

# ELECTRONIC CONTROL SYSTEMS TECHNOLOGY (CONT'D)

## ELECTRONIC CONTROLS CERTIFICATE

Program Code: E.ECS.CER

### Certificate

Graduation requirement — 30 semester hours

This program prepares students for entry-level positions in the installation, service, and repair of electrical and electronic systems used in manufacturing, automation, and process control. Students can expect to find employment as installers, technicians, and electrical support staff.

### Suggested Full-time Sequence

FALL 1st Semester	SPRING 2nd Semester	FALL 3rd Semester
ELT 111	ELT 134	ELT 292
ELT 131	ELT 231	
ELT 150	ELT 293	
ELT 179	MAT 131	
MFT 113	EST 113	

### Required Program Courses (27 hours) Cr. Hrs.

ELT 111	Computer Applications for Technicians . . . . .	2
ELT 131	Residential Wiring . . . . .	3
ELT 134	Motors, Controls, and Drives . . . . .	3
ELT 150	Introduction to Electricity and Electronics. . . . .	3
ELT 179	Industrial Control Devices. . . . .	3
ELT 231	Programmable Controllers . . . . .	3
ELT 292	Process Control . . . . .	3
ELT 293	Industrial Control Networks . . . . .	3
MFT 113	Introduction to Hydraulics and Pneumatics. . . . .	3
EST 113	Work Experience and Ethics. . . . .	1

### Required General Education Courses (3 hours)

MAT 131	Applied Mathematics . . . . .	3
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Total Semester Credit Hours 30

## ELECTRONIC POWER CERTIFICATE

Program Code: E.ELP.CER

### Certificate

Graduation requirement — 31 semester hours

The electrical power certificate prepares students for entry-level positions in the installation, service, and repair of the electrical systems used in manufacturing and industrial control.

### Suggested Full-time Sequence

FALL 1st Semester	SPRING 2nd Semester
ELT 111	ELT 134
ELT 131	ELT 231
ELT 150	WLD 111
ELT 179	EST 113
MFT 113	MFT 117
	MAT 131

### Required Program Courses (28 hours) Cr. Hrs.

ELT 111	Computer Applications for Technicians . . . . .	2
ELT 131	Residential Wiring . . . . .	3
ELT 134	Motors, Controls, and Drives . . . . .	3
ELT 150	Introduction to Electricity and Electronics. . . . .	3
ELT 179	Industrial Control Devices. . . . .	3
ELT 231	Programmable Controllers . . . . .	3
WLD 111	Introduction to Welding . . . . .	4
EST 113	Work Experience and Ethics. . . . .	1
MFT 113	Introduction to Hydraulics and Pneumatics. . . . .	3
MFT 117	Pumps, Compressors, and Vacuum Systems . . . . .	3

### Required General Education Courses (3 hours)

MAT 131	Applied Mathematics . . . . .	3
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Total Semester Credit Hours 31