

Automation Certificate

Automation Certificate Requirements

14 Credits

Code	Title	Hours
MTRN 2200	Industrial Wiring for Automated Systems (Prerequisite: MECH 1000)	1
MTRN 2205	Industrial Wiring for Automated Systems Lab	2
MTRN 2300	Introduction to Programmable Logic Controllers (Prerequisite: MECH 1200)	2
MTRN 2305	Introduction to Programmable Logic Controllers Lab	2
MTRN 2350	Advanced PLC Programming and Applications (Prerequisite: MTRN 2300)	2
MTRN 2355	Advanced PLC Programming and Applications Lab	2
MTRN 3360	Industrial Robots (Prerequisite: MTRN 2350)	2
MTRN 3365	Industrial Robots Lab	1

Completion Requirement

1. Grade C- or higher in each Automation Certificate Requirement course.

Automation Certificate Program Learning Outcomes

At the successful conclusion of this program, students will be able to:

1. Program Programmable Logic Controllers (PLC) to take data from sensors and control actuators to perform desired tasks.
2. Wire and troubleshoot electrical issues on industrial automation equipment.
3. Operate and program industrial robotic arms to perform desired tasks.