced Algebra ..............................................3 credits

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 lists on page 84.

PLUS

Required Electives......................................................................3 credits
Student must complete a minimum of three credits from the following:
WLD 156 AWS Level 1 (Certification Preparation).........................2 credits
WLD 157 AWS Level 1 Certification (Entry Level Welder)..............4 credits
WLD 240 Intro to Plastics.........................................................2 credits
WLD 241 Plastic Welding .........................................................2 credits
WLD 242 Fabrication of Plastics .............................................2 credits
WLD 243 Plastic Welding .........................................................2 credits
WLD 290 Welding Fabrication...................................................3 credits
WLD 291 Internship for Welding ..............................................2 credits

Career Opportunities

According to the U.S. Bureau of Labor Statistics (BLS), prospects should be good for trained welders, especially those familiar with the latest technologies. Almost two out of every three jobs in the manufacturing sector is held by welders, brazers or solderers. Plus, basic welding skills are the same across industries, allowing welders to easily shift from one industry to another, or from one location to another depending on where there is greatest opportunity.

But you don’t have to stray too far from home for a good salary. The BLS reports Arizona was third in the nation for top welder pay (May 2012, SOC 51.4122) where experienced welders earned a median average salary of $40,800.


Cost & Time for Completion

The U.S. Department of Education requires NPC to annually publish cost and time for completion data on Career & Technical Education certificate programs. You can access the current data for the Welding Program online at www.npc.edu/welding.
Turning dreams into reality sometimes requires a little assistance. That’s where a federal Pell Grant and scholarships can help, by providing funds to help you meet educational and other expenses. Start by applying for the Free Application for Federal Student Aid (FAFSA) at fafsa.ed.gov Many scholarships, including those offered by NPC, require completion of the FAFSA. You should start the process at least 4-6 weeks before the Priority Deadlines (Fall: April 15; Spring: October 15; Summer: March 15) to ensure all of your paperwork is completed prior to registration for the upcoming semester.

After you complete your FAFSA, check out www.npc.edu/scholarships for additional scholarships, including College Bound and Finish Line, and other institutional and private awards and grants.