

PROGRAMS

ENGINEERING - AS

Associate in Science in Mechatronic Technology

- [Engineering/Mechatronics Department](#)
- [All Engineering Courses](#)

[Register via Mission Portal](#)

Mechatronic technology is an interdisciplinary field that combines the study of mechanics, electronics, automation, and computers.

The Associate in Science in Mechatronic Technology is designed to provide students with knowledge and skills required for a variety of positions in the following industries.

- Advanced Manufacturing/Semiconductor
- Electrical/Electronics
- Mechanical/Quality
- Transportation/Logistics
- Electric and Hybrid Vehicles
- Medical Equipment
- Biotechnology
- Aerospace/Defense
- Construction.

The program includes a wide range of skill-builder courses.

Program Learning Outcomes

- Students will integrate electrical, electronic, and mechanical systems and devices.
- Students will demonstrate written and verbal communication skills through technical documentation and oral presentations.
- Students will troubleshoot and repair electrical, electronic, and mechanical systems and devices.

Meet the Following Requirements

1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AS Graduation Requirements, CSU GE-B or IGETC.

Please Note

- Requirements here apply to the current catalog year and are subject to change. Visit DegreeWorks in [My Mission Portal](#) to view requirements based your catalog year.
- Not all classes are offered each semester.

Core Required Courses

Code	Class	Units
EGR 025	Engineering Graphics and Design (3.0 Lecture/1.0 Lab)	4.0
MTT 010	Introduction to Technology and Careers (1.0 Lecture/1.0 Lab)	2.0
MTT 012	Electronic Systems Measurement and Troubleshooting (1.0 Lecture/1.0 Lab)	2.0
MAT 001	College Algebra (4.0 Lecture)	4.0
MAT 002	Precalculus and Trigonometry (6.0 Lecture)	6.0

Core Math Courses (Either MAT 001 or MAT 002)

Code	Class	Units
MAT 001	College Algebra (4.0 Lecture)	4.0
MAT 002	Precalculus and Trigonometry (6.0 Lecture)	6.0

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Plus at Least 10.0 Units from the Following Electives

Code	Class	Units
MTT 020	Programmable Logic Controller (PLC) Process Control Systems (1.0 Lecture/1.0 Lab)	2.0
MTT 022	Programmable Logic Controller (PLC) and Robotic System Components (1.0 Lecture/1.0 Lab)	2.0
MTT 030	Electrical Motors and Control Systems (1.0 Lecture/1.0 Lab)	2.0
MTT 032	Microcontroller Systems (1.0 Lecture/1.0 Lab)	2.0
MTT 034	Fluid Power Systems (1.0 Lecture/1.0 Lab)	2.0
MTT 040	Analog Circuits and Semiconductor Devices (1.0 Lecture/1.0 Lab)	2.0
MTT 042	Digital Logic Systems (1.0 Lecture/1.0 Lab)	2.0
MTT 050	Digital Manufacturing (1.0 Lecture / 1.0 Lab)	2.0

Required Units for the Major

	Units
Required units for the major	22.0-23.0
Plus completion of general education requirements and electives as needed to reach 60 units.	
Total required units	60.0