Programs and Degrees

58 Instructional Division and Programs

59 Degrees and Certificates Summary

60 General Education Values Assessment

61 What degrees offered Transfer Agreements

63 Arizona General Education Curriculum (AGEC)

64 General Education Course Options

65 Specific Degree and Certificate Requirements
Instructional Divisions and Programs

Mark Vest, Vice President for Learning and Student Services

Arts and Sciences
Rickey Jackson, Dean
Anthropology
Art
Biology
Chemistry
Early Childhood Development
Economics
English
Film and Digital Video
Geography
Geology
History
Honors Colloquia

Human Services
Humanities
Languages
Mathematics
Music
Philosophy
Photography
Physics
Political Science
Psychology
Sociology
Speech/Theatre

Career and Technical Education
Ms. Peggy Belknap, Dean
Automotive Technology
Business
Community and Corporate Learning
Computer Information Systems
Construction Technology Drafting
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

Education and College and Career Preparation
Vacant, Associate Dean
College and Career Preparation
Education
Human Development

Career and Technical Education
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Automotive Technology
Business
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Construction Technology Drafting
Cosmetology
Cosmetology Instructor
Nail Technician
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Education and College and Career Preparation
Vacant, Associate Dean
College and Career Preparation
Education
Human Development

Apache County Programs
Ms. Tamara Martin, Coordinator
Center Programming (Apache County)
Springerville/Eagar
St. Johns

Allied Health – Health Sciences
Direct Care Worker
Pharmacy Technician
Phlebotomy
Medical Assistant
Nursing Program
RN
LPN to RN
Paramedic to RN
Continuing Nursing Education
Nursing Assistant Training
Paramedicine (EMT)
# Degrees & Certificates Offered

**DEGREES:** AA – Associate of Arts • AAEC – Associate of Arts in Early Childhood (AAEC)  
AAEE – Associate of Arts Elementary Education • ABus – Associate of Business • AS – Associate of Science  
AAS – Associate of Applied Science • AGS – Associate of General Studies  

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

AGEC – Arizona General Education Curriculum

<table>
<thead>
<tr>
<th>Program</th>
<th>Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate of Arts</td>
<td>AA</td>
</tr>
<tr>
<td>Associate of General Studies</td>
<td>AGS</td>
</tr>
<tr>
<td>Associate of Science</td>
<td>AS</td>
</tr>
<tr>
<td>Automotive Technology (ATO)</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Brake and Transmission Systems</td>
<td>CP</td>
</tr>
<tr>
<td>Drive Train, Suspension and Steering, HVAC</td>
<td>CP</td>
</tr>
<tr>
<td>Electrical and Electronics Systems</td>
<td>CP</td>
</tr>
<tr>
<td>Engine Performance</td>
<td>CP</td>
</tr>
<tr>
<td>Engine Repair</td>
<td>CP</td>
</tr>
<tr>
<td><strong>Business (BUS)</strong></td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Accounting Fundamentals</td>
<td>CP</td>
</tr>
<tr>
<td><strong>Associate of Business</strong></td>
<td>ABus</td>
</tr>
<tr>
<td>Entrepreneurship Fundamentals</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Management and Leadership</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Management and Leadership Fundamentals</td>
<td>CP</td>
</tr>
<tr>
<td>Medical Office Technologies</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Medical Office Technologies Fundamentals</td>
<td>CP</td>
</tr>
<tr>
<td>Medical Transcription</td>
<td>CP</td>
</tr>
<tr>
<td>Medical Transcription Fundamentals</td>
<td>CP</td>
</tr>
<tr>
<td>Modern Office Technologies</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Modern Office Technologies Fundamentals</td>
<td>CP</td>
</tr>
<tr>
<td><strong>Computer Information Systems (CIS)</strong></td>
<td></td>
</tr>
<tr>
<td>Commercial Graphics Fundamentals</td>
<td>CP</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Network and PC Support</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Web Development and Graphic Design</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Graphic Design</td>
<td>CP</td>
</tr>
<tr>
<td>Web Development</td>
<td>CP</td>
</tr>
<tr>
<td><strong>Construction Technology (CON)</strong></td>
<td></td>
</tr>
<tr>
<td>Drafting (DRF)</td>
<td>CP</td>
</tr>
<tr>
<td><strong>Cosmetology (COS)</strong></td>
<td></td>
</tr>
<tr>
<td>Cosmetology Instructor</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Nail Technician</td>
<td>CP</td>
</tr>
<tr>
<td><strong>Early Childhood Development (ECD)</strong></td>
<td></td>
</tr>
<tr>
<td>Associate of Arts in Early Childhood</td>
<td>AAEC</td>
</tr>
<tr>
<td>Early Childhood Management</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Family Care</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Infant/Toddler</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Preschool</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>School Age</td>
<td>AAS/CAS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program</th>
<th>Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education (EDU)</td>
<td></td>
</tr>
<tr>
<td>Associate of Arts in Elementary Education</td>
<td>AAEE</td>
</tr>
<tr>
<td>Education Professions</td>
<td>CP</td>
</tr>
<tr>
<td><strong>Film and Digital Video (FDV)</strong></td>
<td>AAS, CAS, CP</td>
</tr>
<tr>
<td><strong>Fire Science (FRS)</strong></td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Firefighter</td>
<td>CP</td>
</tr>
<tr>
<td>Driver/Operator</td>
<td>CP</td>
</tr>
<tr>
<td>Leadership</td>
<td>CP</td>
</tr>
<tr>
<td><strong>Human Services (HUS)</strong></td>
<td></td>
</tr>
<tr>
<td>Residential Child/Youth Care Assistant</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td><strong>Industrial Maintenance and Operations (IMO)</strong></td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Industrial Plant Operations</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Mechanical Maintenance</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Operations/Maintenance</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Wastewater Collection and Treatment</td>
<td>CP</td>
</tr>
<tr>
<td>Water Supply and Treatment</td>
<td>CP</td>
</tr>
<tr>
<td><strong>Mechatronics Engineering Technology (MET)</strong></td>
<td></td>
</tr>
<tr>
<td>Industrial Electrical, Motors and PLC’s</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Industrial Mechanics and Fluid Power</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Electrical and Instrumentation</td>
<td>AAS/CAS</td>
</tr>
<tr>
<td><strong>Medical Assistant (MDA)</strong></td>
<td>AAS/CAS</td>
</tr>
<tr>
<td><strong>Nursing Assistant (NAT)</strong></td>
<td>CP</td>
</tr>
<tr>
<td><strong>Nursing (NUR)</strong></td>
<td></td>
</tr>
<tr>
<td>CNA to RN</td>
<td>AAS</td>
</tr>
<tr>
<td>Paramedic to RN</td>
<td>AAS</td>
</tr>
<tr>
<td>Practical Nursing</td>
<td>CAS</td>
</tr>
<tr>
<td><strong>Paramedicine (EMT)</strong></td>
<td>AAS/CAS</td>
</tr>
<tr>
<td><strong>Welding (WLD)</strong></td>
<td>AAS/CAS</td>
</tr>
<tr>
<td>Welding Level I – Entry Level Welder</td>
<td>CP</td>
</tr>
<tr>
<td>Welding Level II – Intermediate Welder</td>
<td>CP</td>
</tr>
<tr>
<td>Welding Level III – Advanced Welder</td>
<td>CP</td>
</tr>
</tbody>
</table>
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. (AAHE Bulletin, November, 1995, p. 7).

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

Faculty Role

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

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

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

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 Early Childhood (AAEC), 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 63) 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. Although many courses within this degree program 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.

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 College Catalog: 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.

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.

Elective courses

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.
What is AGEC?

Guaranteed Transferability
AGEC stands for Arizona General Education Curriculum, a state-wide 35- or 36-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 toward 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 from other institutions must complete a minimum of 15 credits of AGEC courses at NPC.

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 an AGEC.

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 Requirements
To fulfill AGEC General Education requirements, you must complete 35-36 credits from the list on page 64:

**AGEC-A • 35 credits** See AA Degree, page 65
- 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 70
- 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 67
- 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.
General Education Course Options

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 Early Childhood (AAEC), Associate of Arts in Elementary Education (AAEE), Associate of Business (ABus) and Associate of Science (AS) degrees. (see What is AGEC? – page 63)

**Communications** .............................................................. 6 credits
ENL 101 College Composition I ............................................... 3 credits
ENL 102 College Composition II ............................................. 3 credits
ENL 109 Technical Writing .................................................... 3 credits
SPT 100 Fundamentals of Oral Communication ..................... 3 credits
SPT 120 Public Speaking ....................................................... 3 credits

**Mathematics** .................................................................... 3-4 credits
UNLESS OTHERWISE NOTED IN A SPECIFIC CERTIFICATE OR DEGREE
Program completion of any one of the following courses fulfills the Communications requirement for the second communications course for the Associate of Applied Science (AAS) degree.
ENL 102 College Composition II (**required for AGEC**) ........... 3 credits
ENL 109 Technical Writing ..................................................... 3 credits
SPT 110 Fundamentals of Oral Communications ................... 3 credits
SPT 120 Public Speaking ....................................................... 3 credits

**Discipline Studies** ................................................................. 6-9 credits

**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
MUS 250 World Music ..................................................... 3 credits
PHL 101 Introduction to Philosophy ................................... 3 credits
PHL 103 Introduction to Logic and Critical Thinking ........... 3 credits
PHL 105 Introduction to Ethics ......................................... 3 credits
SPT 130 Introduction to Theatre ...................................... 3 credits
SPT 150 Introduction to Film ........................................... 3 credits
SPT 155 History of Television ........................................ 3 credits

**Physical and Biological Science** ........................................ 3-4 credits
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.
ANT 104 Biological Anthropology and Human Origins .......... 4 credits
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
CHM 130 Fundamental Chemistry .................................. 4 credits
CHM 151 General Chemistry I ....................................... 4 credits
CHM 152 General Chemistry II ..................................... 4 credits
GEO 101 Introduction to Geology I - Physical .................... 4 credits
GEO 110 World Regional Geography ............................. 4 credits
GEO 111 Physical Geography ......................................... 4 credits
GLG 101 Introduction to Geology I - Physical .................... 4 credits
HIS 106 U.S. History since 1877 ..................................... 3 credits
HIS 107 U.S. History to 1877 ........................................ 3 credits
HIS 155 Western Civilization to 1700 .............................. 3 credits
HIS 156 Western Civilization since 1700 ......................... 3 credits
MAT 101 Basic Technical Mathematics ............................. 3 credits
MAT 102 Advanced Algebra ........................................ 3 credits
MAT 104 Business Mathematics ..................................... 3 credits
MAT 105 Technical Mathematics .................................... 3 credits
MAT 107 Algebra I: Intermediate ................................... 3 credits
MAT 112 Algebra II: Intermediate ................................... 3 credits
MAT 125 Introduction to Statistics ................................... 3 credits
MAT 142 College Mathematics ........................................ 3 credits
MAT 152 Advanced Algebra ........................................... 3 credits
MAT 161 Algebra-based Mathematics for Elementary School Teachers I ............................................. 3 credits
MAT 162 Algebra-based Mathematics for Elementary School Teachers II ............................................. 3 credits
MAT 189 Pre-Calculus Algebra/Trigonometry ..................... 3 credits
MAT 211 Technical Calculus ........................................... 4 credits
MAT 221 Calculus I ....................................................... 4 credits
MAT 231 Calculus II ....................................................... 4 credits
MAT 241 Calculus III ..................................................... 4 credits
‡ These courses are **NOT** accepted for transfer credit by all three Arizona state universities.

**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.

‡‡ ANTH 120 Cultural Anthropology .................................. 3 credits
‡‡ ANT 120 Cultural Anthropology .................................. 3 credits
‡‡ ECN 211 Principles of Macroeconomics ......................... 3 credits
‡‡ ECN 212 Principles of Microeconomics ......................... 3 credits
‡‡ GEO 101 Introduction to Geology I - Physical .................... 4 credits
‡‡ GEO 110 World Regional Geography ............................. 4 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 230 Introduction to Psychological Statistics ............ 3 credits
‡‡ PSY 240 Developmental Psychology ............................. 3 credits
‡‡ SOC 120 General Sociology ........................................ 3 credits
‡‡ SOC 121 Social Problems in America ......................... 3 credits
‡‡ SOC 123 Racial, Ethnic and Gender Relations in Modern Society ............................................. 3 credits
‡‡ SOC 225 Sociology of the Family .................................. 3 credits

Northland Pioneer College 2016 – 2017 Catalog
Also available online at www.npc.edu/college-catalog
Associate of Arts (AA) • 64 credits

Completion of the 35 general education and discipline studies course credits fulfills requirements for the Arizona General Education Curriculum (AGEC-A) for the Associate of Arts degree. (see What is AGEC? – page 63)

General Education Courses

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

Mathematics ........................................................................... 3 credits
  Select one of the following:
      MAT 142 College Mathematics with Contemporary Applications ........ 3 credits
      MAT 152 Advanced Algebra .............................................. 3 credits
      Or any mathematics course for which MAT 142 or MAT 152 is a prerequisite.

Discipline Studies

Arts and Humanities ............................................................ 9 credits
  (Select three courses from at least two disciplines from the list on page 64)

Physical and Biological Science ........................................... 8 credits
  (Select two courses from the list on page 64)

Social and Behavioral Sciences .......................................... 9 credits
  (Select three courses from at least two disciplines from the list on page 64)

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

Successful completion of 29 credits of unduplicated university transferrable electives, as described on page 62.

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 minimum 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 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.
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 63), 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 minimum 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 your 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.
- 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 General Studies (AGS) • 64 credits

Students with an associate or higher degree will not be considered for this degree. The AGS degree requires completion of these 31 general education and discipline studies course 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
- ENL 109 Technical Writing ...........................................3 credits

**Mathematics** .................................................................3 credits
- MAT 112 Algebra II: Intermediate ......................................3 credits
- Or any mathematics course for which MAT 112 is a prerequisite.

Discipline Studies

**Arts and Humanities** ....................................................6 credits
- Select two courses from at least two disciplines from the list on page 64

**Physical and Biological Science** .....................................4 credits
- Select one course from the list on page 64

**Social and Behavioral Sciences** .......................................6 credits
- Select two courses from at least two disciplines from the list on page 64

**Additional Discipline Studies** ........................................6 credits
- Select a minimum of six additional credits from the Discipline Studies list on page 64, 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

**Required Electives** ......................................................33 credits
- From any unduplicated courses at 100 or higher level.
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 minimum 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 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 and discipline studies course credits fulfills requirements for the Arizona General Education Curriculum (AGEC-S) for the Associate of Science degree. (see What is AGEC? – page 63)

General Education Courses

Communications ...............................................................6 credits
ENL 101 College Composition I ........................................3 credits
ENL 102 College Composition II .......................................3 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 64)

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 different disciplines, with at least one asterisk (*) course to meet requirements for Contemporary Global, International or Historical Awareness from the list on page 64)

Science/Mathematics Option ........................................6 credits
(Select two courses not taken to satisfy Physical and Biological Sciences requirements listed above.)
ANT 104 Biological Anthropology and Human Origins ........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
BIO 201 Human Anatomy and Physiology I .....................4 credits
BIO 202 Human Anatomy and Physiology II ....................4 credits
BIO 205 Microbiology ................................................4 credits
BIO 241 Human Genetics ............................................3 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
PHY 113 General Physics I ..........................................4 credits
PHY 114 General Physics II ........................................4 credits

Electives .......................................................................28 credits
Successful completion of 28 credits of unduplicated university transferrable electives, as described on page 62.
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/gainful_employment_data_archives.

Certificates of Proficiency (CP)

<table>
<thead>
<tr>
<th>Brake and Transmission Systems (CP) • 13 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATO 103 Safety and Hazardous Materials ................... 2 credits</td>
</tr>
<tr>
<td>ATO 112 Automatic Transmission Systems I .................. 3 credits</td>
</tr>
<tr>
<td>ATO 113 Automatic Transmission Systems II .................. 3 credits</td>
</tr>
<tr>
<td>ATO 114 Brake Systems I ........................................ 3 credits</td>
</tr>
<tr>
<td>ATO 115 Brake Systems II ........................................ 2 credits</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Drive Train, Suspension and Steering, HVAC (CP) • 14 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATO 103 Safety and Hazardous Materials .......................... 2 credits</td>
</tr>
<tr>
<td>ATO 205 Suspension and Steering .................................... 4 credits</td>
</tr>
<tr>
<td>ATO 210 Heating and Air Conditioning Systems ................... 4 credits</td>
</tr>
<tr>
<td>ATO 212 Manual Drive Train ......................................... 4 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical and Electronics Systems (CP) • 11 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATO 103 Safety and Hazardous Materials ................... 2 credits</td>
</tr>
<tr>
<td>ATO 207 Electrical and Electronic Systems I .................. 3 credits</td>
</tr>
<tr>
<td>ATO 208 Electrical and Electronic Systems II .................. 3 credits</td>
</tr>
<tr>
<td>ATO 209 Electrical and Electronic Systems III .................. 3 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engine Performance (CP) • 11 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATO 103 Safety and Hazardous Materials ................... 2 credits</td>
</tr>
<tr>
<td>ATO 109 Engine Performance I .................... 3 credits</td>
</tr>
<tr>
<td>ATO 110 Engine Performance II .................... 3 credits</td>
</tr>
<tr>
<td>ATO 111 Engine Performance III .................... 3 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engine Repair (CP) • 7 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATO 103 Safety and Hazardous Materials ................... 2 credits</td>
</tr>
<tr>
<td>ATO 107 Engine Repair I ...................... 3 credits</td>
</tr>
<tr>
<td>ATO 108 Engine Repair II ...................... 2 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Certificate of Applied Science (CAS) • 31 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete the Electrical and Electronics Systems CP .... 11 credits</td>
</tr>
<tr>
<td>Complete the AAS Level 2 courses ........................ 11 credits</td>
</tr>
<tr>
<td>ATO 111 Engine Performance III ........................... 3 credits</td>
</tr>
<tr>
<td>Communications .................................................. 3 credits</td>
</tr>
<tr>
<td>ENL 101 College Composition I .............................. 3 credits</td>
</tr>
<tr>
<td>Mathematics ..................................................... 3 credits</td>
</tr>
</tbody>
</table>

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64.
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 $38,260 (North Arizona nonmetropolitan area) with higher pay for specialized service technicians working for auto dealerships. (May 2015, 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 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

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
Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64.

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 64.)

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 63)

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 minimum cumulative grade point average of 2.0 on a 4.0 scale.
- Graduates must complete CIS 105 and at least 33 general education credits.
- An 18-credit-hour business core provides foundational business knowledge, as recommended by the Arizona Transfer Committee. This will ensure that when students transfer to state universities they have the core courses that they need to be successful in their upper level businesses courses. Additionally, this business core will ensure that students who graduate with an ABus, and do not further their business education, can be successful in a business environment.
- 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.

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 63)

General Education Courses

Communications ................................................................. 6 credits
ENL 101 College Composition I ............................................. 3 credits
ENL 102 College Composition II ......................................... 3 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 64)

Physical and Biological Science ......................................... 8 credits
(Select two courses from the list on page 64)

Social and Behavioral Sciences .......................................... 6 credits
(Select two courses from at least two disciplines from the list on page 64. 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

Electives Options ............................................................... 3 credits
(Select one additional unduplicated course from either the Arts and Humanities or Social and Behavioral Sciences lists on page 64 to satisfy the requirements of 36 general education credits.)

Business Core ................................................................. 18 credits
BUS 120 Principles of Financial Accounting II ....................... 3 credits
BUS 121 Principles of Accounting – Managerial ..................... 3 credits
BUS 201 Quantitative Methods ............................................ 3 credits
BUS 206 Legal, Ethical, Global and Regulatory Environment of Business ‡ ................................................................. 3 credits
ECN 211 Principles of Macroeconomics .................................. 3 credits
ECN 212 Principles of Microeconomics .................................... 3 credits
‡ Direct Transfer Course to NAU; Elective Transfer Course to ASU, U of A

Electives ......................................................................... 10 credits
Successful completion of 10 credits of unduplicated university transferrable electives, as described on page 62.
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 $33,290 (43-3031-May 2015).

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/gainful_employment_data_archives.

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

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

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

Mathematics ...................................................................................3 credits
Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 EXCEPT for MAT 101, MAT 109, MAT 112, MAT 125 or MAT 142.

Accounting (AAS) • 64 credits

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

PLUS

General Education Courses

Communications .............................................................................3 credits
Select any course under the Communications General Education Course Options (for AAS Degrees) on page 64 EXCEPT for SPT 110 and SPT 120.

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 64.)

AND

BUS 121 Principles of Accounting – Managerial ..............................3 credits
BUS 185 Ethics in Management ..........................................................3 credits
BUS 206 Legal, Ethical, Global and Regulatory Environment of Business ‡ .........................................................3 credits
BUS 210 Principles of Management ..................................................3 credits
ECN 211 Principles of Macroeconomics .............................................3 credits
ECN 212 Principles of Microeconomics .............................................3 credits
‡ Direct Transfer Course to NAU; Elective Transfer Course to ASU, U of A

Unrestricted Electives ................................................................. 6 credits
(Choose from any unduplicated courses at the 100-level or above)
Entrepreneurship Specialization

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 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.

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/gainful_employment_data_archives.

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

Entrepreneurship Fundamentals (CP) • 19 credits

- BUS 100 Introduction to Business ................................................ 3 credits
- BUS 105 Techniques of Supervision .............................................. 3 credits
- BUS 110 Small Business Management .......................................... 3 credits
- BUS 112 Fundamentals of Bookkeeping ........................................ 3 credits
- BUS 202 Professional Customer Service ......................................... 1 credit
- BUS 220 Principles of Marketing .................................................. 3 credits
- BUS 240 Entrepreneurship ........................................................... 3 credits

Entrepreneurship (CAS) • 31 credits

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

PLUS

- BUS 106 Techniques of Personal Finance ...................................... 3 credits
- BUS 210 Principles of Management .............................................. 3 credits
- Communications ............................................................................. 3 credits
- ENL 101 College Composition I ..................................................... 3 credits
- Mathematics ................................................................................... 3 credits

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 EXCEPT for MAT 101, MAT 109, MAT 112, MAT 125 or MAT 142.

Entrepreneurship (AAS) • 64 credits

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

PLUS

General Education Courses

Communications ............................................................................. 3 credits
Select any course under the Communications General Education Course Options (for AAS Degrees) on page 64 EXCEPT for SPT 110 and SPT 120.

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 64.)

AND

- BUS 122 Computerized Accounting with QuickBooks ..................... 3 credits
- BUS 128 Microsoft Excel Applications for Business ........................ 3 credits
- BUS 206 Legal, Ethical, Global and Regulatory Environment of Business ‡ .................................................. 3 credits
- ECN 211 Principles of Macroeconomics ......................................... 3 credits
- ECN 212 Principles of Microeconomics ......................................... 3 credits
- ‡ Direct Transfer Course to NAU; Elective Transfer Course to ASU, U of A

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

(Choose from any unduplicated courses at the 100-level or above)
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 $54,490 to $113,860. (Figures from US BLS May 2015) (SOC 11.2022).

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/gainful_employment_data_archives.

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) • 22 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 202 Professional Customer Service</td>
<td>1</td>
</tr>
<tr>
<td>BUS 203 Introduction to Communication</td>
<td>3</td>
</tr>
<tr>
<td>BUS 210 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 220 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 225 Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 230 Organizational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>BUS 231 Microsoft Office Level I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 238 Financial Management and Budgeting</td>
<td>3</td>
</tr>
</tbody>
</table>

Management and Leadership (CAS) • 31 credits

Complete the Management and Leadership Fundamentals CP...........22 credits

AND

- ECN 211 Principles of Macroeconomics..................................3 credits
- Communications ........................................................................3 credits
- ENL 101 College Composition I..............................................3 credits
- Mathematics ............................................................................3 credits

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 EXCEPT for MAT 101, MAT 109, MAT 112, MAT 125 or MAT 142.

Management and Leadership (AAS) • 64 credits

Complete the Management and Leadership CAS...............................31 credits

PLUS

General Education Courses

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

Select any course under the Communications General Education Course Options (for AAS Degrees) on page 64 EXCEPT for SPT 110 and SPT 120.

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 64.)

AND

- BUS 117 Principles of Financial Accounting I ..........................3 credits
- BUS 150 Administrative Policymaking
- OR BUS 215 Principles of Retail Management ...........................3 credits
- BUS 206 Legal, Ethical, Global and Regulatory Environment of Business‡ .........................................................3 credits
- CIS 105 Computer Applications and Information Technology .......3 credits
- ECN 212 Principles of Microeconomics......................................3 credits
- ‡ Direct Transfer Course to NAU; Elective Transfer Course to ASU, U of A

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

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

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

(General Education Course Options (for AAS Degrees) on page 64 except for MAT 101, MAT 109, MAT 112, MAT 125 or MAT 142.

Medical Office Technologies (AAS) • 64 credits

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

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 231 Microsoft Office Level I ....................................................3 credits
CIS 103 Introduction to Windows.......................................................1 credit

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


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/gainful_employment_data_archives.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 101 Business Grammar</td>
<td>1</td>
</tr>
<tr>
<td>BUS 102 Proofreading Mastery</td>
<td>1</td>
</tr>
<tr>
<td>BUS 103 Success on Your Job</td>
<td>2</td>
</tr>
<tr>
<td>BUS 108 Basic Keyboarding and Document Processing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 126 Vocabulary for the Medical Office</td>
<td>3</td>
</tr>
<tr>
<td>BUS 131 Medical Transcription Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>BUS 155 Microsoft Word Level I</td>
<td>3</td>
</tr>
</tbody>
</table>

Medical Transcription (CAS) • 30 credits

Complete the Medical Transcription Fundamentals CP …………………… 16 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 109 Advanced Keyboarding &amp; Document Processing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 202 Professional Customer Service</td>
<td>1</td>
</tr>
<tr>
<td>BUS 236 Advanced Medical Transcription I</td>
<td>4</td>
</tr>
</tbody>
</table>

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

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

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

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 EXCEPT for MAT 101, MAT 109, MAT 112, MAT 125 or MAT 142.

Medical Transcription (AAS) • 64 credits

Complete the Medical Transcriptions CAS ……………………………… 30 credits

PLUS

General Education Courses

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

Select any course under the Communications General Education Course Options (for AAS Degrees) on page 64 EXCEPT for SPT 110 and SPT 120.

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 64.)

AND

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 100 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 119 Medical Office Administrative Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BUS 170 Written Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>BUS 237 Advanced Medical Transcription II</td>
<td>4</td>
</tr>
</tbody>
</table>

AND

Unrestricted Electives ………………………………………………………… 11 credits

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

The national median annual wage for secretaries and administrative assistants was $35,200 in May 2015.


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/gainful_employment_data_archives.

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

Modern Office Technologies Specialization

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

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 EXCEPT for MAT 101, MAT 109, MAT 112, MAT 125 or MAT 142.

Modern Office Technologies (AAS) • 64 credits

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

PLUS

General Education Courses
- Communications ............................................................................. 3 credits

Select any course under the Communications General Education Course Options (for AAS Degrees) on page 64 EXCEPT for SPT 110 and SPT 120.

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 64.)

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

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

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

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

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/gainful_employment_data_archives.

Computer Information Systems (CAS) • 36 credits

- CIS 105 Computer Applications and Information Technology .........3 credits
- CIS 111 Introduction to Programming ..................................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 150 Digital Culture ....................................................3 credits
- CIS 161 Microsoft Operating Systems ..................................3 credits
- CIS 171 GNU Linux Operating System ................................3 credits
- CIS 245 Database Management and Concepts ...................3 credits
- CIS 280 Systems Analysis and Design ................................3 credits

PLUS

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

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

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 EXCEPT for MAT 101, MAT 103, MAT 109 or BUS 133.

Computer Information Systems (AAS) • 64 credits

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

PLUS

General Education Courses

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

Select any course under the Communications General Education Course Options (for AAS Degrees) on page 64.

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 64.)

Required Electives ..............................................................18 credits

From the list on page 80

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

Stand-alone Certificate of Proficiency (CP)

Commercial Graphics Fundamentals (CP)

- 12 credits
  - CIS 115 Introduction to Graphic Communication Technology .........3 credits
  - CIS 116 Computer Photographic Imaging ..................................3 credits
  - CIS 117 Two-Dimensional Computer Design .......................3 credits
  - CIS 119 Page Layout and Design ........................................3 credits
If you’re interested in the development, maintenance and use of computer systems, software and networks, then information technology (IT) may be the career for you. A great way to start is by earning the industry-recognized A+ and Network+ certifications. These certifications verify to an employer that you can troubleshoot computer hardware and software issues, mobile devices, networking and security issues within varied operating systems.

NPC offers an 18-credit Certificate of Proficiency (CP) program that focuses on the information needed to pass the CompTIA A+ and Network+ exams. We also offer Security+ certification preparation as part of the Certificate of Applied Science (CAS). Our instructors are CompTIA certified so you can be sure they know what it takes to pass the tests. They’ll carefully guide you through the topics covered by the examinations, as well as provide you with the valuable opportunity of obtaining an internship where you’ll gain the recommended 135 hours of hands-on, real-world experience.

Once certified, you’ll have a competitive edge when it comes to hiring and more opportunities within the field of IT. Computer systems and networks are continually being developed and enhanced, making IT a field of almost limitless opportunity. According to the U.S. Bureau of Labor Statistics, nonmetropolitan northern Arizona entry-level salaries average $36,480 for certified IT support techs and $49,410 for network-certified support technicians. The demand for technology professionals will remain high as more and more computers, wireless networks, mobile devices and technologies are integrated into business. Certify your future by enrolling in NPC’s Network & PC Support program.

Network and PC Support (CP) • 18 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 231 Microsoft Office Level I</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 105 Computer Applications and Information Technology</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 141 Managing and Maintaining Your PC I (A+)</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 142 Managing and Maintaining Your PC II (A+)</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 145 Network+ Certification Preparation</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 147 Help Desk/Soft Skills</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Network and PC Support (CAS) • 45 credits

**Complete the Network and PC Support CP.**

**PLUS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 111 Introduction to Programming</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 146 Security+ Certification Preparation</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 148 Applied Networking</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 149 Wireless Networking</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 171 GNU Linux Operation System</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 275 Web Server Administration</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 198 Internship</td>
<td>3 credits</td>
</tr>
<tr>
<td>CIS 280 Systems Analysis and Design</td>
<td>3 credits</td>
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</tbody>
</table>

**Communications**

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

**Mathematics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Select any course under the **Mathematics** General Education Course Options (for CAS and AAS Degrees) on page 64. **EXCEPT** for MAT 101, MAT 103, MAT 109 or BUS 133.

Network and PC Support (AAS) • 64 credits

**Complete the Network and PC Support CAS.**

**PLUS**

**General Education Courses**

**Communications**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Select any course under the **Communications** General Education Course Options (for AAS Degrees) on page 64.

**Discipline Studies**

(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 64.)

**Required Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 credits</td>
</tr>
</tbody>
</table>

**Cost & Time for Completion**

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With the phenomenal growth of the Internet has come an equally astounding rise in the career fields of Web page design and development. To better prepare you for these exciting careers, NPC has revamped this specialization to include training in both graphic design and web 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. In this rapidly expanding digital world, those organizations are looking for someone to provide them with polished, professional websites.

The Web Development and Graphic Design AAS prepares you for tasks ranging from creating web graphics to simple page building and web server administration to the methodologies used for systems analyses and design.

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 $63,490 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/gainful_employment_data_archives](http://www.npc.edu/gainful_employment_data_archives).

### Graphic Design (CP) • 18 credits

- ART 103 Basic Design .................................................. 3 credits
- CIS 113 Multimedia
  - **OR** CIS 118 Graphics, Interactive and Animated ....... 3 credits
- CIS 116 Computer Photographic Imaging ................... 3 credits
- CIS 117 Two-Dimensional Computer Design ............ 3 credits
- CIS 119 Page Layout and Design ............................... 3 credits
- CIS 298 Portfolio .......................................................... 3 credits

### Web Development (CP) • 18 credits

- CIS 105 Computer Applications and Information Technology .... 3 credits
- CIS 171 GNU Linux Operating System .......................... 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 260 Web Design Technologies .............................. 3 credits

### Web and Graphic Design (CAS) • 48 credits

**Complete the Graphic Design CP ........................................18 credits**

**Complete the Web Development CP ..................................18 credits**

**PLUS**

- CIS 125 Effective Communication with Digital Media .......... 3 credits
- CIS 150 Digital Culture .................................................. 3 credits

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

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

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

Select any course under the **Mathematics** General Education Course Options (for CAS and AAS Degrees) on page 64 **EXCEPT** for MAT 101, MAT 103, MAT 109 or BUS 133.

### Web and Graphic Design (AAS) • 64 credits

**Complete the Web and Graphic Design CAS ..................48 credits**

**PLUS**

- CIS 295 Applied Project for CIS ..................................... 3 credits

**General Education Courses**

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

Select any course under the **Communications** General Education Course Options (for AAS Degrees) on page 64.

**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 64.)

**Required Electives .......................................................... 3 credits**

From the CIS AAS Required Electives list on page 80 or General Education Electives on page 64.
Computer Information Systems (CIS)

CIS AAS Required Electives • 3-18 credits

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/gainful_employment_data_archives.

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

To meet the requirements for the Computer Information Systems Associate of Applied Science degree, students must complete 3 to 18 unduplicated credits from this list:

BUS 231 Microsoft Office Level I .......................................................3 credits
CIS 102 Computer Literacy.................................................................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...........................................3 credits
CIS 117 Two-Dimensional Computer Design ....................................3 credits
CIS 118 Graphics, Interactive and Animated ......................................3 credits
CIS 119 Page Layout and Design.....................................................3 credits
CIS 122 Introduction to Computer Presentation Graphics .................1 credit
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 146 Security + Certification Preparation ....................................3 credits
CIS 147 Help Desk/Soft Skills.............................................................3 credits
CIS 148 Applied Networking..............................................................3 credits
CIS 149 Wireless Networking............................................................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 190 Introduction to JavaScript....................................................3 credits
CIS 198 Internship .............................................................................1-3 credits
CIS 199 Workshop .............................................................................1-3 credits
CIS 217 JAVA Programming, Introductory ......................................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 260 Web Design Technologies ....................................................3 credits
CIS 265 Web Programming ...............................................................3 credits
CIS 275 Web Server Administration ................................................3 credits
CIS 280 Systems Analysis and Design ..............................................3 credits
CIS 285 Internet in the Classroom ....................................................1 credit
CIS 286 Educational Technology .......................................................3 credits
CIS 295 Applied Project for CIS .......................................................3 credits
CIS 298 Portfolio ...............................................................................1 to 3 credits
CIS 299 Special Projects ....................................................................3 credits
Construction Technology (CON)

Certificate Options – CP & CAS

Drafting CP

Drafting (CP) • 21 credits

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

CON 102 Introduction to Construction Methods* ........................................3 credits
CON 111 Plan Reading and Employment* ................................................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

Construction CP & CAS

Construction Technology (CP) • 25 credits

CON 101 Jobsite Layout* .......................................................................3 credits
CON 102 Introduction to Construction Methods* ...................................3 credits
CON 111 Plan Reading and Employment* ...........................................3 credits
CON 120 Concrete and Masonry Systems* ..........................................3 credits
CON 126 Framing Systems* ................................................................4 credits
CON 145 Roofing, Thermal and Moisture Protection Systems* ..........3 credits
CON 228 Electrical Systems* ...............................................................3 credits
CON 229 Plumbing and Mechanical Systems* ..................................3 credits

Construction Technology (CAS) • 31 credits

Complete the Construction Technology CP ..............................................25 credits
PLUS
Communications ................................................................................3 credits
ENL 101 College Composition I ..........................................................3 credits
Mathematics ......................................................................................3 credits

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64

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

* NCCER Certified Course

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 NPC’s 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/gainful_employment_data_archives.
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 $30,640 per year (May 2015). 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: $35,440
- Cement masons/concrete finishers: $41,870
- Carpenters: $39,100
- Electricians: $58,360
- Drywall and Ceiling Tile Installers: $36,730
- First-Line Construction Supervisor: $57,550


Construction Technology (AAS) • 64 credits

Complete the Construction Technology CAS .....................................31 credits
AND these Core Courses .........................................................14 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 Cost Estimating, Scheduling and Planning .................3 credits
CON 265 Construction Capstone Portfolio ................................2 credits

PLUS

General Education Courses
Communications .........................................................................3 credits
Select any course under the Communications General Education Course Options (for AAS Degrees) on page 64.

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 64.)

Electives ......................................................................................9 credits
Select any unduplicated 100-level or above courses.

* NCCER Certified Course

Direct to Work
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. (Offered Spring Semester.)

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 I.............................. 2 credits
- COS 133 Nail Technology Basic Practicum Practice II ............................. 2 credits
- COS 134 Nail Technology Advanced Practicum Practice III ..................... 2 credits
- COS 135 Nail Technology Advanced Practicum Practice IV .................... 2 credits
- COS 136 Nail Technology Advanced Practicum Practice V ..................... 2 credits
- COS 137 Nail Technology Advanced Practicum Practice VI .................... 2 credits
- COS 138 Nail Technology Advanced Practicum Practice VII ................... 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/gainful_employment_data_archives.
Cosmetology (COS)

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 – White Mountain Campus in Show Low, Little Colorado Campus in Winslow, and the St. Johns Center (NPC/NAVIT by airport). 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 national salary for hairdressers, stylists and cosmetologists in May 2015 was $28,770, 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

Complete the Cosmetology CP ......................................................52 credits
PLUS
Communications .................................................................3 credits
ENL 101 College Composition I ................................................3 credits
Mathematics ..............................................................................3 credits
Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64

Cosmetology (CAS) • 58 credits

Complete the Cosmetology CP ......................................................52 credits
PLUS
Communications .................................................................3 credits
ENL 101 College Composition I ................................................3 credits
Mathematics ..............................................................................3 credits
Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64

Cosmetology (AAS) • 68 credits

Complete the Cosmetology CAS ..................................................58 credits
PLUS
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 64.)
Why study Early Childhood?
Students interested in the Early Childhood field have several pathways available to them including two degree options – an Associate of Arts in Early Childhood (AAEC) or an Associate of Applied Science (AAS).

The Associate of Arts in Early Childhood degree offers foundational education that enhances good communication skills and provides wide general knowledge while allowing the early childhood student the opportunity to also complete the core early childhood courses leading to a CDA Credential, the most widely-recognized credential in early childhood education. In Arizona, K-3 teachers are also now required to have birth to 8-year old early educator/caregiver experience. Many early childhood settings also are requiring early educators/providers to obtain bachelor degrees in early childhood.

The AAEC degree is designed for students planning to continue their education by transferring to one of the three Arizona public universities. It is specifically designed to fulfill the lower division general education 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.

NPC Requirements
• The Associate of Arts in Early Childhood degree requires a minimum of 64 hours of course credits with a “C” or better in all courses and a minimum 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.

Associate of Arts in Early Childhood (AAEC) • 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 Early Childhood degree. (see What is AGEC? – page 63)

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

<table>
<thead>
<tr>
<th>Communications</th>
<th>6 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL 101 College Composition I</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENL 102 College Composition II</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>3 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>MAT 142 College Mathematics with Contemporary Applications</td>
<td>3 credits</td>
</tr>
<tr>
<td>MAT 152 Advanced Algebra</td>
<td>3 credits</td>
</tr>
<tr>
<td>MAT 189 Pre-Calculus Algebra/Trigonometry</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Or any mathematics course for which MAT 189 is a prerequisite.

Discipline Studies

<table>
<thead>
<tr>
<th>Arts and Humanities</th>
<th>6 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Select two courses from at least two disciplines from the list on page 64)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical and Biological Science</th>
<th>8 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Select two courses from the list on page 64)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social and Behavioral Sciences</th>
<th>9 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Select three courses from at least two disciplines from the list on page 64)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Computer Science</th>
<th>3 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 105 Computer Applications and Information Technology</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>ECD 100 Providing a Healthy Environment</th>
<th>1 credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECD 101 The Child’s Total Learning Environment</td>
<td>1 credit</td>
</tr>
<tr>
<td>ECD 102 Ensuring a Safe Environment</td>
<td>1 credit</td>
</tr>
<tr>
<td>ECD 103 Planned Arrangements and Schedules</td>
<td>1 credit</td>
</tr>
<tr>
<td>ECD 105 Guidance Principles for Encouraging Self-Discipline</td>
<td>1 credit</td>
</tr>
<tr>
<td>ECD 108 Techniques for Observing Children</td>
<td>1 credit</td>
</tr>
<tr>
<td>ECD 110 Building Relationships with Parents Through Communication</td>
<td>1 credit</td>
</tr>
</tbody>
</table>

OR

<table>
<thead>
<tr>
<th>ECD 112 Enhancing Family Involvement</th>
<th>1 credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECD 115 Nutrition in Early Childhood</td>
<td>1 credit</td>
</tr>
<tr>
<td>ECD 120 Enhancing a Positive Self-Concept</td>
<td>1 credit</td>
</tr>
<tr>
<td>ECD 125 Creative Media</td>
<td>1 credit</td>
</tr>
<tr>
<td>ECD 200 Introduction to Early Childhood Education</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECD 250 Child Development I</td>
<td>3 credits</td>
</tr>
<tr>
<td>MAT 161 Algebra-based Mathematics for Elementary Teachers I</td>
<td>3 credits</td>
</tr>
<tr>
<td>MAT 162 Algebra-based Mathematics for Elementary Teachers II</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Additional Electives ............................................... 7 credits

Successful completion of seven credits of unduplicated university transferrable electives, as described on page 62.
Early Childhood Management Specialization

Why study Early Childhood?
The Early Childhood Management specialization is designed for individuals serving as directors of preschool or daycare centers.

The coursework for this specialization does not prepare the student for the national CDA Credential™.

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 $52,760, based on five years of experience in the field.


Certificate is Foundational
The Certificate of Applied Science (CAS) lays the foundation for the 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/gainful_employment_data_archives.

Early Childhood Management (CAS) • 41 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECD 100 Providing a Healthy Environment</td>
<td>1</td>
</tr>
<tr>
<td>ECD 102 Ensuring a Safe Environment</td>
<td>1</td>
</tr>
<tr>
<td>ECD 103 Planned Arrangements and Schedules</td>
<td>1</td>
</tr>
<tr>
<td>ECD 105 Guidance Principles for Encouraging Self-Discipline</td>
<td>1</td>
</tr>
<tr>
<td>ECD 106 Techniques for Observing Children</td>
<td>1</td>
</tr>
<tr>
<td>ECD 110 Building Relationships with Parents Through Communication</td>
<td>1</td>
</tr>
<tr>
<td>ECD 111 Supporting the Growth and Education of Parents</td>
<td>1</td>
</tr>
<tr>
<td>ECD 112 Enhancing Family Involvement</td>
<td>1</td>
</tr>
<tr>
<td>ECD 120 Enhancing a Positive Self-Concept</td>
<td>1</td>
</tr>
<tr>
<td>ECD 128 Incorporating the Children’s Culture</td>
<td>1</td>
</tr>
<tr>
<td>ECD 129 Planning and Implementing a Bilingual Program</td>
<td>1</td>
</tr>
<tr>
<td>ECD 136 Understanding How Children Learn</td>
<td>1</td>
</tr>
<tr>
<td>ECD 175 Professionalism</td>
<td>1</td>
</tr>
<tr>
<td>ECD 198 Internship – (Early Childhood Management)</td>
<td>1</td>
</tr>
<tr>
<td>ECD 200 Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECD 201 Exploring Early Childhood Program Philosophies</td>
<td>1</td>
</tr>
<tr>
<td>ECD 211 Providing Food and Nutrition Services</td>
<td>1</td>
</tr>
<tr>
<td>ECD 231 Planning and Managing an Early Childhood Program</td>
<td>2</td>
</tr>
<tr>
<td>ECD 232 Designing Indoor and Outdoor Environments</td>
<td>2</td>
</tr>
<tr>
<td>ECD 233 Developing Policies and Procedures</td>
<td>2</td>
</tr>
<tr>
<td>ECD 234 Staffing an Early Childhood Program</td>
<td>2</td>
</tr>
<tr>
<td>ECD 235 Budgeting and Financial Management</td>
<td>2</td>
</tr>
<tr>
<td>ECD 236 Marketing the Early Childhood Program</td>
<td>2</td>
</tr>
<tr>
<td>ECD 237 Evaluating an Early Childhood Program</td>
<td>1</td>
</tr>
<tr>
<td>ECD 250 Child Development I...</td>
<td>3</td>
</tr>
</tbody>
</table>

PLUS

Communications ................................................................. 3 credits
ENL 101 College Composition I........................................... 3 credits
Mathematics ........................................................................... 3 credits
Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 EXCEPT for MAT 101

ECD – Early Childhood Management (AAS) • 64 credits

Complete the Early Childhood Management CAS ............................... 41 credits

PLUS

General Education courses
Communications ......................................................................... 3 credits
Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

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 64.)

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.
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.
The Family Care area of ECD specialization 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.

When ready for CDA assessment, you can now take the national CDA exam at NPC Testing Sites in Holbrook and Show Low. Go to www.pearsonassessments.com to register 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/gainful_employment_data_archives.

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 Arranged 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 Science 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 Child Development I ................................................... 3 credit

*ECD 147, 148, 149 may be taken in combination or ECD 250 as a single three-credit class.
Family Care – CAS & AAS Degree Options

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 hourly wage in North Arizona nonmetropolitan area was $10.04 in May 2015.


ECD – Family Care (CAS) • 32 credits

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

PLUS

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

Mathematics ...................................................................................3 credits
Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64.

ECD – Family Care (AAS) • 64 credits

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

PLUS

General Education Courses

Communications .............................................................................3 credits
Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

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 64.)

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
Early Childhood Studies (ECD)

Infant/Toddler Specialization

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 childcare providers that work with children from birth to 3 years of age. NPC’s Infant/Toddler area of specialization 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.

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. Most coursework is competency-based, preparing the student for the national CDA Credential™. When you are ready, you can now take the national CDA exam at NPC Testing Sites in Holbrook and Show Low. Go to www.pearsonassessments.com to schedule the test after submitting CDA assessment application to the Council for Early Childhood Professional Recognition, Washington, D.C. 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>
</tr>
</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>
</tr>
<tr>
<td>ECD 108</td>
<td>Techniques for Observing Children</td>
<td>1</td>
</tr>
<tr>
<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>
<td>2</td>
</tr>
<tr>
<td>*ECD 147</td>
<td>Prenatal and Infant Development</td>
<td>1</td>
</tr>
<tr>
<td>*ECD 148</td>
<td>Toddler Development</td>
<td>1</td>
</tr>
<tr>
<td>*ECD 149</td>
<td>Development of the Preschool Child</td>
<td>1</td>
</tr>
<tr>
<td>ECD 154</td>
<td>Environments for Infants and Toddlers</td>
<td>1</td>
</tr>
<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>
</tr>
<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>*ECD 250</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

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

Mathematics ..............................................................................3 credits
Select any course under the Mathematics General Education Course Options

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

In Arizona, K-3 teachers are now required to have birth to 8-years-old educator/caregiver experience.
Early Childhood Studies (ECD)

Infant/Toddler – AAS Degree

Degree Requirements
The Associate of Applied Science (AAS) ECD-Infant/Toddler degree builds on the foundational Certificate of Applied Science (CAS) and Certificate of Proficiency (CP), requiring completion of an additional 32 credits – 10 general education and 22 required electives.

Check with your NPC 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 hourly wage in North Arizona nonmetropolitan area was $10.04 in May 2015.


ECD – Infant/Toddler (AAS) • 64 credits

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

PLUS

General Education Courses

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

Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

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 64.)

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.

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/gainful_employment_data_archives.
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. This NPC early childhood development area of specialization 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) degree.

Most 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 schedule after submitting CDA Assessment application to the Council for Early Childhood Professional Recognition, Washington, D.C. A photo ID is required to access the testing area.

ECD – Preschool (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 112 Enhancing Family Involvement ............................................. 1 credit
- ECD 113 Fostering Communication and Language Skills .................. 1 credit
- ECD 114 Beginning Mathematical Concepts ........................................ 1 credit
- ECD 115 Nutrition in Early Childhood ................................................... 1 credit
- ECD 116 Sciencing and Discovery ......................................................... 1 credit
- ECD 117 Enhancing Questions and Problem-Solving Abilities ............ 1 credit
- ECD 118 Blocks in Early Childhood Program ........................................ 1 credit
- ECD 120 Enhancing a Positive Self-Concept ....................................... 1 credit
- ECD 123 Music and Creative Movement ............................................. 1 credit
- ECD 124 Dramatic Play in Early Childhood Setting .............................. 1 credit
- ECD 125 Creative Media ..................................................................... 1 credit
- ECD 126 Large Muscle Development ................................................... 1 credit
- ECD 127 Small Muscle Development ................................................... 1 credit
- ECD 136 Understanding How Children Learn .................................... 1 credit
- *ECD 147 Prenatal and Infant Development ....................................... 1 credit
- *ECD 148 Toddler Development .......................................................... 1 credit
- *ECD 149 Development of the Preschool Child ..................................... 1 credit
- ECD 175 Professionalism .................................................................... 1 credit
- ECD 216 Transitions ........................................................................... 1 credit
- *ECD 250 Child Development I ......................................................... 3 credits
- *ECD 147, 148, 149 may be taken in combination or ECD 250 as a single three-credit class.

ECD – Preschool (CAS) • 32 credits

Complete the ECD – Preschool CP ............................................................. 26 credits
PLUS
Communications ......................................................................................... 3 credits
- ENL 101 College Composition I ............................................................. 3 credits
Mathematics ................................................................................................. 3 credits
- Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64

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

Preschool – AAS Degree

Degree Requirements
The Associate of Applied Science (AAS) ECD – Preschool degree builds on the foundational Certificate of Applied Science (CAS), requiring completion of 32 additional credits – 10 general education and 22 required electives. Check with your NPC 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 hourly wage in North Arizona nonmetropolitan area was $10.04 in May 2015.


ECD – Preschool (AAS) • 64 credits

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

PLUS

General Education Courses

Communications ............................................................................... 3 credits
Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

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 64.)

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/gainful_employment_data_archives.
Early Childhood Studies (ECD)

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.

This area of specialization does not prepare students for the 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 216 Transitions ..................................................................................1 credit
ECD 217 Early Literacy ...............................................................................1 credit
*ECD 250 Child Development I ....................................................................3 credits
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
Communications ........................................................................................3 credits
ENL 101 College Composition I .................................................................3 credits
Mathematics ...............................................................................................3 credits
Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64

Section V
Programs
Early Childhood Studies (ECD)

School Age – AAS Degree

Degree Requirements
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.

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 hourly wage in North Arizona nonmetropolitan area was $10.04 in May 2015.


ECD – School Age (AAS) • 64 credits

Complete the ECD – School Age CAS ..................................................32 credits

PLUS

General Education Courses

Communications .............................................................................3 credits
Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

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 64.)

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/gainful_employment_data_archives.
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 minimum 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 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 63)

General Education Courses.............................................. 35 credits

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

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 64)

Physical and Biological Science .....................................8 credits
(Select two courses from the list on page 64)

Social and Behavioral Sciences ......................................9 credits
(Select one of the following and two more courses from at least two disciplines from the list on page 64.)
POS 110 American Government .......................................3 credits
HIS 105 U.S. History to 1877 .........................................3 credits

Core Requirements ......................................................15 credits
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

Required Electives ......................................................6 credits
CIS 105 Computer Applications and Information Technology ......3 credits

PLUS

Successful completion of one of the following:
EDU 276 Managing the Learning Environment ....................3 credits
EDU 286 Educational Technology .....................................3 credits
EDU 291 Children's Literature ...........................................3 credits
ENL 291 Children's Literature ...........................................3 credits

Electives ................................................................. 8 credits
Successful completion of eight credits of unduplicated university transferrable electives, as described on page 62.
Education Studies (EDU)

Education Professions

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 an Education Professions 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.

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 $24,150 in May 2015.


Education Professions (CP only) • 20 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECD 250 Child Development I</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECD 251 Child Development II</td>
<td>2 credits</td>
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<tr>
<td>EDU 101 Effective Tutoring</td>
<td>1 credit</td>
</tr>
<tr>
<td>EDU 137 Principles of Child Guidance</td>
<td>1 credit</td>
</tr>
<tr>
<td>EDU 138 Managing Children’s Behavior</td>
<td>1 credit</td>
</tr>
<tr>
<td>EDU 200 Introduction to Education</td>
<td>3 credits</td>
</tr>
<tr>
<td>EDU 201 Substitute Teaching in the Schools</td>
<td>3 credits</td>
</tr>
<tr>
<td>EDU 222 Introduction to Special Education</td>
<td>3 credits</td>
</tr>
<tr>
<td>EDU/CIS 286 Educational Technology</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

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/gainful_employment_data_archives.

Emergency Medical Technology

See Paramedicine on page 112
The Northland Pioneer College Film and Digital Video program trains students for a career in motion pictures. Foundational courses in the history and theory of film, as well as film aesthetics, pave the way for hands-on courses in the art and craft of several fields of video production, including lighting, cinematography, sound, screenwriting, and editing. Students work with the latest digital tools to produce their own video work in the AAS degree, which acts as a résumé or “short reel” for entry into the professional world of film/video. Students enrolled in NPC’s program will work with Adobe Premiere Pro, an industry standard software.

### Dual Credit Options

Students enrolled in NAVIT and several local high schools may be eligible for dual enrollment credit while pursuing a Film and Digital Video degree at NPC. This allows students to remain in the area and gain valuable experience in the field before possibly pursuing an advanced degree.

### Where are the Jobs?

You don’t have to move to Hollywood to be successful in the film industry. Today, a feature film can be made anywhere with the relatively low cost of technology. As the equipment gets smaller and less expensive, there’s more opportunity to create high quality videos for a local band, business, wedding or event. Most film and digital video graduates will begin as an assistant for an editor, director, producer or camera person.

### FDV Certificate of Proficiency (CP) • 24 credits

- **FDV 130 or SPT 230 Video Production** ..........................................3 credits
- **FDV 140 or SPT 240 Video Editing** .............................................3 credits
- **FDV 150 or SPT 150 Introduction to Film** ....................................3 credits
- **FDV 160 Digital Audio for Film/TV** ............................................3 credits
- **FDV 210 or ENL 210 Screenplay Writing** ....................................3 credits
- **FDV 220 Film Aesthetics** ............................................................3 credits
- **FDV 222 Digital Video Pre-Production Applications** ....................2 credits
- **FDV 232 Digital Video Production Applications** .........................2 credits
- **FDV 242 Digital Video Post-Production Applications** .................2 credits

### FDV Certificate of Applied Science (CAS) • 30 credits

- Complete the FDV CP .................................................................24 credits

**PLUS**

- **Communications** .................................................................3 credits
- **ENL 101 College Composition I** .............................................3 credits
- **Mathematics** ........................................................................3 credits

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64.

### FDV Associate of Applied Science (AAS) • 64 credits

- Complete the FDV CAS ...............................................................30 credits

**PLUS**

#### General Education Courses

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

Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

#### 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 64.)

#### Unrestricted Electives .......................................................... 24 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

### What Kind of Salary?

The Phoenix area is the nation’s eighth largest employer of camera operators for television, video and motion pictures. According to the U.S. Bureau of Labor Statistics, the average annual salary for a camera operator is $42,610, while a film or video editor averages $52,700. Depending on how good you are and what kinds of contacts you’ve made, the sky’s the limit.
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.

Live-train at the Northeast Arizona Training Center (NATC) in Taylor, an “all-risk” facility complete with burn tower, flash chamber and 10-acre defensive driving track.

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

Fire Science (CAS) • 34 credits

- FRS 104 Firefighter I & II ........................................................... 10 credits
- FRS 200 Fire Behavior and Combustion ...................................... 3 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

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

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64
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/gainful_employment_data_archives.

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 $34,600 in May 2015.

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 $18,580 to $23,960 in May 2015, with higher ranges being in specialized disability or substance abuse facilities.


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 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

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

Mathematics .................................................................................................... 3 credits
- Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64
Human Services (HUS)

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/gainful_employment_data_archives.

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

General Education Courses
Communications ................................................................. 3 credits
Select any course under the Communications General Education Course Options (for CAS and AAS degrees) on page 64.

Discipline Studies (Per the lists on page 64) .................. 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 $48,320, plant operators earned a median salary of $45,900 and dispatchers/distributors earned nearly $84,620.

(U.S. BLS, May 2015, SOC 51.8000)

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 208 Introduction to Energy Generation and Distribution ............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 208 Introduction to Energy Generation and Distribution ............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/gainful_employment_data_archives.

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:

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

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 EXCEPT for MAT 103 or BUS 133.

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

General Education Courses

Communications ........................................................................ 3 credits
Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

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

Discipline Studies (Per the lists on page 64) .................. 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
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 now offers three areas of specialization to prepare 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 in Arizona was $57,220 in May 2015.


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

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**Industrial Electrical, Motors and PLC’s Specialization**

### Industrial Electrical, Motors and PLC’s (CP)

- **23 credits**
  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MET 130 Industrial Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>MET 140 Introduction to Programmable Logic Controllers</td>
<td>4</td>
</tr>
<tr>
<td>MET 160 Rotating Electrical Machines</td>
<td>4</td>
</tr>
<tr>
<td>MET 200 Robotics and Motion Control</td>
<td>4</td>
</tr>
<tr>
<td>MET 210 Process Control and Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>MET 220 Advanced Programmable Logic Controllers</td>
<td>4</td>
</tr>
</tbody>
</table>

### Industrial Electrical, Motors & PLC’s (CAS)

- **29 credits**
  
  *Complete the Industrial Electrical, Motors and PLC’s CP*..............23 credits
  
  *Complete these General Education courses:*
  
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td>3</td>
</tr>
<tr>
<td>ENL 101 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 **EXCEPT** for MAT 103 or BUS 133.

### Industrial Electrical, Motors & PLC’s (AAS) • 64 credits

*Complete the Industrial Electrical, Motors & PLC’s CAS*..............29 credits

**PLUS**

**General Education Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science</td>
<td>6</td>
</tr>
<tr>
<td>CIS 105 Computer Applications and Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>CIS 141 Managing and Maintaining Your PC I (A+)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Discipline Studies** (Per the lists on page 64) ..................7 credits

Select one course from the Physical and Biological Sciences list ......4 credits

Select one course from either the Arts and Humanities or Social and Behavioral Science lists..........................3 credits

**Required Electives** .............................................19 credits

Choose from any unduplicated MET courses.
Mechatronics (MET) Studies

Industrial Mechanics and Fluid Power Specialization

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 now offers three areas of specialization to prepare 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 in Arizona was $57,220 in May 2015.


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.

Industrial Mechanics and Fluid Power (CP)

- 25 credits

MET 100 Introduction to Mechatronics ..........................................4 credits
MET 120 Industrial Mechanics I ...................................................5 credits
MET 150 Industrial Mechanics II ..................................................6 credits
MET 160 Rotating Electrical Machines ..........................................4 credits
MET 230 Integrated Manufacturing Systems ..................................3 credits
MET 241 Hydraulic Troubleshooting ..............................................3 credits

Industrial Mechanics and Fluid Power (CAS)

- 31 credits

Complete the Industrial Mechanics and Fluid Power CP .................25 credits

Complete these General Education courses:

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

Mathematics ...................................................................................3 credits
Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 EXCEPT for MAT 103 or BUS 133.

Industrial Mechanics & Fluid Power (AAS) • 64 credits

Complete the Industrial Mechanics and Fluid Power CAS ...............31 credits
PLUS

General Education Courses

Communications .............................................................................3 credits
Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

Computer Science ...........................................................................6 credits
CIS 105 Computer Applications and Information Technology .........3 credits
CIS 141 Managing and Maintaining Your PC I (A+) .........................3 credits

Discipline Studies (Per the lists on page 64) .................................7 credits
Select one course from the Physical and Biological Sciences list ......4 credits
Select one course from either the Arts and Humanities or Social and Behavioral Science lists.......................................3 credits

Required Electives .........................................................................17 credits

Choose from any unduplicated MET courses.
Mechatronics (MET) Studies

Electrical and Instrumentation Specialization

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 now offers three areas of specialization to prepare 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 in Arizona was $57,220 in May 2015.


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.

Electrical and Instrumentation (CP) • 24 credits

MET 242 Industrial Maintenance Electrical and Instrumentation Technician Level I ......................................6 credits
MET 243 Industrial Maintenance Electrical and Instrumentation Technician Level II .....................................6 credits
MET 244 Industrial Maintenance Electrical and Instrumentation Technician Level III ...................................6 credits
MET 245 Industrial Maintenance Electrical and Instrumentation Technician Level IV ....................................6 credits

Electrical and Instrumentation (CAS) • 30 credits

Complete the Electrical and Instrumentation CP .........................24 credits

Complete these General Education courses:

Communications .............................................................................3 credits
ENL 101 College Composition I .....................................................3 credits
Mathematics..................................................................................3 credits
Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 EXCEPT for MAT 103 or BUS 133.

Electrical and Instrumentation (AAS) • 64 credits

Complete the Electrical and Instrumentation CAS .........................30 credits

PLUS

General Education Courses

Communications .............................................................................3 credits
Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

Computer Science ...........................................................................6 credits
CIS 105 Computer Applications and Information Technology ..........3 credits
CIS 141 Managing and Maintaining Your PC I (A+) .........................3 credits

Discipline Studies (Per the lists on page 64)................................. 7 credits
Select one course from the Physical and Biological Sciences list ......4 credits
Select one course from either the Arts and Humanities or Social and Behavioral Science lists. ..............................3 credits

Required Electives ...........................................................................18 credits
Choose from any unduplicated MET courses.

Northland Pioneer College 2016 – 2017 Catalog
Also available online at www.npc.edu/college-catalog
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.


**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/gainful_employment_data_archives](http://www.npc.edu/gainful_employment_data_archives).

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**Medical Assistant (CAS) • 40 credits**

**Complete these Core courses**

- BIO 160 Introduction to Human Anatomy and Physiology .................. 4 credits
- OR BIO 201 AND 202* Human Anatomy and Physiology I & II (8 credits)
- BUS 119 Medical Office Administrative Procedures .................. 3 credits
- BUS 231 Microsoft 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**

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

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

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 **EXCEPT** for MAT 101.

---

**Associate of Applied Science (AAS) • 64 credits**

**Complete the Medical Assistant CAS ............................................. 40 credits**

**General Education Courses**

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

Select any course under the Communications General Education Course Options (for AAS degrees) on page 64 **EXCEPT** for SPT 110 and SPT 120.

**Discipline Studies** (Per the lists on page 64)

- 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

**PLUS**

**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
Nursing Assistant (NAT) Certificate of Proficiency (CP)

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.

Career Opportunities

Employment of nursing assistants is projected to grow 17 percent through 2024, much faster than the average for all occupations. Because of the growing elderly population, many nursing assistants will be needed to assist and care for these patients.


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/gainful_employment_data_archives.

Nursing Assistant (CP only) • 20 credits

**Communications** 3 credits
ENL 101 or higher, with grade of “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

**Mathematics** 3 credits
Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64 **EXCEPT** for MAT 101.
NAT 101 5 credits

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.

Additional Costs/Requirements

Tuition, course fee, media fee, a current negative TB test, textbook, royal blue scrubs, nursing shoes, a watch with a second hand and current costs of testing and certification examination and fingerprinting.

Students applying for the certification exam must provide proof of legal presence in the United States, provide fingerprints for a criminal background check and compliance with A.R.S. § 32-1606(B)(17) regarding felony convictions.

Note: Students planning to enter the NPC nursing program must have current Arizona licensure as a Certified Nursing Assistant. Only the English and Mathematics courses will satisfy Nursing program entrance prerequisites. See an academic adviser for details.
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

■ 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.

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 currently 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 must 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.

Students apply in the fall and complete the LPN to RN transition course in the spring semester. Prerequisites must be completed by July 1 prior to enrolling in the third semester NUR 221 nursing course. The student is eligible to take the National Council Licensing Examination for Registered Nursing (NCLEX-RN) when the core nursing courses are successfully completed.

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 NPC 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.

**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 recommended.

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

- **Arts and Humanities**
  - No requirements

- **Physical and Biological Sciences** 20 credits
  - 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

- **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

**Must have current Arizona CNA license in good standing.**

**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

### 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 $71,300 per year and LPN’s averaging $50,760. (May 2014, SOC 29-1141, 29-2061)


### 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/gainful_employment_data_archives](http://www.npc.edu/gainful_employment_data_archives).
Paramedicine (EMT)

Certificates (CP & CAS) and AAS Degree

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 qualify 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 a TB skin test within six months of the start of the program and MMR and Hepatitis B (or waiver) immunizations.

**Paramedicine (CP) • 52 credits**

- EMT 240 Basic ECG and Pharmacology .................................................. 3 credits
- EMT 244 Paramedic Training I ........................................................ 23 credits
- EMT 245 Paramedic Training II ..................................................... 26 credits

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

**Paramedicine (CAS) • 58 credits**

- Complete the Paramedicine CP .................................................. 52 credits
- Communications ............................................................................. 3 credits
- ENL 101 College Composition I ..................................................... 3 credits
- Mathematics .................................................................................. 3 credits

Select any course under the Mathematics General Education Course Options (for AAS degrees) on page 64.

**Paramedicine (AAS) • 70 credits**

- Complete the Paramedicine CAS .................................................. 58 credits
- Communications ............................................................................. 3 credits

Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

**Discipline Studies**

(Per the lists on page 64).................................................. 9 credits

- Arts and Humanities ........................................................................ 3 credits
- Social and Behavioral Sciences ..................................................... 6 credits
  - PSY 101 Introduction to Psychology ..................................... 3 credits

AND

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

**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/gainful_employment_data_archives](http://www.npc.edu/gainful_employment_data_archives).
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 I Entry Level Welder, Level II Intermediate Level Welder and Level III 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

Welding Level I – Entry Level Welder (CP) • 13 credits
WLD 100 Safety and Math..........................................................2 credits
WLD 170 Metal Preparation, Quality and Alignment...................2 credits
WLD 171 Welding Cutting Processes ........................................2 credits
WLD 172 SMAW ARC..................................................................3 credits
WLD 173 SMAW Open Root Plate.................................................2 credits
WLD 174 SMAW V-Groove with Backing ....................................2 credits

Welding Level II – Intermediate Welder (CP) • 11 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 175 GMAW Plate .................................................................3 credits
WLD 176 FCAW Plate................................................................3 credits
WLD 177 GTAW (TIG) Plate ........................................................3 credits
WLD 178 Metallurgy, Drawings and Symbols ..............................2 credits

Welding Level III – Advanced Welder (CP) • 21 credits
Student must complete all of the requirements for Welding Level I & II and receive a Certificate of Proficiency for Level I & II before receiving the Welding Level III certificate.
WLD 179 AWS Prep ....................................................................2 credits
WLD 200 AWS Certification .......................................................4 credits
WLD 280 GMAW (MIG) Pipe ........................................................3 credits
WLD 281 FCAW Pipe .................................................................3 credits
WLD 282 GTAW CS Pipe ............................................................3 credits
WLD 283 GTAW LA and SS Pipe ................................................3 credits
WLD 284 SMAW CS Pipe ..........................................................3 credits
Certificate (CAS) and AAS Degree Options

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.


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/gainful_employment_data_archives.

Certificate of Applied Science (CAS) • 30 credits

Complete the Welding Level I Entry Level Welder CP .........................13 credits
Complete the Welding Level II Intermediate Welder CP .....................11 credits

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

Select any course under the Mathematics General Education Course Options (for CAS and AAS Degrees) on page 64.

Associate of Applied Science (AAS) • 64 credits

Complete the Welding CAS .............................................................30 credits
Complete the Welding Level III Advanced Welder CP .........................21 credits

PLUS
General Education Courses
Communications .............................................................................3 credits
Select any course under the Communications General Education Course Options (for AAS degrees) on page 64.

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 64.

PLUS
Electives .....................................................................3 credits

Student must complete a minimum of three credits from the following:
WLD 134 Fundamentals of Plastic Welding ....................................3 credits
WLD 288 Advanced Topics in Welding: Aluminum .........................6 credits
WLD 290 Welding Fabrication .......................................................3 credits
WLD 291 Internship for Welding ...................................................2 credits
Or any unduplicated 100-level course or higher ..............................3 credits