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.

2024-2025

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, students will have demonstrated a proficiency in the following general outcomes:
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: _____ Date: _____
Advisor: _____ Student ID# _____

COURSE CODE		COURSE NAME	CREDIT HOURS	HOURS COMPLETED
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