

# PROGRAMS

## ENGINEERING - CERTIFICATE

### Mechatronics Technology Certificate of Achievement

Mechatronic technology is an interdisciplinary field that combines the study of mechanics, electronics, automation, and computers. Certificate of Achievement in Mechatronic Technology prepares students to work in various industries. Depending on the course track selected, students gain specialized technical skills in electrical, electronic and/or mechanical industry environment.

#### Program Learning Outcomes:

- Students will analyze and 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.

#### To earn this certificate, students must meet the following requirements:

1. Complete all required certificate courses with a C (or P) or better.
2. Complete at least 1/3 of the program courses at Mission College to establish residency.

#### NOTES:

- Requirements here apply to the current catalog year and are subject to change. Visit DegreeWorks in-1 My Mission Portal-1 to view requirements based your catalog year.
- Not all classes are offered each semester.

#### Required Courses

General Education credits are not required for the certificate.

Code	Class	Units
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

#### Plus at least 14.0 units from the following electives

Code	Class	Units
EGR 025	Engineering Graphics and Design (3.0 Lecture/1.0 Lab)	4.0
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

#### Units Required

	Units
Total Required Units	18.0-24.0

#### Career Opportunities

Career opportunities include the following: robotics technician, field service technician, industrial maintenance technician, engineering technician, electromechanical technician, research and development technician.

**MAKE AN APPOINTMENT WITH A COUNSELOR SUBMIT A COURSE SUBSTITUTION REQUEST CONTACT THE DEPARTMENT**