Programs and Degrees

Section IV
Programs

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 Studies
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

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

Gail Campbell, Associate Dean

College and Career Preparation
Education
Human Development

Apache County Programs

Nicole Ullibarri, Coordinator

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

Nursing and Allied Health

Dr. Debra McGinty, Dean

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

General Education Values

Northland Pioneer College places general education at the center of its mission. More than a perfunctory set of courses, general education serves as an important foundation for lifelong learners. Critical thinking and effective communication are the backbone to general education, and these skills serve as an important bridge to a plethora of different fields of study. The purpose of general education is to give each student the fundamental skills associated with higher education and the cultivation for a lifetime of learning, problem solving, and responsibly informed decision making. Specifically, Northland Pioneer College, through its general education program, aims to:

- offer a comprehensive set of foundational skills so students can fully engage their educational intent;

- offer an integrated curriculum that will set the stage for lifelong learning;
- represent a wide cross-section of the arts, humanities and sciences;
- require students to engage in thoughtful and precise writing and critical thinking; quantitative, qualitative, and informational literacies;
- introduce students to the diversity of the natural and social worlds;
- promote academic curiosity;
- offer university transferable courses articulated through the general education Articulation Task Force (ATF).

Assessment at NPC:

Northland Pioneer College adheres to the Association for the Assessment of Learning in Higher Education's mission statement: "Using assessment as a tool to improve student learning and institutional effectiveness in fostering student success" (2016).
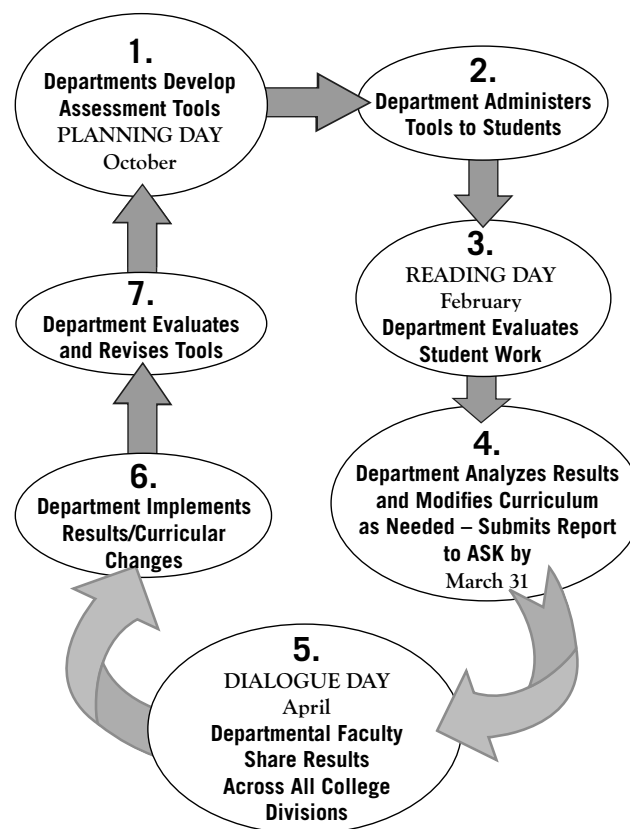
The college uses a cyclical assessment process that is outlined in the diagram at the right.

Planning Day is where departments and programs examine their assessment tool and data collected from the previous assessment cycle. Departments and programs are encouraged to choose to measure one or more of the college's general education outcomes, which include:

- NPC 1: Critical Thinking/Critical Inquiry
- NPC 2: Effective Communication
- NPC 3: Quantitative Reasoning
- NPC 4: Scientific Inquiry
- NPC 5: Information Literacy
- NPC 6: Diversity

After making any needed adjustments to their assessment tool, it is administered to students and data is collected from the assessment tool. Reading Day is conducted in February when departments and programs evaluate student work and data collected during the time their assessment tool was administered to students. Following this evaluation, the department or program modifies curriculum as needed and submits a report detailing their process to the Assessment of Student Knowledge Committee (ASK). In April, the college faculty gather to participate in Dialogue Day, when departmental/program results are shared with other faculty across divisions as a means of promoting a college-wide discussion over best practices and insights gained through the current year's assessment process.

Following Dialogue Day, departments and programs adjust curriculum based on the results of the data that was collected and the assessment tool is adjusted as needed in preparation for the next year's assessment cycle.

1.
Departments Develop Assessment Tools
PLANNING DAY
October

2.
Department Administers Tools to Students

3.
READING DAY
February
Department Evaluates Student Work

4.
Department Analyzes Results and Modifies Curriculum as Needed – Submits Report to ASK by
March 31

5.
DIALOGUE DAY
April
Departmental Faculty Share Results Across All College Divisions

6.
Department Implements Results/Curricular Changes

7.
Department Evaluates and Revises Tools

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

<u>CERTIFICATES:</u> CAS – Certificate of Applied Science • CP – Certificate of Proficiency

AGEC – Arizona General Education Curriculum

Section IV Programs

Programs and Degrees

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***.

Graduation Requirements

Degrees and Certificates

Associate Degrees

- Associate of Arts (AA)
- Associate of Arts in Early Childhood (AAEC)
- Associate of Arts in Elementary Education (AAEE)
- Associate of Business (ABus)
- Associate of Science (AS)
- Associate of General Studies (AGS)
- Associate of Applied Science (AAS)

A student pursuing a certificate or degree needs to declare a degree plan with an academic adviser. The declared degree plan is then posted to the student's file. Degrees and certificates will be posted to transcripts three to six weeks after each semester.

A student who files an *Application for Graduation* by the appropriate deadline and is approved for graduation will be invited to participate in the **Commencement Ceremony** in May. A student who is late in filing an *Application for Graduation* may participate in the Commencement Ceremony the following year.

A student with eight (8) or fewer credits to complete their degree or certificate in the upcoming summer semester may also apply for spring graduation.

> A student must complete an *Application for Graduation* with their academic adviser and have their application submitted to the Records and Registration Office during the semester in which the student expects to complete requirements for their degree or certificate:
>
> - **October 3, 2017** for **Fall** graduation
> - **February 20, 2018** for **Spring** graduation
> - **July 3, 2018** for **Summer** graduation
>
> A student must remove any indebtedness to the college and resolve any outstanding holds on their account prior to the *Application for Graduation* deadline. Upon verification of completed degree or certificate requirements, NPC may automatically award degrees or certificates for students without a graduation application.

To obtain the Associate of Arts, Associate of Arts in Early Childhood, Associate of Arts in Elementary Education, Associate of Business, Associate of Science, Associate of General Studies or Associate of Applied Science degrees from NPC, the candidate must:

Degree Graduation Requirements Continued

1. Satisfy the degree requirements as published in the applicable NPC catalog prior to the date of graduation on which the degree is to be awarded. All petitions for degree requirement waivers must be submitted and approved prior to the *Application for Graduation* deadline listed on page 57.

2. File an *Application for Graduation* with the Records and Registration Office by the deadline listed on page 57.

3. Be credited with not less than 64 applicable semester credits in the Records and Registration Office (except for an AAS LPN to RN degree where 57 credits are required). No course numbered below the 100 level can be used to satisfy the requirements for any degree.

4. Have a cumulative grade-point average of 2.0 or better in courses taken at NPC. No 'D' credit will be allowed in the AA, AAEC, AAEE, ABus or AS degrees. For AAS or AGS degrees, no more than nine units of 'D' credit will be allowed and only in unrestricted electives.

5. Have no more than 12 credits of 'P' grade applied toward graduation credit for the AAS and AGS degree requirements. No 'P' credit will be allowed in the AA, AAEC, AAEE, ABus or AS degrees.

6. Have a minimum of 16 semester credits in residence at NPC that apply toward the degree being pursued and meet the requirements for the applicable NPC catalog *(see "Applicable Catalog" for additional details)*. Credits obtained by assessment may not be used toward the residency requirement.

Certificate of Applied Science (CAS)

A Certificate of Applied Science will be awarded to students who have completed an approved vocational program with all courses successfully completed with a grade of 'C' or better to indicate the achievement of technical skills and competence in a specific area of endeavor.

The candidate for the Certificate of Applied Science must:

1. Satisfy the certificate requirements as published in the applicable NPC catalog prior to the date of graduation at which the certificate is to be awarded. All petitions for degree requirement waivers must be submitted and approved prior to the *Application for Graduation* deadline listed on page 57.

2. File an *Application for Graduation* with the Records and Registration Office by the deadline listed on page 57;

3. Have a minimum of 12 semester credits in residence at NPC that apply toward the certificate being pursued and meet the requirements for the applicable NPC Catalog

(see "Applicable Catalog" for additional details). Credits obtained by assessment may not be used toward the residency requirement.

Certificate of Proficiency (CP)

Certificates of Proficiency are approved programs that indicate specific vocational competencies. Any number of certificates may be awarded to a student who completes the requirements. A formal certificate will be sent to the applicant once the completion of requirements is certified. Normally these students do not attend commencement ceremonies. An exception is made for those students who complete a Certificate of Proficiency of 32 credits or more in two semesters.

Certificates of Proficiency will be awarded when the student:

1. Satisfies the requirements for the certificate as published in the applicable NPC catalog;

2. Files an *Application for Graduation* with the Records and Registration Office by the deadline listed on page 57;

3. Completes successfully, with a grade of 'C' or better, all courses to indicate the achievement of technical skills and competence in a specific area of endeavor;

4. Has a minimum of 75 percent of the credits required for the certificate in residence at NPC. Credits obtained by assessment cannot be used toward the residency requirement.

Applicable Catalog

Students maintaining continuous enrollment at any public Arizona community college or university may graduate according to the requirements of the catalog in effect at the time of initial enrollment or according to the requirements of any single catalog in effect during subsequent terms of continuous enrollment. A student may maintain continuous enrollment whether attending a single public community college or university in Arizona or transferring among public institutions in Arizona while pursuing his or her degrees.

Students transferring among Arizona public higher education institutions must meet the admission, residency and all curricular and academic requirements of the degree-granting institution.

1. A semester in which a student earns course credit is counted toward continuous enrollment. Noncredit courses, audited courses, failed courses or courses from which the student withdraws do not count toward the determination of continuous enrollment for catalog purposes.

2. Students who do not meet the minimum enrollment standard stipulated in number 1 during three consecutive semesters (fall/spring/fall or spring/fall/spring) and the intervening summer term* at any public Arizona community college or university are no longer considered continuously enrolled. These students must meet requirements of the public Arizona community college or university catalog in effect at the time they are readmitted or of any single catalog in effect during subsequent terms of continuous enrollment after readmission.

   Students are not obligated to enroll and earn course credit during summer terms, but summer enrollment may be used to maintain continuous enrollment status.

3. Students admitted or readmitted to a public Arizona community college or university during a summer term must follow the degree or certificate requirements of the catalog in effect the following fall semester or of any single catalog in effect during subsequent terms of continuous enrollment.

4. In areas of study in which the subject matter changes rapidly, material in courses taken long before graduation may become obsolete or irrelevant. Course work that is more than eight years old is applicable to completion of degree requirements at the discretion of the student's major department. Departments may accept such course work, reject it or request that the student revalidate its substance. The eight-year limit on course work applies except when program accreditation agencies limit the life of course work to less than eight years. Departments may also require students to satisfy current major requirements rather than major requirements in earlier catalogs, when completing earlier requirements is no longer possible or educationally sound.

5. Enrollment by Arizona community college students in nontransferable courses still constitutes enrollment for purposes of determining whether the student has been continuously enrolled. For example, if a student takes two semesters of cooperative education classes, which are not transferable to the university but constitute continuous enrollment at the community college, the university should consider it continuous enrollment.

6. Exceptions made by an institution apply only to the institution that made the exception. For example, if the community college departments accepted credit which was more than eight years old, the university department to which the student transfers has the right and the obligation to reevaluate any credit which is more than eight years old.

   Inquiries about these guidelines should be directed to the student's academic adviser.

Degree Exclusions and Exceptions

Students who have completed an Associate of Arts, Associate of Arts in Early Childhood, Associate of Arts in Elementary Education, Associate of Business or Associate of Science degrees or higher degree (BS, BA, etc.), will not be awarded an Associate of General Studies, or a second degree of the same type. Students completing the aforementioned degrees may complete a different transfer degree providing they complete the appropriate Arizona General Education Curriculum (AGEC) courses, the common courses identified for the major they will be pursuing at the university, and applicable language requirements.

1. Students who complete an AAS degree offered by NPC may complete an AA, AAEC, AAEE, AS, ABus or AGS degree. For each degree students must complete 12 additional credits transferable to all three Arizona state universities. Students must meet all requirements specific to the degree they wish to earn.

2. A student may earn any number of CAS or AAS degrees; however, students must earn a minimum of nine additional credits that apply to each new area of specialization.

3. Students who completed an AA, AAEC, AAEE, AS, ABus or AAS degree or higher degree at NPC or another regionally accredited institution are not required to complete the General Education requirements of a second AAS or CAS to be earned at NPC.

Due to Arizona State Board of Nursing requirements, nursing students must complete all general education requirements for the Certificate of Applied Science Practical Nursing and the Associate of Applied Science Registered Nursing.

Credits and degrees over eight years in age are subject to review prior to acceptance toward the prerequisites and/or degree requirements in some NPC programs, except when program accreditation agencies limit the life of course work to less than eight years.

Petitions for Exceptions

Students seeking exceptions to degree requirements should meet with an academic adviser for assistance in completing the petition forms. These forms accompanied by supporting information such as copies of transcripts, course descriptions, and articulation rules are forwarded to the Dean responsible for the degree program being petitioned. The Dean makes a recommendation and forwards the paperwork to the Director of Enrollment Services for review, then to the Vice President for Learning and Student Services for a final decision and distribution of the copies of the petition form.

Grades

Grade Key

A = Excellent, 4.0 grade points per semester credit.
B = Good, 3.0 grade points per semester credit.
C = Average, 2.0 grade points per semester credit.
D = Unsatisfactory, 1.0 grade points per semester credit.
F = Failure (no credit), 0.0 grade points per semester credit.
I = Incomplete.
IP = In Progress, on transcript for current course until final grade is posted.
P = Pass (credit awarded), does not affect the NPC GPA.
W* = Withdrawal (no credit), does not affect the NPC GPA.
AU* = Audit (no credit and no letter grade), does not affect the NPC GPA.
TR = Transfer Credit (credit, no letter grade) does not affect NPC GPA.
NC = No Credit, not computed in NPC GPA.
AP = Advanced Placement, not computed in NPC GPA.
AS = Assessed Credit, not computed in NPC GPA.
IB = International Baccalaureate, not computed in NPC GPA.
CL = CLEP, not computed in NPC GPA.

A student with a grade of less than 'C' in any subject should not expect to continue advanced work in that field unless there is other evidence indicating possible success.

> * **Veteran benefit recipients** are not eligible for a 'W' or 'AU' grade unless they officially withdraw from a class using a *Course Change Form*. This form must be signed by the instructor indicating the last day of attendance. (This procedure complies with the guidelines recommended by the federal Veterans' Administration.)

Audit ('AU') Grades

A student may choose to register for an Audit grade in a course. The Audit grade allows a student to take a course without affecting the student's grade-point average.

A student taking a course for Audit may fully participate in all aspects of the course, but will not be given any graded assignments. The Audit grade does not count for credit and does not factor into a student's grade-point average. Completion of a course with an Audit grade does not count as successful completion of the course for prerequisite purposes. An Audit grade may not be used in any degree or certificate program. Students may not switch from a letter grade (including 'P') to an Audit grade for a course once they have registered for a letter grade. Students registering for an Audit grade may not file for a change of grade to a letter grade at the end of the course.

Courses taken for an Audit grade do not appear on the official transcript. Students are cautioned that courses taken for an Audit grade will not be accepted for transfer at other postsecondary institutions. When a student registers for an Audit, Records and Registration assigns the final grade as 'AU.' Students taking courses for Audit grades pay regular tuition and fees for audited courses.

The Audit grade option is not available for one-day workshops, dual enrollment or College and Career Preparation (CCP) courses and all courses offered through Community Services (typically courses with a 099x designation).

To register for an Audit grade for a course, a student must take the following steps:

1. Beginning with the day instructor approval is required for course entry a student must see an academic adviser to obtain a course *Registration Form* and an *Audit Request* form. The student signs the *Audit Request* form indicating that student understands the limitations of auditing a course.

2. The student checks with the instructor to see if the instructor will allow the student into the course as an auditing student. If so, the instructor signs the *Registration Form* and the *Audit Request* form.

3. The student then takes the forms to the campus/center office. The campus/center office makes sure the course has space availability and, if so, registers the student for the course. The student receives a student copy of the *Audit Request* form. The remaining copies of the *Audit Request* form are attached to the *Registration Form* copies and sent to the Records and Registration Office.

Pass ('P') Grades

In certain classes it is possible to obtain a 'P' or Passing grade. The following information should help the student decide when considering the 'P' option:

- A 'P' grade is **NOT** available in any course designated as general education courses.

- All 'P' grades taken in the core requirement area of a degree must be approved by the appropriate dean.

- A 'P' grade **MAY** not be accepted for transfer credit to postsecondary institutions, nor does NPC accept 'P' grades from other institutions for credit at NPC.

- No 'P' credits are allowed for the following degrees: AA, AAEC, AAEE, ABUS or AS.

- For AGS or AAS degrees, the maximum number of 'P' credits allowed by NPC is 12.

- Because 'P' grades will satisfy course prerequisites as a "'C' or better," the minimum requirements for a 'P' grade are those regularly required for a 'C' grade in any class in which the 'P' grade option is allowed.

- A 'P' grade cannot be later changed to a letter grade, nor can a letter grade be later changed to a 'P' grade.

Process

If a student wishes the 'P' grade option in a class where the option is available, the student must make a written request to the instructor to take the course on the "pass/fail" basis prior to the second class meeting of the semester. If the instructor agrees to the request, s/he shall sign and date the request and forward to the Records and Registration Office. All 'P' grades taken in core requirement area of a degree must be approved by the appropriate dean. The request may not later be rescinded.

Incomplete ('I') Grades

An incomplete grade may be given to support student success when extenuating circumstance exists (but not to delay a final grade when a student is performing poorly). To award an incomplete grade of 'I,' the student must be passing the course with at least a 'C' or otherwise demonstrating satisfactory performance as determined by the instructor. A student receiving an incomplete grade has the responsibility of completing all work as outlined in an *Incomplete Grade Agreement* for removal of the incomplete grade.

Once all work is completed and graded, the instructor will submit a *Change of Grade* form with a copy of the *Incomplete Grade Agreement*. If an incomplete is not removed within one semester (Fall or Spring) from the end of the semester in which it was awarded, it is automatically converted to a grade of 'F.'

Withdrawal ('W') Grades

A student or an instructor can initiate a grade of 'W.' Withdrawal from classes during the first two weeks of the semester (for semester length classes) will not be reflected on the student's transcript. The grade of 'W' will appear on the student's transcript for each class withdrawn from after the end of the second week of the semester. All nonsemester-length classes (usually identified as short-term classes) will show a 'W' regardless of when the withdrawal occurs after the class begins.

The course instructor may initiate an administrative withdrawal for a student after the 45th day of the semester and up to the final day of the semester by submitting the appropriate form and assigning a 'W,' which will be reflected on the student's transcript at the end of the semester, with the exception of veteran benefits recipients.

Whether initiated by the student or instructor, the last date of attendance (LDA) must be written on the withdrawal form.

Withdrawal from Class(es)

Any student wishing to withdraw from class(es) on or after the first day of class must contact an academic adviser in order to complete the process.

SPECIAL NOTE: Students who completely unofficially withdraw and/or officially withdraw from NPC will have their federal financial aid recalculated by using the Federal Return of Title IV calculation prescribed by federal law. *See page 38.*

Grading Procedure

The instructor is responsible for assigning grades. Grades are based on academic performance, class participation and attendance. Academic dishonesty will not be tolerated. An instructor may lower a grade based on academic dishonesty or other forms of student misconduct. Academic dishonesty or other forms of student misconduct may also be referred to the Vice President for Learning and Student Services for further action. *(See Student Conduct Code, Procedure 2625, on page 184)* Grade changes can be made only by the instructor with approval of the Dean and/or the Vice President for Learning and Student Services. Changes must be submitted within one semester from the end of the semester in which the grade was awarded. After that time, the student must follow the Appeal of Grade process. Students who disagree with a grade may file a grade appeal as outlined in the *Appeal of Grade* section.

Raising Grades

A student may repeat a course to raise a grade. The higher grade will be credited and counted in computing the student's grade-point average. The lower grade will not be used, but will still appear on any transcript.

SPECIAL NOTE: Students receiving financial aid are limited to the number of times a class may be repeated for benefit purposes. *See page 36, note 4.* Transfer credits cannot be used to raise a grade. *See page 15 under Regionally Accredited Institutions.*

Repeating Courses

You can repeat a course as many times as you wish.* Each instance will show up on your transcript along with the grade you received, but only the highest grade will be counted toward your grade-point average and toward fulfilling credit requirements for a degree or certificate.

SPECIAL NOTE: Students receiving financial aid are limited to the number of times a class may be repeated for benefit purposes. *See page 36, note 4.*

*****EXCEPTION:** Some music performance, art studio or Health and Physical Education courses can only be repeated up to four times for degree or certificate credit. See an academic adviser for specific courses.

Reporting of Grades

Instructors post final grades after each semester. Students can view their grades and obtain unofficial transcripts by logging

Section IV
Programs

Reporting of Grades Continued

in to *MyNPC*. Grades will only be mailed to students upon special request. Contact the Records and Registration Office for the appropriate form. Transcripts and grades will not be released until all financial obligations to the college have been met.

Scholastic Honors – Graduation

The notation "Graduate with Distinction" or "Graduate with High Distinction" will be placed on the transcript of students who have completed in residence at NPC at least 30 units which are used toward the degree (AA, AAEC, AAEE, ABus, AS, AGS or AAS) and meet the cumulative grade-point average (GPA) criteria of 3.5 – 3.89 for Distinction and 3.9 – 4.0 for High Distinction. Students who receive additional degrees or emphasis areas will be required to complete, in residence, a minimum of 16 additional credits toward the subsequent degree or emphasis area in order to have this honor noted on the transcript. (GPA standards remain the same.)

Students who are receiving a Certificate of Applied Science must complete in residence at NPC at least 16 credits which apply to the certificate in order to have "Certificate with Distinction" or "Certificate with High Distinction" noted on the transcript. The cumulative GPA standards outlined above will be used for the Certificate of Applied Science.

Scholastic Honors – Outstanding Graduates

Each year, NPC selects five (5) students, one (1) from each degree area (AA, ABus, AS, AGS and AAS) as Outstanding Graduates. The **Outstanding Graduates** are chosen based on the highest cumulative GPA from students who attended classes that are open to the general student population. In the case of a tie in GPA's, the student with the most credits earned at NPC is awarded the recognition. Students who utilize any transfer credits from other colleges to meet the degree requirements at NPC are not eligible for this recognition. Students must have all degree requirements either completed or in progress to be eligible for Outstanding Graduate consideration.

Scholastic Honors – President's & Dean's Lists

The President's List recognizes students who achieved a perfect 4.0 grade-point average during a specific semester. The Dean's List honors those with a 3.5 to 3.99 grade-point average during a specific semester. To be eligible for these distinctions, students must have completed 12 or more credits in 100-level or above courses. Students will receive letters of recognition, and the honor will be noted on their transcripts.

Scholastic Honors – All-USA & All-Arizona Academic Team

Each year, Northland Pioneer College can nominate up to two outstanding students from each campus and center location for the All-USA / All-Arizona Academic Team. Phi Theta Kappa, the American Association of Community Colleges, Arizona Board of Regents, Follet Higher Education Group and *USA Today* help these exceptional students reach their educational goals by awards of scholarships and tuition waivers to any of Arizona's three public universities: Arizona State University, University of Arizona or Northern Arizona University. Students also receive a scholarship from NPC. Criteria for selection:

- Cumulative GPA of 3.50 or higher (4.0 scale);
- Good academic standing and working toward an associate degree by the end of the current academic year; and
- Involvement in campus and community volunteerism.

Membership in Phi Theta Kappa is not required. Fliers announcing the application process are posted at all campus and center locations and on *www.NPC.edu* in late September to early October.

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.

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.**

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 (see page 64) that provide students with a broad knowledge base. If specific courses are required, those are listed in the degree or program description.

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.

Transferable Electives: Courses that transfer to all three public Arizona universities as defined in the Course Equivalency Guide for the year in which the course is completed. (See aztransfer information above.)

Course Delivery Methods

Northland Pioneer College uses multiple methods for delivering classes at its campus and center locations, educational sites and area high schools through dual enrollment programs. Some courses are also offered online via the Internet.

Traditional Classroom Learning Environment

NPC offers many classes in a traditional lecture, discussion, and/or laboratory format.

Connected Classroom Learning Environments

NPC also offers interactive instructional video and multimedia classes with a number of exciting components that use new digital technologies linking multiple locations. This flexible format allows us to expand our course offerings to provide more educational options closer to your home. An academic adviser can answer questions prior to registering for these classes.

Multi-Course Learning Environment "Lab" Classes

LAB refers to a multi-course learning environment and should not be confused with laboratory sessions. This type of nontraditional instruction allows a single teacher to instruct 16 to 18 students in several classes at once. In these classes, students work at their own pace with individualized instruction materials. The teacher becomes a facilitator working with each student, one-on-one, as the need arises.

LAB classes allow the teaching of subjects where there are often only one or two students at any given time. At NPC, "labs" are used in studio art, business, computer science and several other subjects.

Online Classes

A variety of internet classes are available through NPC. In these classes, students learn course material presented via the internet. These classes are great for those who have busy schedules or difficulty commuting to an NPC campus or center.

> **Requirement:** Prior to enrolling in online classes, students should have access to a computer and should have an email account. (All NPC students are given an email account, which is used to communicate with students.)

> Students must also demonstrate computer competency (exempt if enrolling only in POS 221 or 222) through successful completion of an opt-out test or completion of Skills for Online Learning – ICT 095. *See Proof of Computer Competency on page 18.*

For information on online classes, including prerequisites and registration instructions, visit ***www.npc.edu/online-classes***.

Alternative Learning *(See also, page 28)*

NPC also offers alternative learning methods that allow students to earn course credit. This involves dean-approved learning contracts negotiated with faculty to meet your degree completion requirements.

NPC can also evaluate your prior learning certified through industry, business or trade school training programs to assess if this education is applicable toward an NPC degree program. For more information, contact your academic adviser. If you do not have an academic adviser, call the campus or center where you plan to attend and ask to speak with the adviser.

> **Note:** Additional fees may apply for credit by evaluation. Ask your academic adviser for details. Students seeking evaluation of prior military training do not pay tuition charges for their assessed credits.

Course Offering Limitations

NPC offers courses at a number of locations throughout the district utilizing college-owned or leased facilities. Through its regular offerings and alternative study programs, NPC attempts to provide as many courses as possible for completion of degrees and certificates at each learning site. However, many vocational programs require specific tools and equipment that may not be available at all locations. Prospective students should check with the academic adviser at the NPC location they plan to attend to determine which programs are available.

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 66:

AGEC-A • 35 credits *See AA Degree, page 67*
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 72*
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 Behavorial Sciences lists.

AGEC-S • 36 credits *See AS Degree, page 69*
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 65)*

Communications ....6 credits

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

Mathematics ....3-4 credits

UNLESS OTHERWISE NOTED IN A SPECIFIC CERTIFICATE OR DEGREE PROGRAM, completion of any one of the following courses fulfills the **Mathematics** requirement for any Certificate of Applied Science (CAS) or Associate of Applied Science (AAS) degree:

‡ BUS 133 Business Mathematics .... 3 credits
‡ MAT 101 Basic Technical Mathematics .... 3 credits
‡ MAT 103 Business Mathematics .... 3 credits
‡ MAT 109 Algebra I: Introductory .... 3 credits
‡ MAT 112 Algebra II: Intermediate .... 3 credits
MAT 125 Introduction to Statistics .... 3 credits
MAT 142 College Mathematics
    with Contemporary Applications .... 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 public universities.

Discipline Studies

Arts and Humanities......................................6-9 credits
Select courses from at least two different disciplines, as listed under a specific degree.

ART 101 Understanding Art..................................... 3 credits
ART 115 Art History I .... 3 credits
ART 116 Art History II .... 3 credits
ART 215 Native American Art .... 3 credits
ENL 220 World Literature I...................................... 3 credits
ENL 221 World Literature II..................................... 3 credits
ENL 224 English Literature I.................................... 3 credits
ENL 225 English Literature II................................... 3 credits

ENL 230 American Literature I................................. 3 credits
ENL 231 American Literature II................................ 3 credits
HUM 150 Humanities in the Western World I .... 3 credits
HUM 151 Humanities in the Western World II .... 3 credits
MUS 150 Music Appreciation................................. 3 credits
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
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 111 Physical Geography................................... 4 credits
GLG 101 Introduction to Geology I - Physical............. 4 credits
GLG 102 Introduction to Geology II - Historical......... 4 credits
PHY 113 General Physics I.. 4 credits
PHY 114 General Physics II....................................... 4 credits

Social and Behavioral Sciences........................6-9 credits
Select courses from at least two different disciplines, as listed under a specific degree. (This applies to all transfer degrees, select at least one asterisk (*) course to meet requirements for Contemporary Global, International or Historical Awareness.)

*ANT 102 Cultural Anthropology................................ 3 credits
ANT 120 Buried Cities and Lost Tribes .... 3 credits
ECN 211 Principles of Macroeconomics .... 3 credits
ECN 212 Principles of Microeconomics .... 3 credits
*GEO 110 World Regional Geography....................... 3 credits
GEO 120 Human Geography................................... 3 credits
*HIS 105 U.S. History to 1877 .... 3 credits
*HIS 106 U.S. History since 1877............................. 3 credits
*HIS 155 Western Civilization to 1700 .... 3 credits
*HIS 156 Western Civilization since 1700................. 3 credits
POS 110 American Government............................... 3 credits
PSY 101 Introduction to Psychology .... 3 credits
PSY 240 Developmental Psychology....................... 3 credits
PSY 250 Social Psychology.................................... 3 credits
SOC 101 Introduction to Sociology .... 3 credits
SOC 121 Social Problems in America .... 3 credits
SOC 212 Sex and Gender in Society........................ 3 credits
SOC 215 Ethnicity and Race .... 3 credits
SOC 225 Sociology of the Family............................ 3 credits

Transfer Degree

Associate of Arts (AA) Degree

University Transfer

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

The **AA degree** is designed for students planning to continue their education by transferring to one of the three Arizona public universities. The **general education component** of our AA degree fulfills the requirements of the Arizona General Education Curriculum (AGEC-A), which when completed, will transfer to any of the three public Arizona state universities as a block meeting all lower division general education requirements. *(see What is AGEC? – page 65)*

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.

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 65)*

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 66)

Physical and Biological Science..**8 credits**
    (Select two courses from the list on page 66)

Social and Behavioral Sciences..**9 credits**
    (Select three courses from at least two disciplines, with at least one asterisk (*) course to meet requirements for Contemporary Global, International or Historical Awareness, from the list on page 66)

Electives ....**29 credits**
    Successful completion of 29 credits of unduplicated university transferrable electives, as described on page 63.

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
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 66)
Physical and Biological Science......................................*4 credits*
    (Select one course from the list on page 66)
Social and Behavioral Sciences......................................*6 credits*
    (Select two courses from at least two disciplines from the list on page 66)
Additional Discipline Studies...*6 credits*
    Select a minimum of six additional credits from the **Discipline Studies**
      list on page 66, **_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 65)*

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 66)
Physical and Biological Science ....**8 credits**
    (Select two courses from the **SAME** discipline)
    BIO 181 General Biology I..4 credits
    BIO 182 General Biology II...4 credits
    CHM 151 General Chemistry I...4 credits
    CHM 152 General Chemistry II..4 credits
Social and Behavioral Sciences..**6 credits**
    (Select two courses from two different disciplines, with at least one asterisk (*) course to meet requirements for Contemporary Global, International or Historical Awareness from the list on page 66)
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 63.

Automotive Technology (ATO)

Direct to $ Work

Certificate Options – CP & CAS

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

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

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

Cost & Time for Completion

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

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

Certificates of Proficiency (CP)

Brake and Transmission Systems (CP) • 13 credits

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

Drive Train, Suspension and Steering, HVAC (CP) • 14 credits

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

Electrical and Electronics Systems (CP) • 11 credits

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

Engine Performance (CP) • 11 credits

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

Engine Repair (CP) • 7 credits

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

Certificate of Applied Science (CAS) • 31 credits

Complete the Electrical and Electronics Systems CP	.........................**11 credits**
Complete the AAS Level 2 courses	....**11 credits**
ATO 111 Engine Performance III	....3 credits
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 66.

Associate of Applied Science (AAS) Degree

Direct to $ Work

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 $37,380 (North Arizona nonmetropolitan area) with higher pay for specialized service technicians working for auto dealerships. (May 2016, 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 66.

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 66.)

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

Section IV Programs

Transfer Degree

Associate of Business (ABus) Degree

University Transfer

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 65)*

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 65)*

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 66)
Physical and Biological Science.......................................***8 credits***
(Select two courses from the list on page 66)
Social and Behavioral Sciences.......................................***6 credits***
(Select two courses from at least two disciplines from the list on page 66. Make at least one selection an asterisk (*) course to meet requirements for Contemporary Global, International or Historical Awareness.)
Computer Science..***3 credits***
CIS 105 Computer Applications and Information Technology............3 credits
General Electives Options...***3 credits***
(Select one additional unduplicated course from either the **Arts and Humanities** or **Social and Behavioral Sciences** lists on page 66 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 63.

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 2014 to 2024, faster than average for all occupations. The median annual salary in nonmetropolitan north Arizona is $34,600 (43-3031-May 2016).

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.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, Bookkeeping, Accounting and Auditing Clerks

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/accounting*.

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

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 66 ***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 66 ***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 66.)
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. The U.S. Bureau of Labor Statistics reports a steady upward climb, with the number of new businesses established in 2015 at 679,072, less than 37,000 below the 2006 record of 715,734.

Since most entrepreneurs are self-employed, no median salary statistics are available from the BLS.

If you are considering starting your own business, consider contacting NPC's Small Business Development Center for a free consulation and assistance in contracting with governmental agencies or 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/entrepreneurship*.

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**.

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 66 ***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 66 ***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 66.)
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

Direct to $ Work

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 5 percent from 2014 to 2024, 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 nonmetropolitan north Arizona median annual salaries range from $72,670 to $144,000.
(Figures from US BLS May 2016) (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/ ManagementLeadership*.

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

BUS 202 Professional Customer Service .... 1 credit
BUS 203 Introduction to Communication.....................................3 credits
BUS 210 Principles of Management ....3 credits
BUS 220 Principles of Marketing ....3 credits
BUS 225 Human Resources Management ....3 credits
BUS 230 Organizational Leadership ....3 credits
BUS 231 Microsoft Office Level I ....3 credits
BUS 238 Financial Management and Budgeting..........................3 credits

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 66 ***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 66 ***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 66.)
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)

Section IV Programs

Medical Office Technologies Specialization

Medical office administrative assistants are multi-skilled individuals essential in providing clerical support for the running of an efficient and profitable medical practice. They ensure quality, accuracy, accessibility and security in both paper and electronic systems. Because they work in the health care field, medical office administrative assistants also need specialized inowledge about the types of 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 medical office administrative assistants is projected to grow 15 percent from 2014 to 2024, with a median annual salary in North Nonmetropolitian Arizona of $40,420. The demand for health services professionals is expected to increase as the population ages.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, Medical Records and Health Information Technicians (SOC 29-2071 May 2016)

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/MedicalOffice*.

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

Medical Office Technologies Fundamentals (CP) • 18 credits

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

Medical Office Technologies (CAS) • 29 credits

Complete the Medical Office Technologies Fundamentals CP.............18 credits
BUS 102 Proofreading Mastery .... 1 credit
BUS 227 Medical Coding ....4 credits
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 66 ***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
PLUS

General Education Courses
Communications ....3 credits
Select any course under the **Communications** General Education Course Options (for AAS Degrees) on page 66 ***EXCEPT*** for SPT 110 and SPT 120.

Discipline Studies... 7 credits
BIO 160 Introduction to Human Anatomy and Physiology ....4 credits
(Plus one course from either the **Arts and Humanities** or **Social and Behavioral Sciences** lists on page 66.)
AND
BUS 106 Techniques of Personal Finance ....3 credits
BUS 111 Ten-Key Skill Mastery.. 1 credit
BUS 112 Fundamentals of Bookkeeping ....3 credits
BUS 131 Medical Transcription Fundamentals ....3 credits
BUS 184 Medical Scribe...3 credits
BUS 231 Microsoft Office Level I ....3 credits
CIS 103 Introduction to Windows .... 1 credit
AND

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

Section IV
Programs

Modern Office Technologies Specialization

Secretaries and administrative assistants perform routine clerical and administrative duties. They organize files, draft messages, schedule appointments and support other staff.

Graduates with basic office and computer skills usually qualify for entry-level positions. Although most secretaries learn their job in several weeks, many legal and medical secretaries require several months of training to learn industry-specific terminology. Executive secretaries usually need several years of related work experience.

Career Opportunities

Employment of secretaries and administrative assistants is projected to decline about 3 percent from 2014 to 2024. 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 nonmetropolitan north Arizona median annual wage for secretaries and administrative assistants was $30,880 in May 2016.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, SOC 43-6014.

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/Modern-Office-Technologies*.

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

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 credits
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 66 ***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 66 ***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 66.)

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 Boolkeeping..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** (2016), employment of computer analysts, programmers and software engineers is projected to decline 8 percent, as U.S. workers compete for jobs against worldwide economies with lower salary costs. The average median salary for programmers and analysts in rural Arizona was $86,980 in May 2016, but are generally higher in metropolitan areas.

Cost & Time for Completion

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

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

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 66 **_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 66.

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 66.)

Unrestricted Electives.. 18 credits
(Choose from any unduplicated courses at the 100-level or above)
(CP) Certificate of Proficiency • (CAS) Certificate of Applied Science
(AAS) Associate of Applied Science Degree

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

CIS Cybersecurity Specialization

Information security analysts plan and carry out security measures to protect an organization's computer networks and systems. Their responsibilities are continually expanding as the number of cyberattacks increases.

Information security analysts must continually adapt to stay a step ahead of cyberattackers. They must stay up-to-date on the latest methods attackers are using to infiltrate computer systems and on IT security. Analysts need to research new security technology to decide what will most effectively protect their organization.

There are currently over 200,000 unfilled Information Security jobs in the United States, with an expected global shortfall of 1.5 million by 2019. Demand for certified Information Security Analysts is extremely high, with growth estimates as high as 58 percent, far exceeding other general computer and all occupations.

NPC's Cybersecurity program will prepare you to take respected industry certifications and pursue a bachelor's degree in a variety of programs, including Information Security, Computer Information Systems, Information Technology, Software Engineering, Computer Science and Criminal Justice.

Many courses will be taught using purely online **and** hybrid online/on-site labs, giving students the flexibility to obtain high quality instruction at one of the lowest tuition rates in Arizona.

Career Opportunities

With a bachelor's degree and a few years of experience, Information Security analysts' salaries in Arizona average more than $80,910 a year, with national averages in the mid 90s into six figures.
Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, SOC 15-1122, May 2016.

Cybersecurity (CP) • 18 credits

CIS 105 Computer Applications and Information Technology............3 credits
CIS 130 Information Security Fundamentals ....3 credits
CIS 135 IT Assessment, Audit, and Controls..............................3 credits
CIS 141 Managing and Maintaining Your PC I (A+) ....3 credits
CIS 145 Network+ Certification Preparation................................3 credits
CIS 146 Security+ Certification Preparation................................3 credits

Cybersecurity (CAS) • 45 credits

Complete the Cybersecurity CP...18 credits
PLUS
CIS 111 Introduction to Programming..3 credits
CIS 125 Effective Communication with Digital Media.....................3 credits
CIS 161 Microsoft Operating Systems...3 credits
CIS 171 GNU Linux Operating System..3 credits
CIS 230 Operating System Security..3 credits
CIS 231 Digital Forensics and Investigations
   OR CIS 233 Ethical Hacking..3 credits
CIS 232 Network Security...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 66 **_EXCEPT_** for MAT 101, MAT 103, MAT 109 or BUS 133.

Cybersecurity (AAS) • 64 credits

Complete the Cybersecurity CAS...45 credits
PLUS

General Education Courses
Communications ....3 credits
Select any course under the **Communications** General Education Course Options (for AAS Degrees) on page 66.

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 66.)

Unrestricted Electives... 9 credits
(Choose from any unduplicated courses at the 100-level or above)

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

Section IV Programs

Network and PC Support Specialization

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, May 2016 nonmetropolitan northern Arizona entry-level salaries average $37,660 for certified IT support techs and $50,790 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

BUS 231 Microsoft Office Level I ....3 credits
CIS 105 Computer Applications and Information Technology............3 credits
CIS 141 Managing and Maintaining Your PC I (A+) ....3 credits
CIS 142 Managing and Maintaining Your PC II (A+) ....3 credits
CIS 145 Network+ Certification Preparation.................................3 credits
CIS 147 PC Help Desk/Soft Skills..3 credits

Network and PC Support (CAS) • 45 credits

Complete the Network and PC Support CP....................................18 credits
PLUS
CIS 111 Introduction to Programming..3 credits
CIS 146 Security+ Certification Preparation.................................3 credits
CIS 148 Applied Networking..3 credits
CIS 149 Wireless Networking...3 credits
CIS 171 GNU Linux Operating System...3 credits
CIS 198 Internship ....3 credits
CIS 280 Systems Analysis and Design ....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 66 ***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.................................45 credits
PLUS

General Education Courses
Communications ....3 credits
Select any course under the **Communications** General Education Course Options (for AAS Degrees) on page 66.

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 66.)

Unrestricted Electives .... 9 credits
(Choose from any unduplicated courses at the 100-level or above)

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/network-pc-support***.

Web Development and Graphic Design Specialization

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 in Arizona average more than $68,750 a year.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, SOC 15-1134, May 2016.

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/web-design-development*.

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 66 ***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 66.

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 66.)

Unrestricted Electives... **3 credits**
(Choose from any unduplicated courses at the 100-level or above)

Construction Technology (CON)

Direct to $ Work

Certificate Options – CP & CAS

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

If you are thinking about a building trades career, consider these benefits of 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/construction**.

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 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 66

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

Construction Technology (AAS) • 64 credits

Complete the Construction Technology CAS ....31 credits
PLUS

General Education Courses

* **NCCER Certified Course**

Associate of Applied Science (AAS) Degree

Direct to $ Work

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 $32,410 per year (May 2016). 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: $35,920

- Cement masons/concrete finishers: $43,300

- Carpenters: $41,540

- Electricians: $59,450

- Drywall and Ceiling Tile Installers: $39,150

- First-Line Construction Supervisor: $56,560

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, May 2016.

Communications ....3 credits
> *Select any course under the Communications General Education Course Options (for AAS Degrees) on page 66.*

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 66.)

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

* NCCER Certified Course

Cosmetology (COS)

Certificate of Proficiency (CP) Options

Direct to $ Work

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/cosmetology*.

Cosmetology Certificate & Degree Options

Cosmetology

This is a 1600-hour program that will prepare individuals in hair cutting/styling; nails; facial/scalp treatments; shampooing; chemical applications; salon management; customer service; and Arizona State Laws and Regulations. Upon successful completion you will be prepared to take the AZ State Board of Cosmetology Licensing Practical and Written Examinations. Additional training is 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 hair dressers, stylists and cosmetologists in May 2016 was $23,710, a skilled cosmetologist can build an ever-growing and well-paying client base. Opportunities even exist for you to run your own business!

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition. (SOC 39.5012), May 2016

Cosmetology (CP) • 52 credits

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

Cosmetology (CAS) • 58 credits

Complete the Cosmetology CP ....*52 credits*
PLUS
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 66

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 66.)

Direct to $ Work

Section IV Programs

Early Childhood Studies (ECD)

Early Childhood Studies Programs Overview

Why study Early Childhood?

It is during the "Early Childhood" years, before the age of eight, that a child goes through the most rapid phase of growth and development. Their brains develop faster than at any other point in their lives, so these years are critical. The foundations for social skills, self-esteem, perception of the world and moral outlook are all established during these early years, as well as physical, cognitive and language development. Positive adult-child interactions and engaging, high quality early experiences play a fundamental role in the development of young children.

Early childhood professionals have an opportunity to profoundly impact a child's healthy development and learning potential.

Trends show that parents are increasingly recognizing the value of high-quality early learning experiences. In fact, according to the National Center for Education Statistics (NCES), enrollment in prekindergarten education has risen from 96,000 to over 1 million in the last 30 years.

In NPC's Early Childhood Studies programs, students are prepared to work in diverse and inclusive environments, including homes, schools and other community settings that serve children from birth to age eight and their families. Child-centered, developmentally effective and culturally sensitive practices are emphasized throughout the program. Through a curriculum that integrates general and special early childhood education content, we aim to enable our students to become outstanding early childhood educators, decision-makers, advocates and intellectual and ethical leaders. The program provides a comprehensive set of knowledge and competencies aligned with state and national standards for early childhood professional prepartion.

NPC students interested in the field of Early Childhood have several career options and two main degree pathways available to them — the **Associate of Arts in Early Childhood** (AAEC) or the **Associate of Applied Science** (AAS) with a selected area of specialization.

The **AAEC** supports students who wish to continue their education toward a bachelor's degree in early childhood or early childhood teacher certification and/or endorsement.

The **AAS** in **Early Childhood Studies** is an appropriate option for individuals interested in pursing a career working directly with, or on behalf of, young children and who may not wish to attain teacher certification and/or endorsement. The AAS degree **does not** supply the AGEC (*see page 65*) requirements for university transfer, but may partially support pursuit of a Bachelor of Applied Science

ECD Program is in Transition

NPC's Early Childhood Programs are in transition as curriculum and program specializations are being revised to better meet state and national standards.

Students interested in pursuing a degree or certificate in this area should work closely with an academic adviser or the ECD Department Chair to ensure coursework is applicable to your career goals.

(BAS) degree at two of the three state universities. See your academic adviser to design an educational pathway that meets your educational and career goals if you wish to attain a BAS degree.

Degree requirements

Both the **Associate of Arts in Early Childhood (AAEC) and the Associate of Applied Science (AAS) Early Childhood** degrees require a minimum of 64 hours of course credits with a "C" or better in all courses. The certificate programs that lead to the AAS degree also require a "C" or better in all courses.

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, check with your NPC academic adviser.

Most coursework in the program is practicum-based. Students conduct assignments and receive observation and instruction at an early childhood location in which the students work or volunteer. Students in this program are required to complete 16 hours of practicum for *each Early Childhood course credit* in which a practicum is a required part of the course. If you do not have access to an early childhood setting, please contact your adviser or the Early Childhood Department Chair to discuss degree and course options that meet your educational goals.

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. Data is only posted for certificate programs meeting minimum federal enrollment guidelines.

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

Associate of Arts in Early Childhood (AAEC)

Why study Early Childhood Education?

The Associate of Arts in Early Childhood (AAEC) degree offers foundational knowledge and competencies aligned with state and national standards for early childhood professional preparation. In Arizona, public preschool and kindergarten teachers are required to have specific coursework and practicum experiences in early childhood. The AAEC supports students who wish to continue their education toward a bachelor's degree in early childhood and who may have an interest in early childhood teacher certification and/or endorsement.

The AAEC degree is designed for students planning to transfer to one of the three Arizona public universities. It is specifically designed to fulfill the set of lower division general education requirements of the Arizona General Education Curriculum (AGEC-A) which, when completed, transfers as a block to any of three public universities.

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

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 65)*

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:
    MAT 142 College Mathematics with Contemporary Applications........3 credits
    MAT 152 Advanced Algebra ....3 credits
    MAT 189 Pre-Calculus Algebra/Trigonometry..................................3 credits
    Or any mathematics course for which MAT 189 is a prerequisite.

Discipline Studies

Arts and Humanities..***6 credits***
    (Select two courses from at least two disciplines from the list on page 66)
Physical and Biological Science..***8 credits***
    (Select two courses from the list on page 66)
Social and Behavioral Sciences..***9 credits***
    (Select three courses from at least two disciplines from the list on page 66)
Computer Science ....***3 credits***
    CIS 105 Computer Applications and Information Technology............3 credits

Core Requirements.. 22 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 Understanding Behavior and Encouraging Self-Discipline.... 1 credit
    ECD 108 Observation and Assessment in Early Childhood................. 1 credit
    ECD 110 Building Relationships with Families
        OR ECD 112 Enhancing Family Involvement .... 1 credit
    ECD 115 Nutrition in Early Childhood.. 1 credit
    ECD 120 Guidance and Development
       of Social-Emotional Development .... 1 credit
    ECD 125 Creative Media.. 1 credit
    ECD 200 Introduction to Early Childhood Education........................3 credits
    ECD 250 Child Development I...3 credits
    MAT 161 Algebra-based Mathematics for Elementary Teachers I.......3 credits
    MAT 162 Algebra-based Mathematics for Elementary Teachers II......3 credits

Transferrable Electives... 7 credits

    Successful completion of seven credits of unduplicated university
      transferrable electives, as described on page 63.

Early Childhood Studies

Why study Early Childhood?

The Early Childhood Studies degree is designed for individuals who wish to work directly with, or on behalf of, young children in a variety of settings including: health settings, childcare settings, faith-based settings, libraries, parent support or education programs and many others.

An AAS in Early Childhood Studies may be an appropriate option for individuals pursuing a career in early childhood or a related field, such as social work or child and family studies. The AAS Early Childhood Studies degree **does not** supply the AGEC (*see page 65*) requirements for university transfer, but may partially support pursuit of a Bachelor of Applied Science (BAS) degree at two of the three state universities. See your adviser to design an educational pathway that meets your needs if you wish to attain a BAS degree.

ECD – Early Childhood Studies(CP) • 19 credits

ECD 100 Providing a Healthy Environment.................................1 credit
ECD 102 Ensuring a Safe Environment ....1 credit
ECD 105 Understanding Behavior
   and Encouraging Self-Discipline..1 credit
ECD 108 Observation and Assessment in Early Childhood ....1 credit
ECD 110 Building Relationships with Families............................1 credit
ECD 120 Guidance and Development
   of Social-Emotional Development ....1 credit
ECD 128 Culture, Language and Community.............................1 credit
‡ECD 136 Understanding How Children Learn...........................1 credit
‡ECD 142 Designing Developmentally Effective
   Learning Environments ....2 credits
*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 186 Effective Interactions for Learning ....1 credit
ECD 187 Supporting STEM in Early Childhood..........................1 credit
‡ECD 200 Introduction to Early Childhood Education ....3 credits
ECD 217 Early Childhood Language and Literacy......................1 credit
ECD 233 Policies and Procedures in Early Childhood Programs 2 credits
*ECD 250 Child Development I...3 credit
**‡ECD 136, 142 may be taken in combination or
   ECD 200 as a single three-credit class.**
***ECD 147, 148, 149 may be taken in combination or
   ECD 250 as a single three-credit class.**

ECD – Early Childhood Studies (CAS) • 28 credits

Complete the ECD – Early Childhood CP............19 credits
PLUS

General Education Courses .... 6 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 66

Core Requirements .... 3 credits

   Select any courses within ECD

ECD – Early Childhood Studies (AAS) • 64 credits

*Complete the ECD – Early Childhood Studies
   CAS...28 credits*
PLUS

General Education Courses .... 3 credits

Communications ....3 credits
   Select any course under the **Communications** General Education Course Options (for AAS degrees)
   on page 66.

Discipline Studies....................... 13 credits

   (Select one course from the **Physical and Biological Sciences** and one course from the **Arts and Humanities** and two courses from the **Social and Behavioral Sciences** lists on page 66.)

Core Requirements .... 11 credits

   ECD 222 Introduction to Early Childhood Special Education .... 3 credits
PLUS
   Select any courses within ECD .... 8 credits

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

   Select a minimum of 9 unduplicated non-ECD credits. May be in a related area to ECD, such as SOC, EDU, or HUS.

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

Family Care

Direct to $ Work

Why specialize in Family Care?

The **Family Care** area of specialization prepares individuals to provide high-quality early care and education programs for children in their homes. Operating a childcare program in one's home can be rewarding while also providing a service to families in one's community. The Family Care Specialization offers individuals both foundational skills in early childhood, as well as the specific knowledge and information needed to operate a childcare business.

The **Associate of Applied Science (AAS), Family Care Specialization** degree is not intended for university transfer, but prepares graduates to immediately enter the workforce.

ECD – Family Care (CP) • 25 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 Understanding Behavior
    and Encouraging Self-Discipline.. 1 credit
ECD 108 Observation and Assessment in Early Childhood .... 1 credit
ECD 110 Building Relationships with Families............................. 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 120 Guidance and Development
    of Social-Emotional Development .... 1 credit
ECD 123 Music and Creative Movement.................................... 1 credit
ECD 124 Dramatic Play in the Early Childhood Setting .... 1 credit
ECD 125 Creative Media.. 1 credit
ECD 126 Large Muscle Development .... 1 credit
ECD 127 Small Muscle Development... 1 credit
ECD 136 Understanding How Children Learn .... 1 credit
*ECD 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 credits

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

ECD – Family Care (CAS)
• 31 credits

Complete the ECD – Family Care 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 66

ECD – Family Care (AAS) • 64 credits

Complete the ECD – Family Care CAS...............31 credits
PLUS

General Education Courses .... 3 credits

Communications ....3 credits
Select any course under the **Communications** General Education Course Options (for AAS degrees) on page 66.

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 66.)

Required Electives....................... 23 credits

Select a minimum of 23 unduplicated credits. One-half to six credits of ECD/EDU/HUS 199s and 299s may be included in the 23 credits.

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

Section IV Programs

Direct to Work

Infant/Toddler

Why specialize in Infant/Toddler Development?

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.

A specialty in **Infant and Toddler Studies** provides individuals with the foundational knowledge and skills to support children during this critical period of development. Individuals with a specialization in **Infant and Toddler Studies** may choose to work directly with young children, such as in an Early Head Start program, or with their families in a variety of family support or parent education settings.

The **Associate of Applied Science (AAS), Infant and Toddler Specialization** degree is not intended for university transfer, but prepares graduates to immediately enter the workforce.

ECD – Infant/Toddler (CP)
• 26 credits

ECD 100 Providing a Healthy Environment.................................1 credit
ECD 102 Ensuring a Safe Environment ....1 credit
ECD 103 Planned Arrangements and Schedules ....1 credit
ECD 108 Observation and Assessment in Early Childhood.........1 credit
ECD 110 Building Relationships with Families.............................1 credit
ECD 112 Enhancing Family Involvement.....................................1 credit
ECD 115 Nutrition in Early Childhood...1 credit
ECD 143 Inclusion of Children with Special Needs....................2 credits
*ECD 147 Prenatal and Infant Development..............................1 credit
*ECD 148 Toddler Development...1 credit
*ECD 149 Development of the Preschool Child ....1 credit
ECD 154 Environments for Infants and Toddlers........................1 credit
ECD 155 Curriculum and Learning Materials for Infants ....1 credit
ECD 156 Curriculum and Learning Materials for Toddlers..........1 credit
ECD 158 Developing and Utilizing Observation Skills
     in Infant and Toddler Programs...1 credit
ECD 159 Recordkeeping Skills for Infant/Toddler Care...............1 credit
ECD 163 Cognitive Development of Infants and Toddlers...........1 credit
ECD 164 Practical Applications of Cognitive Development
     in Infants and Toddlers ....1 credit
ECD 165 Language Development of Infants and Toddlers..........1 credit
ECD 166 Encouraging Autonomy and Positive Self-Concept ......1 credit
ECD 167 Guidance and Discipline of Infants and Toddlers ....1 credit
ECD 168 Enhancing Social Competence
     of Infants and Toddlers ....1 credit
ECD 169 Sensorimotor Learning in Infancy and Toddlerhood .....1 credit
ECD 172 Physical Development in Infancy and Toddlerhood ......1 credit
ECD 175 Professionalism ....1 credit
*ECD 250 Child Development I...3 credits

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 (for CAS and AAS Degrees) on page 66.

ECD – Infant/Toddler (AAS)• 64 credits

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

General Education Courses .... 3 credits

Communications ....3 credits
Select any course under the **Communications** General Education Course Options (for AAS degrees) on page 66.

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 66.)

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 Management

Direct to $ Work

Why specialize in Early Childhood Management?

Administering a high-quality early childhood program requires both an understanding of early childhood curriculum as well as general business and management skills.

The Early Childhood Management Specialization prepares individuals who are serving as, or who wish to serve as, a director, manager or coordinator of an early care and education program.

In addition to general early childhood coursework, the Management Specialization provides skills in supervision, budgeting, marketing and evaluation of an early childhood program.

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

Career Opportunities

Employment of preschool and childcare center directors is projected to grow 7 percent from 2014 to 2024, about average for all occupations. Continued demand for preschool programs and childcare is expected to contribute to this growth.

The median Arizona annual salary is $41,430, based on five years of experience in the field.

SOC 11-9031, May 2016. Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition.

Early Childhood Management (CAS) • 41 credits

ECD 100 Providing a Healthy Environment .... 1 credit
ECD 102 Ensuring a Safe Environment .... 1 credit
ECD 103 Planned Arrangements and Schedules .... 1 credit
ECD 105 Understanding Behavior and Encouraging Self-Discipline.... 1 credit
ECD 108 Observation and Assessment in Early Childhood................ 1 credit
ECD 110 Building Relationships with Families .... 1 credit
ECD 111 Supporting the Growth and Education of Parents .... 1 credit
ECD 112 Enhancing Family Involvement.. 1 credit
ECD 120 Guidance and Development
    of Social-Emotional Development .... 1 credit
ECD 128 Culture, Language and Community .... 1 credit
ECD 129 Planning and Implementing a Bilingual Program................ 1 credit
ECD 136 Understanding How Children Learn................................. 1 credit
ECD 175 Professionalism .... 1 credit
ECD 198 Internship – (Early Childhood Management) .... 1 credit
ECD 200 Introduction to Early Childhood Education .... 3 credits
ECD 201 Exploring Early Childhood Program Philosophies .... 1 credit
ECD 211 Providing Food and Nutrition Services............................. 1 credit
ECD 231 Planning and Managing an Early Childhood Program .... 2 credits
ECD 232 Designing Indoor and Outdoor Environments.................... 2 credits
ECD 233 Policies and Procedures in Early Childhood Programs .... 2 credits
ECD 234 Staffing an Early Childhood Program............................... 2 credits
ECD 235 Budgeting and Financial Management .... 2 credits
ECD 236 Marketing the Early Childhood Program........................... 2 credits
ECD 237 Evaluating an Early Childhood Program .... 1 credit
ECD 250 Child Development I.. 3 credits
PLUS
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 66 ***EXCEPT*** for MAT 101

ECD – Early Childhood Management (AAS) • 64 credits

Complete the Early Childhood Management CAS ....41 credits
PLUS
General Education Courses... 3 credits
Communications .... 3 credits
    Select any course under the **Communications** General Education Course
      Options (for AAS degrees) on page 66.

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 66.)

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.

Section IV Programs

School-Age

Direct to $ Work

Why specialize in School-Age Care?

The **School-Age** area of specialization is designed for individuals who are working with, or wish to work with, school-age children and want to further develop their knowledge and skills specific to this age group.

With a **School-Age** area of specialization, individuals are prepared to support a variety of programs, such as after-school care, children's parks and recreation programs, summer camp experiences and other programs in settings where one works with children 5 – 12 years of age.

The **Associate of Applied Science (AAS) School-Age Specialization** degree is not intended for university transfer, but prepares graduates to immediately enter the workforce.

ECD – School-Age (CP) • 25 credits

ECD 100 Providing a Healthy Environment.................................. 1 credit
ECD 102 Ensuring a Safe Environment .... 1 credit
ECD 103 Planned Arrangements and Schedules .... 1 credit
ECD 108 Observation and Assessment in Early Childhood .... 1 credit
ECD 110 Building Relationships with Families............................. 1 credit
ECD 115 Nutrition in Early Childhood.. 1 credit
ECD 116 Science and Discovery .... 1 credit
ECD 120 Guidance and Development
    of Social-Emotional Development .... 1 credit
ECD 123 Music and Creative Movement..................................... 1 credit
ECD 124 Dramatic Play in the Early Childhood Setting .... 1 credit
ECD 125 Creative Media.. 1 credit
ECD 127 Small Muscle Development... 1 credit
ECD 128 Culture, Language and Community .... 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 186 Effective Interactions for Learning .... 1 credit
ECD 217 Early Childhood Language and 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) • 31 credits

Complete the ECD – School-Age 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 66

ECD – School-Age (AAS) • 64 credits

Complete the ECD – School-Age CAS .... 31 credits
PLUS

General Education Courses .... 3 credits

Communications ....3 credits

Select any course under the **Communications** General Education Course Options (for AAS degrees) on page 66.

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 66.)

Required Electives....................... 23 credits

Select a minimum of 23 **unduplicated** credits. One-half to six credits of ECD/EDU/HUS 199s and 299s may be included in the 23 credits.

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

Section IV Programs

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 65*)

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 <u>one</u> 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 66)
Physical and Biological Science..*8 credits*
  (Select two courses from the list on page 66)
Social and Behavioral Sciences..*9 credits*
  (Select <u>one</u> of the following and <u>two</u> more courses from at least two disciplines with at least one asterisk (*) course to meet requirements for Contemporary Global, International or Historical Awareness, from the list on page 66.)
  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 63.

Education Studies (EDU)

Education Professions

Direct to $ Work

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 Profession Certificate of Proficiency (CP)**.

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

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 nonmetropolitian Arizona was $24,200 in May 2016.

(SOC 25-9041) Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, May 2016.

Education Professions (CP only) • 20 credits

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

Cost & Time for Completion

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

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

Film and Digital Video (FDV)

Direct to $ Work

Degree and Certificate Options

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 66

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 66.

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 66.)

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 May 2016 average annual salary for a camera operator is $49,080, while a film or video editor averages $61,750. Depending on how good you are and what kinds of contacts you've made, the sky's the limit.

Fire Science (FRS)

Direct to Work

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 66

Associate of Applied Science (AAS) Degree

Direct to **$** *Work*

First Responders

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

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

Cost & Time for Completion

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

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

Career Opportunities

Employment of firefighters is projected to grow 5 percent from 2014 to 2024, about 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 Nonmetropolitian Arizona was $35,470 in May 2016.

(SOC 33-2011) Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition.

Fire Science (AAS) • 64 credits

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

General Education Courses

Communications ....*3 credits*
    Select any course under the **Communications** General Education Course Options (for AAS degrees) on page 66.

Discipline Studies (Per the lists on page 66)......................... **9 credits**
    Select one course from the **Arts and Humanities** ....3 credits
    Social and Behavioral Sciences ....6 credits
        PSY 101 Introduction to Psychology ....3 credits
    and any non-PSY course from the **Social and Behavioral Sciences** list.

    PLUS

Required Electives .... **9 credits**
    Complete a minimum of 9 credit hours from the following:
    FRS 101 Principles of Fire and Emergency Services Administration..3 credits
    FRS 110 Hazardous Materials for First Responder..........................2 credits
    FRS 126 Rope Rescue I .... 1 credit
    FRS 127 Rope Rescue II .... 1 credit
    FRS 128 Rope Rescue III .... 1 credit
    FRS 132 Fire Investigation I ....3 credits
    FRS 135 Fire Protection Hydraulics and Water Supply....................3 credits
    FRS 137 Strategies and Tactics...3 credits
    FRS 138 Legal Aspects of Emergency Services..............................3 credits
    FRS 139 Confined Space Operations ....3 credits
    FRS 141 Fire Service Communication...3 credits
    FRS 150 Wildland Firefighter..2 credits

Unrestricted Electives .... **9 credits**
    Any <u>unduplicated</u> courses at the 100 or higher level.

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

Section IV Programs

Human Services (HUS)

Residential Child/Youth Care – CP & CAS

Direct to Work

Why become a Residential Child/Youth Assistant?

Know how to manage time effectively?

Do you have patience, 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 26 percent between 2014 and 2024, well above 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 personal care workers.

The median annual salary for residential child/youth assistants ranged from $20,980 to $21,640 in May 2016, with higher ranges being in specialized disability or substance abuse facilities.

(SOC 39-9021, 9041) Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, May 2016.

Child/Youth Care (CP) • 19 credits

ECD 100 Providing a Healthy Environment	1 credit
ECD 102 Ensuring a Safe Environment	1 credit
ECD 108 Observation and Assessment in Early Childhood	1 credit
ECD 110 Building Relationships with Families	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

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

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 (Per the list on page 66)***...................... 3 credits***
Select any course under the **Mathematics** General Education Course Options (for CAS and AAS Degrees)

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

Complete the **Residential Child/Youth Care CAS** ... ***36 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 66.

Discipline Studies (Per the lists on page 66) ... 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**.

PLUS
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.

Industrial Maintenance & Operations (IMO)

Direct to $ Work

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 $50,310, plant operators earned a median salary of $49,080 and dispatchers/distributors earned nearly $86,610.
(U.S. BLS, May 2016, 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

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 Skills Center on NPC's Holbrook campus, the Navajo Generating Station in Page and the Tucson Electric Power Generating Station in Springerville. (*Check current semester's class schedule for hands-on component scheduling.*)

Cost & Time for Completion

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

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

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

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

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

> **Note:** A Certificate of Applied Science (CAS) is **NOT** available in Wasterwater 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 66 ***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 66.

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

Discipline Studies (Per the lists on page 66)......................... 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

Mechatronics (MET) Studies

Direct to $ Work

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 $56,900 in May 2016.

(SOC 17-3024) Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, May 2016.

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 66 ***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 66.

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 66)......................... 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.

Section IV
Programs

Industrial Electrical, Motors and PLC's 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.

Direct to Work

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 $56,900 in May 2016.

(SOC 17-3024) Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, May 2016.

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 Electrical, Motors and PLC's (CP)
• 23 credits

MET 130 Industrial Electrical Systems ....4 credits
MET 140 Introduction to Programmable Logic Controllers...............4 credits
MET 160 Rotating Electrical Machines ....4 credits
MET 200 Robotics and Motion Control..4 credits
MET 210 Process Control and Instrumentation ....3 credits
MET 220 Advanced Programmable Logic Controllers ....4 credits

Industrial Electrical, Motors & PLC's (CAS)
• 29 credits

Complete the Industrial Electrical, Motors and PLC's CP................*23 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 66 *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

Communications ....3 credits
Select any course under the **Communications** General Education Course Options (for AAS degrees) on page 66.
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 66)......................... 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.

Section IV
Programs

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.

Direct to Work

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 $56,900 in May 2016.

(SOC 17-3024) Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, May 2016.

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 66 ***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 66.

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 66)......................... **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.

Section IV Programs

Medical Assistant (MDA)

Certificate (CAS) & AAS Degree Options

Direct to $ Work

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 23 percent from 2014 to 2024, much faster than the average for all occupations. The growth of the aging baby-boom population will continue to spur demand for preventive medical services, which are often provided by physicians. As their practices expand, physicians will hire more assistants to perform routine administrative and clinical duties, allowing the physicians to see more patients.

The median annual salary for North Nonmetropolitian Arizona was $29,830 in May 2016.

(SOC 31-9092) Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, May 2016.

Cost & Time for Completion

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

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

Medical Assistant (CAS) • 40 credits

Complete these Core courses
BIO 160 Introduction to Human Anatomy and Physiology ....4 credits
 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 66 **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 66 **EXCEPT** for SPT 110 and SPT 120.

Discipline Studies (Per the lists on page 66)

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

Social and Behavioral Sciences...*6 credits*
 One course from the **Social and Behavioral Sciences** list..................3 credits
 AND PSY 101 Introduction to Psychology ....3 credits
 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 Studies (NUR)

Direct to Work

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 nurse (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.*

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

Check with your NPC or university academic adviser or visit *www.npc.edu/nursing-programs-LPN-RN*

■ *Requirements:*

<u>Note</u>: Admission to the college does not guarantee admission to the Nursing Program.

Graduates must satisfy the licensing requirements of the Arizona 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 a minimum of three semesters of prerequisites followed by two academic years dedicated to the study of nursing. After completion of the first year and the addition of the Practical Nurse Completion course, the student nurse can receive a Certificate of Applied Science in Practical Nursing and apply to write the NCLEX-PN. The student nurse may then exit the program or continue on to earn the Associate of Applied Science Degree, and be qualified to take the NCLEX-RN exam.

LPN to RN

For the student who is a **Licensed Practical Nurse (LPN)**, who wishes to enter the program to acquire the Associate of Applied Science in Nursing Degree and become a Registered Nurse (RN), the prerequisite requirements and admission standards are identical to the Multiple Exit CNA to RN Program, with the exception of the CNA course. The student should meet with an NPC academic adviser and provide evidence of <u>current</u> Arizona Licensed Practical Nurse licensure that is active and in good standing. Decisions regarding acceptance are determined by the Nursing Admission Committee. **Additional fees may apply for assessed credit by evaluation.** *Evaluation and approval of assessed credit does not guarantee admission to the Nursing program.*

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 program requirements 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 and admission standards are identical to the Multiple Exit CNA to RN Program, with the exception of the CNA course. Prerequisites must be completed by July 1 prior to enrolling in the third semester NUR 221 nursing course.

The student should meet with an NPC academic adviser and provide evidence of certification. Decisions regarding

Nursing Studies (NUR)

Direct to $ Work

Paramedic to RN Transition Continued

acceptance are determined by the Nursing Admission Committee. **Additional fees may apply for assessed credit by evaluation.** *Evaluation and approval of assessed credit does not guarantee admission to the Nursing program.* The student is eligible to take the National Council Licensing Examination for Registered Nursing (NCLEX-RN) when program requirements 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.

Prerequisite Courses Required <u>Before</u> 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 is required 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 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
ENL 102 College Composition II	3 credits
PSY 240 Developmental Psychology	3 credits

<u>AND</u> 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

Nursing Studies (NUR)

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
Elementary Algebra score: ASSET, 41; ACCUPLACER, 57; 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 I...................................... 4 credits
BIO 201 Human Anatomy and Physiology I............... 4 credits
BIO 202 Human Anatomy and Physiology II.............. 4 credits
BIO 205 Microbiology... 4 credits
CHM 130 Fundamental Chemistry........................... 4 credits

Social and Behavioral Sciences.........................*6 credits*
PSY 240 Developmental Psychology .... 3 credits

PLUS one of the following:
ANT 102 Cultural Anthropology.............................. 3 credits
SOC 101 Introduction to 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 219 NCLEX Review Seminar............................. 2 credits
NUR 221 Nursing III.. 8 credits
NUR 222 Nursing IV.. 8 credits

LPN to RN (AAS) • 57 credits

**Must have current Arizona Licensed Practical Nurse
    (LPN) license, active and in good standing**
Complete the RN (AAS)
    General Education Requirements ....*32 credits*

Plus, these Core Requirements ....*25 credits*
NUR 116 LPN to RN Transition................................ 3 credits
NUR 117 Pharmacology I.. 2 credits
NUR 118 Pharmacology II....................................... 2 credits
NUR 219 NCLEX Review Seminar............................. 2 credits
NUR 221 Nursing III.. 8 credits
NUR 222 Nursing IV.. 8 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 219 NCLEX Review Seminar............................. 2 credits
NUR 221 Nursing III.. 8 credits
NUR 222 Nursing IV.. 8 credits

■ *Career Opportunities*

According to the U.S. Bureau of Labor Statistics, employment of registered nurses is expected to grow 16 percent until 2024, faster than the average for all occupations. The demand for registered nurses is projected to generate 439,300 new jobs over the next seven years, with Arizona RN salaries averaging $73,430 per year and LPN's averaging $51,670. (May 2016, SOC 29-1141, 29-2061)
Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition.

■ *Cost & Time for Completion*

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

You can access the current data for the Licensed Practical Nursing (CAS) Program online at **www.npc.edu/nursing**.

Nursing Assistant (NAT)

Direct to Work

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.

The median annual salary for North Nonmetropolitian Arizona was $30,280 in May 2016.

(SOC 31-1014) Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition.

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/CNA_nursing-assistant*.

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 66 ***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.
See an academic adviser or Nursing Department for details.

Paramedicine (EMT)
Certificates (CP & CAS) and AAS Degree

Direct to **$** *Work*

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 of 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.

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 at *www.npc.edu/emergency-medical-services*.

Northland Pioneer College's Paramedic Program is accredited by the

CAAHEP

Commission on Accreditation of Allied Health Education Programs

1361 Park Street • Clearwater, FL 33756 • (727) 210-2350 • Fax (727) 210-2354 • www.caahep.org

CAAHEP Accreditation for Paramedics: "To prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels."

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**
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 66

Paramedicine (AAS) • 70 credits

Complete the Paramedicine CAS...**58 credits**
Plus

General Education Courses

Communications ....**3 credits**
Select any course under the **Communications** General Education Course Options (for AAS degrees) on page 66.

Discipline Studies (Per the lists on page 66)........................ 9 credits

Arts and Humanities..**3 credits**
Select one course from the **Arts and Humanities** section.
PHL 105 is recommended, but not required
Social and Behavioral Sciences..**6 credits**
PSY 101 Introduction to Psychology ....3 credits
AND
One additional non-PSY course from the
Social and Behavorial Sciences list...3 credits

Welding (WLD)

Certificates of Proficiency (CP)

Direct to **$** *Work*

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 E. Thornton 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

Direct to **$** *Work*

Career Opportunities

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

But you don't have to stray too far from home for a good salary. The BLS reports experienced welders in Arizona earned a median average salary of $42,330.

(SOC 51.4121) May 2016 Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition.

Cost & Time for Completion

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

You can access the current data for the Welding Program online at *www.npc. edu/welding*.

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 66

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 66.

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 66.
    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

Section IV Programs

Northland Pioneer College

Northland Pioneer College
EXPANDING MINDS • TRANSFORMING LIVES℠

Pre-Registration Course Selection Form

Semester _____

Steps for selecting courses:

1. Review the courses needed to complete your degree or certificate.
2. Access the NPC online class schedule at *www.npc.edu/class-schedule*.
3. Choose the appropriate courses toward your career plan and list the classes below.
4. You are now ready to meet with an adviser and register for your classes.

Student Name _____   NPC Student ID Number _____

	DEPT	COURSE	SECTION #	COURSE TITLE	DAY	TIME	INSTRUCTOR	CREDIT	FEES
Ex.	HDE	105	35	Success Strategies for College	R	8-10:44pm	Hill, A.	3	$0
1									
2									
3									
4									
5									
6									
7									
8									