

# Associate of Science Pre-Engineering Concentration Engineering Management Pathway

Full-Time, Fall Start

[www.pima.edu/engineering-as](http://www.pima.edu/engineering-as)

Prepare to transfer to a university to complete a bachelor's degree in engineering. This program has been designed to match as closely as possible to the first two years of an engineering degree at the University of Arizona.

**Title IV Financial Aid eligible:** Yes

## What can I do with this degree?

**Career options:** Completing a bachelor's degree in engineering can lead to employment in a variety of different careers as a chemical, civil, electrical, or mechanical engineer. Some careers may require additional education or training.

**Academic options:** Transfer to a university and continue your studies Engineering. See an advisor.

### CHOOSE YOUR COURSES WITH YOUR COLLEGE ADVISOR

## Placement

Students must meet prerequisite standards before taking MAT 220 and WRT 101 required in the pathway below. If you are not prepared for these courses based on placement results, you will need to take courses to build your skills prior to taking them. The sequence of courses follows.

Math: ICS 081 > MAT 092 > MAT 097 > MAT 188 > MAT 189 > MAT 220

Reading: ACL 080 > REA 091

Writing: ACL 080 > WRT 090 > WRT 101 (or WRT101S can replace both WRT 090 and WRT 101)

## Semester Pathway

This pathway is a suggested sequence of courses for your program of study. Work with an advisor to develop a unique pathway for you based on your placement recommendations, any prior college courses and your specific situation.

**General Education Note:** When General Education (Gen. Ed.) credits are listed below, select from the appropriate General Education course list linked from the program website. Some programs recommend specific courses.

For this pathway, ensure that the I, C and G requirement is met.

### Semester 1 - Fall (Semester Total: 16 credits)

**CHM 151IN:** General Chemistry I (4 credits)

**ENG 102IN:** Problem Solving and Engineering Design (3 credits)

**MAT 220:** Calculus I (5 credits)

**WRT 101:** English Composition I (3 credits)

**STU 100:** College Success and Career Planning (1 credits)  
or STU 107: University Transfer Exploration, Preparation and College (1 credits)

### Semester 2 - Spring (Semester Total: 15 credits)

**ENG 110IN:** Solid State Chemistry (4 credits)  
or CHM 152IN: General Chemistry II (4 credits)

**MAT 231:** Calculus II (4 credits)

**PHY 210IN:** Introductory Mechanics (4 credits)

**WRT 102:** English Composition II (3 credits)

**Semester 3 – Fall (Semester Total: 17 credits)**

**ENG 175IN:** Computer Programming for Engineering Applications I (3 credits)

**MAT 241:** Calculus III (4 credits)

**PHY 216IN:** Introductory Electricity and Magnetism (4 credits)

**Gen. Ed.:** AGEC Social and Behavioral Sciences List. Recommend ANT 112: Exploring Non-Western Culture (3 credits) or ECN 202: Macroeconomic Principles (3 credits) or POS 201: American National Government and Politics (3 credits) or SOC 101: Introduction to Sociology (3 credits) or SOC 120: Current Social Problems (3 credits)

**Gen. Ed.:** AGEC Fine Arts List (3 credits)

**Semester 4 - Spring (Semester Total: 15-17)**

**ENG 210:** Engineering Mechanics: Statics (3 credits)

**ENG 232:** Thermodynamics (3 credits)

**ENG 260:** Electrical Engineering (3 credits)  
or ENG 282IN: Basic Electric Circuits (5 credits)

**STU 210UA:** University of Arizona Transition (2 credits)  
or STU 210UT: University Transition (2 credits)

**Gen. Ed.:** AGEC Social and Behavioral Sciences List. Recommend ANT 112: Exploring Non-Western Culture (3 credits) or ECN 202: Macroeconomic Principles (3 credits) or POS 201: American National Government and Politics (3 credits) or SOC 101: Introduction to Sociology (3 credits) or SOC 120: Current Social Problems (3 credits)

**Gen. Ed.:** AGEC Humanities List. Recommend: HIS 102: Introduction to Western Civilization II (3 credits) or PHI 101: Introduction to Philosophy (3 credits) or PHI 123: Philosophical Foundations of Science (3 credits)

**PROGRAM TOTAL: 63-65 credits**

Program/Major/Concentration Codes: **AOSASI/ASI/ENGR**

**Find more information about this program at:  
[www.pima.edu/engineering-as](http://www.pima.edu/engineering-as)**