# ELE 131 - COMMERCIAL ELECTRICAL

### **Course Description**

Through structured classroom and hands-on skill building, the student will learn commercial building plans and specifications, reading electrical drawings, calculating the electrical load, branch circuits, wiring methods, motor and appliance circuits, feeders, special systems, and working drawings. Group 2 course.

### **Credit Hours**

**Contact Hours** 

## Lecture Hours

Lab Hours

### Required Prerequisites ELE 105 Course Learning Outcomes

#### Knowledge:

- · Identify electrical prints and Symbology.
- Show proper sizing of the electrical circuit in commercial applications.
- Explain multiple services.

#### Application:

- Extrapolate take-offs for commercial building plans.
- · Develop a working plan and noting on the prints.
- Calculate motor loads, feeders, and branch circuit loads for commercial projects.

#### Integration:

· Contrast the differences between residential and commercial wiring.

#### Human Dimension:

- · Collaborate with other trades and stakeholders.
- · Recognize the value of job coordination.

#### Caring - Civic Learning:

· Evaluate the complexity of commercial jobs.

#### Learning How to Learn:

· Estimate the proper circuiting take-offs and calculations.