

# ELECTRONIC CONTROL SYSTEMS TECHNOLOGY

## ELECTRONIC CONTROL SYSTEMS TECHNOLOGY A.A.S.

Program Code: E.ECS.AAS

### Associate in Applied Science (A.A.S.)

Graduation requirement — 60 semester hours

The Electronic Control Systems Technology 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 workers.

### Program Notes\*

- General Education electives are chosen from two of the following categories: communications, social/behavioral sciences, humanities/fine arts, mathematics, physical/life sciences. For more information, see General Education requirements on p. 63.
- MFX substitutions are accepted for MFT 113.
  - MFT 113 = MFX 130 + MFX 131 + MFX 150 + MFX 151

### Suggested Full-time Sequence

<i>FALL</i>	<i>SPRING</i>	<i>SUMMER</i>
<i>1st Semester</i>	<i>2nd Semester</i>	<i>3rd Semester</i>
CTC 132	ELT 134	EST 113
CTC 193	ELT 155	
ELT 131	ELT 171	
ELT 150	MFT 117	
ELT 179	MAT 131	
MFT 113		

<i>FALL</i>	<i>SPRING</i>
<i>4th Semester</i>	<i>5th Semester</i>
ELT 193	ELT 231
ELT 292	ELT 293
ELT 299	ELT 295
ENG 101 or ENG 111	COM 103 or
Gen Ed elec	COM 120
	Gen Ed elec

### Required Program Courses (45 hours)

**Cr. Hrs.**

CTC 132	Computer Basics . . . . .	1
CTC 193	Windows . . . . .	1
ELT 131	Residential Wiring . . . . .	3
ELT 134	Motors, Controls, and Drives . . . . .	3
ELT 150	Introduction to Electricity and Electronics. . . . .	3
ELT 155	Digital Control Systems . . . . .	3
ELT 171	Analog Control Systems. . . . .	3
ELT 179	Industrial Control Devices. . . . .	3
ELT 193	Electronic Systems Repair. . . . .	3
ELT 231	Programmable Controllers . . . . .	3
ELT 292	Process Control . . . . .	3
ELT 293	Industrial Control Networks . . . . .	3
ELT 295	Automation and Motion Control. . . . .	3
ELT 299	Robotics and Automation . . . . .	3
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 (15 hours)

ENG 101	Composition I	
or ENG 111	Workplace Writing. . . . .	3
COM 103	Introduction to Public Speaking	
or COM 120	Interpersonal Communication. . . . .	3
MAT 131	Applied Mathematics . . . . .	3
General Education electives* . . . . .		6
<i>Total Semester Credit Hours</i>		<b>60</b>