

## Contact Us

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## Program Overview

A broad program designed to prepare graduates for employment in the manufacture, merchandising, testing, installation, maintenance, modification or repair of electrical and electronic equipment and systems, Industrial Electronics Technology offers both classroom instruction and hands-on experience. Instruction covers DC and AC voltages; DC/AC Motors and motor control; and the generation, distribution and utilization of electrical power.

Practical training in troubleshooting, monitoring, operation and maintenance of electrical and electronic equipment provides experience this graduate needs for a successful career.

The Electrical Maintenance Technician certificate is also available. This program requires three years of maintenance experience for enrollment and provides a pathway toward the Associate in Applied Science degree with a major in Industrial Electronics.

## PROGRAM REQUIREMENTS

### A.A.S., Major in Industrial Electronics Technology - IEE3

A broad program designed to prepare graduates for employment in the manufacture, merchandising, testing, installation, maintenance, modification or repair of electrical and electronic equipment and systems, Industrial Electronics Technology offers both classroom instruction and hands-on experience. Instruction covers DC and AC voltages; DC/AC motors and motor control; and the generation, distribution and utilization of electrical power.

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### Day Program

<b>FIRST SEMESTER</b>	<b>CREDIT HOURS</b>
EEM 107 Industrial Computer Techniques .....	2.0
<i>or CPT 169 Industrial Computer Applications ..</i>	<i>3.0</i>
EEM 117 AC/DC Circuits I.....	4.0
ENG 165 Professional Communications.....	3.0
MAT 170 Algebra, Geometry and Trigonometry I.....	3.0

### SECOND SEMESTER

EEM 151 Motor Controls I .....	4.0
EEM 200 Semiconductor Devices .....	4.0
EEM 221 DC/AC Drives.....	3.0
MAT171 Algebra, Geometry and Trigonometry II .....	3.0

### SUMMER TERM

EEM 140 National Electrical Code.....	3.0
EEM 231 Digital Circuits I.....	3.0
EEM 170 Electrical Installation .....	3.0
Elective Humanities/Fine Arts .....	3.0

### THIRD SEMESTER

AMT 105 Robotics and Automated Controls I .....	3.0
EEM 162 Introduction to Process Control .....	3.0
EEM 241 Microprocessors I.....	3.0
EEM 251 Programmable Controllers .....	3.0

### FOURTH SEMESTER

AMT 205 Robotics and Automated Controls II .....	3.0
EEM 252 Programmable Controllers Applications.....	3.0
EEM 271 Sensors and System Interfacing.....	2.0
EEM 273 Advanced Process Control.....	3.0

### SUMMER TERM

EEM 235 Power Systems.....	3.0
EEM 274 Technical/System Troubleshooting.....	4.0
Elective Social/Behavioral Science.....	3.0

**TOTAL CREDIT HOURS: 71.0/72.0**

Evening Program

**FIRST SEMESTER** **CREDIT HOURS**

EEM 107	Industrial Computer Techniques .....	2.0
	<i>or CPT 169 Industrial Computer Applications ..</i>	<i>3.0</i>
EEM 117	AC/DC Circuits I.....	4.0
ENG 165	Professional Communications.....	3.0
MAT 170	Algebra, Geometry and Trigonometry I.....	3.0

**SECOND SEMESTER**

EEM 151	Motor Controls I .....	4.0
EEM 200	Semiconductor Devices .....	4.0
EEM 221	DC/AC Drives.....	3.0
MAT171	Algebra, Geometry and Trigonometry II .....	3.0

**SUMMER TERM**

EEM 140	National Electrical Code.....	3.0
EEM 231	Digital Circuits I.....	3.0
EEM 170	Electrical Installation .....	3.0
	Elective Humanities/Fine Arts .....	3.0

**THIRD SEMESTER**

AMT 105	Robotics and Automated Controls I.....	3.0
EEM 162	Introduction to Process Control .....	3.0
EEM 241	Microprocessors I.....	3.0
EEM 251	Programmable Controls.....	3.0

**FOURTH SEMESTER**

AMT 205	Robotics and Automated Controls II .....	3.0
EEM 252	Programmable Controllers Applications.....	3.0
EEM 271	Sensors and System Interfacing.....	2.0
EEM 273	Advanced Process Control.....	3.0

**SUMMER TERM**

EEM 235	Power Systems.....	3.0
EEM 274	Technical/System Troubleshooting.....	4.0
	Elective Social/Behavioral Science.....	3.0

**TOTAL CREDIT HOURS: 71.0/72.0**

**Electrical Maintenance Technician Certificate - ELM7**

This certificate is designed for people with three years of maintenance experience who are needing certification for their craft, job advancement or short term refresher training. All courses within this certificate will be awarded for credit toward an Associate in Applied Science with a major in Industrial Electronics Technology.

**Day or Evening Program**

**FIRST SEMESTER** **CREDIT HOURS**

EEM 107	Industrial Computer Techniques .....	2.0
EEM 117	AC/DC Circuits .....	4.0
IMT 102	Industrial Safety.....	2.0

**SECOND SEMESTER**

EEM 151	Motor Controls I .....	4.0
EEM 200	Semiconductor Devices .....	4.0
EEM 221	DC/AC Drives.....	3.0

**SUMMER TERM**

EEM 140	National Electrical Code.....	3.0
EEM 170	Electrical Installation .....	3.0
EEM 251	Programmable Controllers .....	3.0

**TOTAL CREDIT HOURS: 28.0**

>>> Visit [www.ptc.edu/indelectronics](http://www.ptc.edu/indelectronics) to learn more.