

Electrical Systems Technology – Electrical Pathway (A35130E) – 65 Credit Hours

2023-2024

| Fall – 1 st Year | | | | |
|-----------------------------|-----------------------------------|-----|-----|--------------|
| Course Number | Course Name | Lec | Lab | Credit |
| ACA-120 | Career Assessment | 1 | 0 | 1 |
| CIS 110 | Introduction to Computers (A) | 2 | 2 | 3 |
| ELC 118 | National Electric Code ★ (A) | 1 | 2 | 2 |
| ENG 111 | Writing and Inquiry (S) | 3 | 0 | 3 |
| MAT 143 <i>or</i> | Quantitative Literacy (S) | 2 | 2 | 3 |
| MAT 171 | Precalculus Algebra (S) | 3 | 2 | 4 |
| | Humanities/Fine Arts Elective (S) | 3 | 0 | 3 |
| Total | | | | 15-16 |

| Spring – 1 st Year | | | | |
|-------------------------------|--|-----|-----|-----------|
| Course Number | Course Name | Lec | Lab | Credit |
| HYD 110 | Hydraulics/Pneumatics I (A) | 2 | 3 | 3 |
| ELC 128 | Intro to PLC ★ (A) | 2 | 3 | 3 |
| ELC 134 | Transformer Applications | 1 | 2 | 2 |
| ELN 133 | Digital Electronics | 3 | 3 | 4 |
| | Communications Elective (S) | 3 | 0 | 3 |
| | Social/Behavioral Science Elective (S) | 3 | 0 | 3 |
| Total | | | | 18 |

| Fall – 2 nd Year | | | | |
|-----------------------------|--------------------------------|-----|-----|-----------|
| Course Number | Course Name | Lec | Lab | Credit |
| DFT 151 | CAD I (A) | 2 | 3 | 3 |
| ELC 114 | Commercial Wiring ★ | 2 | 6 | 4 |
| ELC 121 | Electrical Estimating | 1 | 2 | 2 |
| ELC 131 | Circuit Analysis I | 3 | 3 | 4 |
| ELC 131A | Circuit Analysis I LAB | 0 | 3 | 1 |
| BPR 115 | Electrical/Fluid Power Diagram | 1 | 2 | 2 |
| Total | | | | 16 |

| Spring – 2 nd Year | | | | |
|-------------------------------|-------------------------------|-----|-----|-----------|
| Course Number | Course Name | Lec | Lab | Credit |
| ELC 115 | Industrial Wiring ★ (A) | 2 | 6 | 4 |
| ELC 117 | Motors and Controls (A) | 2 | 6 | 4 |
| ELC 113 | Residential Wiring ★ (A) | 2 | 6 | 4 |
| WBL 111 | Work-Based Learning I (and) | 0 | 0 | 1 |
| WBL 115 | Work-Based Learning Seminar I | 1 | 0 | 1 |
| ISC 112 | Industrial Safety ★★ (A) | 2 | 0 | 2 |
| Total | | | | 16 |

- ★ - Designates classes preparing students to sit for electrical contracting limited license
- ★★ - Designates classes preparing students to sit for OSHA basic safety certification tests
- (S) – Designates recommended classes for students starting in Spring of the first year.
- (A) – Students may receive credit for this course by successfully completing the articulated non-credit course, or submitting evidence of an articulated industry certification.
See: <https://spcc.edu/credit-articulation-at-spcc/>