

APPLIED ENGINEERING & TECHNOLOGIES

ELECTRICAL SYSTEMS TECHNOLOGY

Electrical Systems Technology Degree - A35130

The Electrical Systems Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial, and industrial facilities.

Training, most of which is hands-on, will include such topics as photovoltaic AC/DC theory, basic wiring practices, programmable logic controllers, industrial motor controls, the National Electrical Code, and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical field as an on-the-job trainee or apprentice assisting in the layout, installation, and maintenance of electrical systems.

Electrical Systems Technology Diploma - D35130

The Electrical Systems Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial, and industrial facilities.

Training, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, programmable logic controllers, industrial motor controls, the National Electrical Code, and other subjects as local needs require.

Diploma graduates should qualify for a variety of jobs in the electrical field as an on-the-job trainee or apprentice assisting in the layout, installation, and maintenance of electrical/electronic systems.

Residential Wiring Certificate – C35130A

Commercial Wiring Certificate – C35130B

Industrial Wiring Certificate – C35130C

Wiring Methods Certificate – C35130D

Renewable Energy Certificate – C35130E

Program Sequence

First Semester

ELC 112	DC/AC Electricity.....	5
ELC 113	Residential Wiring	4
ELC 118	National Electrical Code.....	2
ELC 127	Software for Technicians.....	2

Second Semester

ELC 114	Commercial Wiring.....	4
ELC 117	Motors and Controls.....	4
ELC 119	NEC Calculations.....	2
ENG 111	Writing and Inquiry	3

Completes Wiring Methods Certificate (C35130D): ELC 113, ELC 114, ELC 118, ELC 119

Third Semester

ELC 115	Industrial Wiring.....	4
ELC 128	Introduction to PLC.....	3
	Major Elective	3

Fourth Semester

BPR 130	Print Reading-Construction	3
HUM 115	Critical Thinking.....	3
ISC 121	Environmental Health & Safety.....	3
MAT 110	Math Measurement and Literacy.....	3
	Major Elective	3

Completes Residential Wiring Certificate (C35130A): BPR 130, ELC 112, ELC 113, ELC 118

Completes Electrical Systems Technology Diploma (D35130): ALT 120, ELC 112, ELC 113, ELC 114, ELC 115, ELC 117, ELC 118, ELC 119, ELC 128, ENG 111, HUM 115

Fifth Semester

ELC 134	Transformer Applications.....	2
ENG 114	Professional Research & Reporting	3
PSY 118	Interpersonal Psychology	3
	Major Elective	3
	Work-Based Learning Elective	2

Completes Commercial Wiring Certificate (C35130B): ELC 114, ELC 117, ELC 119, ELC 121

Completes Industrial Wiring Certificate (C35130C): ELC 115, ELC 128, ELC 134, ISC 121

Completes Renewable Energy Certificate (C35130E): ALT 120, ELC 112, ELC 220, ELC 221

Major Electives List I – Renewable Energy Track

(Select 9 hours from the following courses):

ALT 120	Renewable Energy Technologies.....	3
ELC 220	Photovoltaic System Technology	3
ELC 221	Advanced Photovoltaic System Design.....	3

Major Electives List II - Business Track

(Select 9 hours from the following courses):

BUS 110	Introduction to Business	3
BUS 115	Business Law I	3
BUS 139	Entrepreneurship I.....	3

Work-Based Learning Elective List

(Select 2 hours from the following courses):

ELC 121	Electrical Estimating	2
WBL 112	Work-Based Learning I.....	2

Graduation Requirements 64 Credit Hours