



Wayne  
County  
Community  
College  
District

# Electrical Electronics Engineering Technology: Programmable Logic Controllers

## PAY

The median annual wage for electrical and electronics engineering technicians was \$63,660 in May 2017.

## JOB OUTLOOK

Employment of electrical and electronics engineering technicians is projected to grow 2 percent from 2016 to 2026. These technicians work in manufacturing industries, many of which are declining or growing slowly. However, growth rates will vary by occupational specialty. Job opportunities should be best for applicants who have either an associate's degree in electronics, certification, or related work experience.

*Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, April 2018, Electrical and Electronics Engineering Technicians, on the Internet at <http://www.bls.gov/ooh/architecture-and-engineering/electrical-and-electronics-engineering-technicians.htm>*

## ABOUT THE PROGRAM

This Electrical/Electronics Engineering Technology: Programmable Logic Controllers Technology certificate is designed to provide students with in-depth instruction in the field of Programmable Logic Controllers (PLC). This program will prepare students for employment in the ever expanding Electrical/Electronics industry as entry-level programmable logic controller programmers and technicians, instrumentation technicians, field engineers, and sales and marketing engineers.



## WHAT DO ELECTRICAL ELECTRONICS TECHNICIANS DO?

Electrical and electronics engineering technicians (also known as programmable logic controller technicians) are mostly employed in manufacturing settings or in research and development. Electrical and electronics engineering technicians help engineers design and develop computers, communications equipment, medical monitoring devices, navigational equipment, and other electrical and electronic equipment. They often work in product evaluation and testing, using measuring and diagnostic devices to adjust, test, and repair equipment.

## WHERE DO THEY WORK?

Electrical and electronics engineering technicians work closely with electrical and electronic engineers. For this reason, teamwork is an important part of the job. They work in offices, laboratories, and factories because their job tasks involve both engineering theory and assembly-line production.

Electrical and electronics engineering technicians may be exposed to hazards from equipment or toxic materials, but incidents are rare if proper procedures are followed.

**Wayne County Community College District...  
Jobs for Today, Jobs for the Future!**

**FOR MORE INFORMATION, CALL 313-496-2600  
OR VISIT OUR WEBSITE AT WWW.WCCCD.EDU**



## *Recommended Sequence of Courses*

### EEE: Programmable Logic Controllers: College Certificate

CR. No.	COURSE TITLE	CREDITS
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#### **SEMESTER 1**

CT 203	Digital Logic I . . . . .	4
EE 101	Circuit Analysis I . . . . .	4
EE 107	Math for E/E I . . . . .	4
MCT 202	Introduction to Robotics . . . . .	3
<b>SEMESTER TOTAL . . . . .</b>		<b>15</b>

#### **SEMESTER 2**

EE 102	Circuit Analysis II . . . . .	4
EE 111	Solid State Fundamentals . . . . .	3
MCT 207	Introduction to Hydraulics and Pneumatics . . . . .	3
MCT 208	Programmable Logic Controllers . . . . .	3
<b>SEMESTER TOTAL . . . . .</b>		<b>13</b>

#### **SEMESTER 3**

MCT 203	Electrical Machinery and Controls . . . . .	3
MCT 215	Advanced Programmable Logic Controllers . . . . .	3
<b>SEMESTER TOTAL . . . . .</b>		<b>6</b>
<b>CERTIFICATE TOTAL . . . . .</b>		<b>34</b>

*Note: Certificate total hours may not include prerequisites.*

