# Southern West Virginia 2022-2023 Southern Academic Catalog Community Technical College

# **Electrical Engineering Technology, A.A.S.**

# **Purpose**

The Electrical Engineering Technology Program has the mission to provide an academic and technical education with sequential/practical instruction for the development of the student as a mature, responsible electrical technician. The curriculum incorporates basic and advanced courses in electricity, electronics and electrical machinery. In addition students must take technical specialization electives in fields that are of particular interest to them.

The full Electrical Engineering Technology Program is available on the Logan Campus. The Boone/Lincoln, Williamson, and Wyoming/ McDowell campuses offer the general education/program support courses only.

#### Program Level Outcomes:

- 1. Prepare students to become safe and competent electrical technicians.
- 2. Provide opportunities to display critical thinking skills.
- 3. Demonstrate responsible professional conduct and behavior.
- 4. Effectively communicate.

# **First Semester**

- CS 102 Computer Literacy 3 Credit Hours (E)
- EG 103 Electrical Calculations 3 Credit Hours
- EG 105 Industrial Safety 1 Credit Hours (E)
- EG 171 Circuit Analysis I 4 Credit Hours
- MT 124 Technical Math 3 Credit Hours
- OR 105 Orientation to Technical Programs 1 Credit Hours (E)

## Credit Hours: 15

## **Second Semester**

- EG 123 Electrical Schematics 3 Credit Hours (E)
- EG 172 Circuit Analysis II 4 Credit Hours
- EG 214 Electrical Control Systems 4 Credit Hours
- PH 200 ~ Conceptual Physics 4 Credit Hours

#### **Credit Hours: 15**

### **Third Semester**

• MX 110 - Introduction to Mechatronics 2 Credit Hours

- MX 190 Industrial Robotics 3 Credit Hours
- EN 101 ~ English Composition I 3 Credit Hours
- SP 103 ~Speech Fundamentals 3 Credit Hours
- Restricted Specialized Elective 4 Credit Hours

# **Credit Hours: 15**

## **Fourth Semester**

- EG 296 Program Logic Control 4 Credit Hours
- EG 298 Capstone 1 Credit Hours
- Restricted Specialized Elective 7 Credit Hours
- General Education Elective 3 Credit Hours

# **Credit Hours: 15**

### **Total Credit Hours: 60**

~ Designates courses on the statewide Core Coursework Transfer Agreement.

<sup>1</sup>Restricted Specialized Elective: Choose from any Engineering (EG), Drafting (DR), or Mechatronics (MX) courses not already required by the program and other related courses as approved by the Dean.

<sup>2</sup>General Education Elective: Choose from any Economics (EC), English (EN), History (HS), Mathematics (MT), Political Science (PS), Psychology (PY), or Sociology (SO) course not already required by the program.

This degree program provides students the opportunity to receive credit for their high school EDGE courses (<a href="http://careertech.k12.wv.us/edge/edgeCollege.html">http://careertech.k12.wv.us/edge/edgeCollege.html</a>) as designated by the (E).