# **ELE 101 - INTRODUCTION TO ELECTRICAL**

## **Course Description**

This course provides an introduction to the electrical. Through structured classroom and hands-on skill building, the student will learn safety, basic electricity, Ohm's Law, basic electric circuits, meters and wire sizes. Group 2 course.

## **Credit Hours**

3

## **Contact Hours**

4

## **Lecture Hours**

2

## **Lab Hours**

2

## **Recommended Prerequisites or Skills Competencies**

Placement in MTH 111 or higher, or co-enrollment in the appropriate developmental Math course, placement into ENG 11/111 or higher or co-enrollment in the appropriate developmental English course.

## **Course Learning Outcomes**

#### Knowledge:

- · Recall the fundamentals of electrical theory.
- · Explain safety on the construction site.
- · Recognize hand and power tools.
- · Identify electrical test equipment.
- · Describe the basics of electrical circuitry.

#### Application:

- Show proper use of hand tools.
- Demonstrate proper job-site safety.
- · Calculate the electrical elements of basic circuit wiring.

### Integration:

- Recognize advanced applications.
- Distinguish how electricity works in a variety of applications.

## **Human Dimension:**

 Estimate the amount of electricity consumed on a daily basis and how it impacts people's lives.

#### Caring - Civic Learning:

· Recognize the unseen power behind everything we use.

## **Learning How to Learn:**

· Judge the efficient use of electricity in daily applications.