

The certificate of proficiency and the technical certificate programs give the student the opportunity to earn certificates while completing steps toward an Associate of Applied Science degree.

2023-2024



**TECHNICAL CERTIFICATE PLAN
MECHATRONICS**

Degree Code: 4510; CIP Code: 15.0303

All technical certificate-seeking students must meet the freshman assessment and placement requirements. If deficiencies exist, the student must complete the required CPT courses.

**A 2.0 GPA is required for graduation from the
Technical Certificate in Mechatronics program.**

**ATTENTION STUDENTS: PLEASE SEE CURRENT CATALOG FOR
ALL FEES AND CHARGES ASSOCIATED WITH THIS CERTIFICATE.**

This program is designed for students seeking the knowledge and skills necessary to be employed in the laboratory and field-testing, manufacturing and assembly, quality assurance, manufacturing technician and other related fields. Students should be able to apply this knowledge and perform basic tests, troubleshooting, and repair of electronic equipment and machinery often found in advanced manufacturing firms. Visit asumh.edu/ge_mech for gainful employment information.

Student Learning Outcomes for TC Mechatronics Program

1. Students will comprehend and communicate using standard technical and engineering terminology.
2. Conduct Standard tests, measurements, and experiments using appropriate instruments, settings, and tools where necessary.
3. Demonstrate basic computer skills, navigation, and software skills related to control systems.

In addition to these program-specific outcomes, the following general outcomes should apply:

4. Applications of Math and the Natural Sciences appropriate to degree or field of study.
5. Composition and Oral Communication.
6. Utilization of technology appropriate to degree or field of study.

Name: _____
Advisor: _____

Date: _____
Student ID# _____

<u>COURSE CODE</u>	<u>COURSE NAME</u>	<u>CREDIT HOURS</u>	<u>HOURS COMPLETED</u>
General Education (9 credit hours)			
CIS 1053	Computer Essentials	3	_____
ENG 1003	Composition I (must earn a "C" or better) OR	3	_____
ENG 1103	Career Writing (must earn a "C" or better)		_____
MATH 1113	Applied Math or higher-level mathematics course	3	_____
Applied Technology Core (2 credit hours)			
TECH 1012	Employment Strategies	2	_____
Mechatronics Core (20 credit hours)			
TECH 1004	Introduction to Mechatronics	4	_____
TECH 1044	Computer Aided Design (CAD)	4	_____
TECH 1404	AC/DC Electronics	4	_____
TECH 2314	Programmable Logic Controllers	4	_____
TECH 2424	Hydraulic and Pneumatic Systems	4	_____

Program Total 31 Hours