



## Automated Systems with Robotics Certificate

**Program:** Engineering Technology

**Program Code:**

AR

**Academic Area:**

Science, Technology, Engineering and Mathematics

**Type:**

Certificate of Accomplishment

**CIP Code:**

15.0405

### Program Statement

This certificate is designed to develop students' skills and apply their knowledge of electrical and mechanical systems. It prepares students to serve as technicians working with engineers on automated systems used in industry and entertainment. Topics include pneumatics, hydraulics, electrical and mechanical sensors, switches, motors and other automation hardware, process controllers and programmable logic.

### Program Information

- Students work with robotics, automation and/or computer-controlled systems in industry and entertainment.
- Students can work as technicians maintaining and troubleshooting amusement rides and mechanical animation.

### Program Requirements

Course #	Title	Credits
EGR 113	Introduction to Robotics	4
EGR 171	Fluid Systems	4
EGR 211	Programmable Control Systems	4
	EGR 131 or EGR 151	3-4

### Recommended Course Sequence - Semester 1

Course #	Title	Credits
EGR 113	Introduction to Robotics	4
	EGR 131 or EGR 151	3-4

### Recommended Course Sequence - Semester 2

Course #	Title	Credits
EGR 171	Fluid Systems	4
EGR 211	Programmable Control Systems	4



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**Total credits:**

**15-16**

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## Category Descriptions

### EGR 131 or EGR 151

Credits: 3-4

Choose one of the following:

<b>Course #</b>	<b>Title</b>	<b>Credits</b>
EGR 131	Introduction to Electrical Circuits	4
EGR 151	Electrical Machinery	3