

Associate of Science Pre-Engineering Concentration Electrical & Computer Engineering

Full-Time, Fall Start

www.pima.edu/engineering

Prepare to transfer to a university to complete a bachelor's degree in engineering.

Title IV Financial Aid eligible: Yes

What can I do with this degree?

Career options: Completing this program can lead to employment in a variety of different careers.

Academic options: Transfer to a university and continue your studies toward a bachelor's degree in Engineering.

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 1097 > MAT 188 > MAT 189 > MAT 220

Reading: ICS 079 > REA 081 > REA 091

Writing: ICS 079 > WRT 090 > WRT 101 (or WRT 101S can replace both WRT 090 and WRT 101)

Semester Pathway

This pathway is a suggested sequence of courses for full-time students. Part-time students or those with specific interests or transfer needs are encouraged to work with an advisor to develop a unique academic map.

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, select Gen. Ed. course(s) to fulfill the I, C and G requirements.

Semester 1-Fall (Semester Total: 16 credits)

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

CHM 151IN: General Chemistry I (4 credits)

MAT 220: Calculus I (5 credits)

STU 100: College Study Skills (1 credit)

or STU 107: University Transfer Preparation (1 credit)

WRT 101: English Composition I (3 credits)

Semester 2-Spring (Semester Total: 14 credits)

ENG175IN: Computer Programming for Engineering Applications I (3 credits)

MAT 231: Calculus II I (4 credits)

PHY 210IN: Introductory Mechanics (4 credits)

WRT 102: English Composition II (3 credits)

Semester 3-Fall (Semester Total: 18 credits)

ENG 274IN: Digital Logic (4 credits)

MAT 241: Calculus III (4 credits)

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

Gen. Ed.: AGEC Humanities List (3 credits) 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)

Gen. Ed.: AGEC Fine Arts List (3 credits) Recommend: ART 100 Basic Design (3 credits) or ART 110 Drawing I (3 credits)

Semester 4-Spring (Semester Total: 16 credits)

ENG 282IN: Basic Electric Circuits (3 credits)

Gen. Ed.: AGEC Social & Behavioral Sciences List (3 credits) Recommend: ANT 112 Exploring Non-Western Cultures (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)

Gen. Ed.: AGEC Social & Behavioral Sciences List (3 credits) Recommend: ANT 112 Exploring Non-Western Cultures (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)

MAT 262: Differential Equations

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

PROGRAM TOTAL: 64 credits

Program/Major/Concentration Codes: **AOSASI/ASI1/ENGR**

**Find more information about this program at:
www.pima.edu/engineering**