# EET 233 - PLC APPLICATIONS

## **Course Description**

This course is a study of the integration of program styles and components used in industry. Program structures and instructions will be used in lab projects to simulate how PLCs can be used to create a variety of useful functions. A mixture of textbook and component manuals will be used to learn the necessary information to complete these functions. Group 2 course.

Credit Hours <sup>3</sup> Contact Hours <sup>4</sup> Lecture Hours <sup>2</sup>

### Lab Hours <sup>2</sup> Required Prerequisites

EET 232 or ELE 142

## **Course Learning Outcomes**

#### Knowledge:

- Define the fundamentals of PLC control.
- · Read ladder logic as well as advanced program instructions.

#### Application:

- Design PLC program logic for input.
- · Research ladder logic to develop PLC programs.
- · Select proper devices for various tasks.

#### Integration:

- Develop PLC program logic to work various devices in a typical industrial environment.
- · Place control logic devices properly within a working circuit.
- Develop logical sequences of ideas to transfer to an operational format.

#### Human Dimension:

- · Assess their position on replacing people with electronics.
- Discover their ability to logically and sequentially set up programs and device functions.

#### Caring - Civic Learning:

- · Appreciate the importance of attention to detail.
- Recognize the need for technicians as manufacturing institutes these problems.

#### Learning How to Learn:

• Reflect on their ability to use these course skills in real-world applications.