

Automated Industrial Technology Associate of Applied Science

Full-Time Fall Start

www.pima.edu/industrial-tech-aas

Prepare for a career designing and maintaining the complex mechanical and electrical control systems that keep automated manufacturing lines up and running.

Title IV Financial Aid eligible: Yes

What can I do with this certificate?

Career options: Employment as an Automation Engineer Technician, Electronics Assembly Technician, or Maintenance and Instrumentation Technician in the manufacturing, defense, energy/utility, mining, or healthcare industries.

Academic options: This program may apply toward a Bachelor of Applied Science (BAS). See an advisor

CHOOSE YOUR COURSES WITH YOUR COLLEGE ADVISOR

Placement

Students must meet prerequisite standards before taking GTM 105 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 > GTM 105

Reading: ACL 080 > REA 091

Writing: ACL 080 > 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 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 one Gen. Ed. course fulfills the C or G requirement.

Semester 1 -Fall (Semester Total: 17 credits)

AIT 100: Industrial Safety (1 credits)

AIT 105: Maintenance Operations (3 credits)

AIT 110: Mechanical Systems (3 credits)

AIT 115: Hydraulic Systems (3 credits)

AIT 120: Pneumatic Systems (3 credits)

AIT 125: Electrical Systems I (3 credits)

STU 100: College Success and Career Planning (1 credit)

Semester 2 - Spring (Semester Total: 16 credits)

AIT 205: Electronic Control Systems I (3 credits)

AIT 210: Electronic Control Systems II (3 credits)

AIT 215: Process Control Systems (4 credits)

AIT 225: Electrical Systems II (3 credits)

AIT 270: Robotics I (3 credits)

Semester 3 - Summer (Semester Total: 6 credits)

Gen Ed: CTE Arts and Humanities List. Recommend ART 100: Basic Design (3 credits) or HIS 101: Introduction to Western Civilization I (3 credits)

Gen Ed: CTE Social and Behavioral Science List. Recommend ECN 201 Microeconomic Principles (3 credits) or POS 201 American National Government and Politics (3 credits) or SOC 110 Introduction to Cities and Global Society (3 credits)

Semester 4 - Fall (Semester Total: 12-13 credits)

Gen Ed.: CTE Communications List. Recommend WRT 101: English Composition I (3 credits)

Technical Elective*: any AIT courses not already required, CAD 117, 142, 153, 172, CIS 119, 170, MAC 110, 150 or WLD 110 (6-7 credits) GTM 105: Applied Technical Mathematics (3 credits)

Semester 5 - Spring (Semester Total: 13-14 credits)

AIT 250: Automated Industrial Technology (3 credits)
or **AIT 291:** Automated Industrial Technology Internship (3 credits)

Gen Ed.: CTE Other Requirement. Recommend BIO 108IN: Plants, People and Society (4 credits)

Technical Elective*: any AIT courses not already required, CAD 117, 142, 153, 172, CIS 119, 170, MAC 110, 150 or WLD 110 (3-4 credits)

Elective: Complete an additional Gen. Ed. course, if planning to pursue a bachelor's degree or an additional Technical Elective if not planning to transfer (3 credits)

PROGRAM TOTAL: 64 credits

** NOTE: A total of 12 credits of Technical Elective Courses is required. Students may choose to take the credits in different combinations than indicated in the pathway.*

Program/Major Codes: **AASAIT/AIT**

**Find more information about this program at:
www.pima.edu/industrial-tech-aas**