

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.

Electrical Systems Technology Certificate – C35130

Residential Wiring Certificate – C35130A

Commercial Wiring Certificate – C35130B

Industrial Wiring Certificate – C35130C

Wiring Methods Certificate – C35130D

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 |

Complete Electrical Systems Technology Certificate (C35130): ELC 113, ELC 114, ELC 118, ELC 119

Complete 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 |
| Elective List I or II..... | | 3 |

Complete Electrical Systems Technology Diploma (D35130): Choose ALT 120 + ELC 112, ELC 113, ELC 114, ELC 115, ELC 117, ELC 118, ELC 119, ELC 128, ENG 110, PSY 118

Fourth Semester

| | | |
|----------------------------|------------------------------------|---|
| BPR 130 | Print Reading-Construction | 3 |
| ISC 121 | Envir Health and Safety..... | 3 |
| MAT 110 | Math Measurement and Literacy..... | 3 |
| Elective List I or II..... | | 3 |

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

Fifth Semester

| | | |
|----------------------------|-------------------------------|---|
| ELC 121 | Electrical Estimating | 2 |
| ELC 134 | Transformer Applications..... | 2 |
| Elective List I or II..... | | 3 |

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

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

General Education Academic Core Requirements

| | | |
|---------|-----------------------------------|---|
| COM 120 | Interpersonal Communications..... | 3 |
| ENG 110 | Freshman Composition | 3 |
| HUM 121 | The Nature of America | 3 |
| PSY 118 | Interpersonal Psychology | 3 |

Elective List I – Renewable Energy Track (Select 9 hours from the following courses):

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|---------|-----------------------------------|---|
| ALT 120 | Renewable Energy Tech | 3 |
| ELC 220 | Photovoltaic Sys Tech..... | 3 |
| ELC 221 | Adv Photovoltaic Sys Designs..... | 3 |

Elective 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 |

Graduation Requirements 64 Credit Hours