**FAYETTEVILLE TECHNICAL COMMUNITY COLLEGE**

**ELECTRICAL SYSTEMS TECHNOLOGY (D35130)**

Effective: Fall 2023

Revised: 12/09/22

This 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.

Length: 3 Semesters

Prerequisite: High School Diploma, Placement Test Equivalent

Award: Diploma

**FALL SEMESTER 1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Prefix No.** | Title | **Class** | **Lab** | **Clinical** | **Credit** |
| ACA120 | Career Assessment | 1 | 0 | 0 | 1 |
| or |  |  |  |  |  |
| ACA122 | College Transfer Success | 0 | 2 | 0 | 1 |
| CIS110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| ELC112 | DC/AC Electricity | 3 | 6 | 0 | 5 |
| ELC128 | Intro to PLC | 2 | 3 | 0 | 3 |
| ENG110 | Freshman Composition | 3 | 0 | 0 | 3 |
| or |  |  |  |  |  |
| ENG111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
|  |  | ----- | ----- | ----- | ----- |
|  | **Totals** | **10** | **11** | **0** | **15** |

**SPRING SEMESTER 1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Prefix No.** | Title | **Class** | **Lab** | **Clinical** | **Credit** |
| ELC113 | Residential Wiring  | 2 | 6 | 0 | 4 |
| ELC117 | Motors and Controls | 2 | 6 | 0 | 4 |
| ELC220 | Photovoltaic Sys Tech | 2 | 3 | 0 | 3 |
| ISC115 | Construction Safety | 2 | 0 | 0 | 2 |
| PSY118 | Interpersonal Psychology | 3 | 0 | 0 | 3 |
|  |  | ----- | ----- | ----- | ----- |
|  | **Totals** | **11** | **15** | **0** | **16** |

**SUMMER SEMESTER 1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Prefix No.** | Title | **Class** | **Lab** | **Clinical** | **Credit** |
| ELC114 | Commercial Wiring  | 2 | 6 | 0 | 4 |
| ELC118 | National Electrical Code | 1 | 2 | 0 | 2 |
| ELC121 | Electrical Estimating | 1 | 2 | 0 | 2 |
|  |  | ----- | ----- | ----- | ----- |
|  | **Totals** | **4** | **10** | **0** | **8** |

**TOTAL REQUIRED CREDITS.... 39**

**Work-Based Learning Option**: NA

 **\*Note:** ENG-110 is not transferable.