

ELECTRICAL SYSTEMS TECHNOLOGY

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.

Coursework, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, programmable logic controllers, industrial motor controls, applications of the National Electric 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

A.A.S. Degree (A35130)

Suggested Sequence of Courses

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
FALL SEMESTER 1						
ACA 115	Success and Study Skills <i>or</i>					
ACA 122	College Transfer Success	0	2	0	0	1
ELC 112	DC/AC Electricity	3	6	0	0	5
ELC 113	Residential Wiring	2	6	0	0	4
ELC 118	National Electrical Code	1	2	0	0	2
ELC 125	Diagrams and Schematics	1	2	0	0	2
ISC 112	Industrial Safety	2	0	0	0	2
TOTALS		9	18	0	0	16

SPRING SEMESTER 1

ELC 114	Commercial Wiring	2	6	0	0	4
ELC 117	Motors and Controls	2	6	0	0	4
ELC 128	Introduction to PLC	2	3	0	0	3
ELC 119	NEC Calculations	1	2	0	0	2
HYD 110	Hydraulics/Pneumatics I	2	3	0	0	3
TOTALS		9	20	0	0	16

SUMMER SEMESTER 1

ENG 110	Freshman Composition <i>or</i>					
ENG 111	Expository Writing	3	0	0	0	3
	Humanities / Fine Arts Elective	3	0	0	0	3
TOTALS		6	0	0	0	6

FALL SEMESTER 2

AHR 110	Intro to Refrigeration	2	6	0	0	5
AHR 111	HVACR Electricity	2	2	0	0	3
BPR 111	Print Reading	1	2	0	0	2
BUS 110	Introduction to Business	3	0	0	0	3
ELC 213	Instrumentation	3	2	0	0	4
TOTALS		11	12	0	0	17

SPRING SEMESTER 2

CIS 110	Intro to Computers	2	2	0	0	3
COM 231	Public Speaking <i>or</i>					
ENG 115	Oral Communication	3	0	0	0	3
MAT 110	Math Measurement and Literacy	2	2	0	0	3
	Behavioral/Social Sciences Elective	3	0	0	0	3
TOTALS		10	4	0	0	12

PROGRAM TOTAL **67**

ELECTRICAL SYSTEMS TECHNOLOGY

Diploma Program (D35130)

Suggested Sequence of Courses

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
FALL SEMESTER 1						
ACA 115	Success and Study Skills <i>or</i>					
ACA 122	College Transfer Success	0	2	0	0	1
ELC 112	DC/AC Electricity	3	6	0	0	5
ELC 113	Residential Wiring	2	6	0	0	4
ELC 118	National Electrical Code	1	2	0	0	2
ELC 125	Diagrams and Schematics	1	2	0	0	2
ISC 112	Industrial Safety	2	0	0	0	2
TOTALS		9	18	0	0	16

SPRING SEMESTER 2

ELC 114	Commercial Wiring	2	6	0	0	4
ELC 117	Motors and Controls	2	6	0	0	4
ELC 128	Introduction to PLC	2	3	0	0	3
ELC 119	NEC Calculations	1	2	0	0	2
HYD 110	Hydraulics/Pneumatics I	2	3	0	0	3
TOTALS		9	20	0	0	16

SUMMER SEMESTER

ENG 110	Freshman Composition <i>or</i>					
ENG 111	Writing & Inquiry	3	0	0	0	3
	General Education Requirement	3	0	0	0	3
TOTALS		6	0	0	0	6

DIPLOMA TOTAL **38**

ELECTRICAL SYSTEMS TECHNOLOGY

Residential Electrical Technician

Certificate Program (C35130A)

Required Courses

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
ELC 112	DC/AC Electricity	3	6	0	0	5
ELC 113	Residential Wiring	2	6	0	0	4
ELC 118	National Electrical Code	1	2	0	0	2
ELC 125	Diagrams and Schematics	1	2	0	0	2
TOTALS		7	16	0	0	13

CERTIFICATE TOTAL **13**

**ELECTRICAL SYSTEMS TECHNOLOGY
Industrial Electrical Technician
Certificate Program (C35130B)**

Required Courses

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
ELC 112	DC/AC Electricity	3	6	0	0	5
ELC 114	Commercial Wiring	2	6	0	0	4
ELC 117	Motors and Controls	2	6	0	0	4
TOTALS		7	18	0	0	13
CERTIFICATE TOTAL						13

**ELECTRICAL SYSTEMS TECHNOLOGY
Line Tech Prep
Certificate Program (C35130E)**

Required Courses

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
ACA 115	Success and Study Skills	0	2	0	0	1
ELC 112	DC/AC Electricity	3	6	0	0	5
ELC 113	Residential Wiring	2	6	0	0	4
ELC 118	National Electrical Code	1	2	0	0	2
ELC 125	Diagrams and Schematics	1	2	0	0	2
ISC 112	Industrial Safety	2	0	0	0	2
TOTALS		9	18	0	0	16
CERTIFICATE TOTAL						16

**ELECTRICAL SYSTEMS TECHNOLOGY
Manufacturing Electrical Technician
Beginner Certificate Program (C35130F)**

Required Courses

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
FALL SEMESTER						
CIS 110	Introduction to Computers	2	2	0	0	3
ELC 112	DC/AC Electricity	3	6	0	0	5
ELC 113	Residential Wiring	2	6	0	0	4
ISC 112	Industrial Safety	2	0	0	0	2
TOTALS		9	14	0	0	14
SPRING SEMESTER						
ELC 114	Commercial Wiring	2	6	0	0	4
MAT 110	Math Measurement & Literacy	2	2	0	0	3
TOTALS		4	8	0	0	7
CERTIFICATE TOTAL						21

**ELECTRICAL SYSTEMS TECHNOLOGY
Manufacturing Electrical Technician
Intermediate Certificate Program (C35130G)**

Required Courses

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
FALL SEMESTER						
BPR 111	Print Reading	1	2	0	0	2
ELC 118	National Electrical Code	1	2	0	0	2
ELC 125	Diagrams and Schematics	1	2	0	0	2
MAT 121	Algebra/Trigonometry I	2	2	0	0	3
TOTALS		5	8	0	0	9
SPRING SEMESTER						
ELC 117	Motors and Controls	2	6	0	0	4
HYD 110	Hydraulics/Pneumatics	2	3	0	0	3
TOTALS		4	9	0	0	7
CERTIFICATE TOTAL						16

**ELECTRICAL SYSTEMS TECHNOLOGY
Manufacturing Electrical Technician
Advanced Certificate Program (C35130H)**

Required Courses

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
FALL SEMESTER						
HUM 115	Critical Thinking	3	0	0	0	3
HYD 210	Advanced Hydraulics	1	3	0	0	2
TOTALS		4	3	0	0	5
SPRING SEMESTER						
ELC 119	NEC Calculations	1	2	0	0	2
ELC 128	Introduction to PLC	2	3	0	0	3
ELC 135	Electrical Machines	2	2	0	0	3
TOTALS		5	7	0	0	8
CERTIFICATE TOTAL						13

**ELECTRICAL SYSTEMS TECHNOLOGY
Photo Voltaic Technology Certificate Program
(C35130I)**

Required Courses

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
FALL SEMESTER						
ELC 112	DC/AC Electricity	3	6	0	0	5
ELC 118	National Electrical Code	1	2	0	0	2
ISC 112	Industrial Safety	2	0	0	0	2
TOTALS		6	8	0	0	9
SPRING SEMESTER						
ELC 114	Commercial Wiring	2	6	0	0	4
ELC 220	Photovoltaic Sys Technology	2	3	0	0	3
TOTALS		4	9	0	0	7
CERTIFICATE TOTAL						16