

AUTOMATION TECHNICIAN CERTIFICATE

15 Semester Credit Hours; Curriculum: 0264

Certificate prepares students for entry-level automation technician positions. Program content includes occupational safety, technical print reading, basic electronics, and concepts related to fluid power and electrical motor controls. Students will learn how to operate, setup, and maintain various industrial automation systems. If taken in spring, this certificate can be completed in one semester.

Code	Title	Hours
Courses for a Certificate		
MFG 101	Occupational Safety	2
MFG 102	Industrial Drafting and Design	3
or ELT 107	Survey of Electronics	
MFG 112	Introduction to Automation	3
MFG 135	Fluid Power and Controls ¹	4
MFG 225	Motors and Controls ¹	3
Total Hours		15

¹ Offered in spring semester only.

Automation Technician Certificate Pathway

The following Pathway is recommended for students pursuing the Automation Technician Certificate.

First Year		Hours
Fall Semester		
MFG 101	Occupational Safety	2
MFG 102	Industrial Drafting and Design	3
or ELT 107	or Survey of Electronics	
MFG 112	Introduction to Automation	3
	Hours	8
Spring Semester		
MFG 135	Fluid Power and Controls	4
MFG 225	Motors and Controls	3
	Hours	7
	Total Hours	15

Note: Pathway is a recommended sequence of courses. Students should contact the department chair or program coordinator with questions about course prerequisites and recommendations.

Program Learning Outcomes

1. Describe various applications of automation in modern production.
2. Operate various automation systems following OSHA safety rules.
3. Explain basic principles, advantages, and limitations of fluid power.
4. Discuss elementary concepts of various electric motors and controls.