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.

ASUMH

2025-2026

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.

ivaille.			Date.	
Advisor:			Student ID#	
			CREDIT	HOURS
COURSE CODE		COURSE NAME	<u>HOURS</u>	<u>COMPLETED</u>
General	Education	(9 credit hours)		
CIS	1053	Computer Essentials	3	
ENG ENG	1003 1103	Composition I (must earn a "C" or better) OR Career Writing (must earn a "C" or better)	3	
MATH	1113	Applied Math or higher-level mathematics course	3	
Applied TECH	Technolog 1012	gy Core (2 credit hours) Employment Strategies	2	
Mechatr	onics Core	e (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