

EET 232 - PROGRAMMABLE LOGIC CONTROLLERS

Course Description

This course studies programmable logic controllers (PLCs). Basic models and complete applications are applied to control inputs and outputs of PLCs. Ladder logic and device wiring techniques are studied, along with advanced program instructions such as counters, timers, sequencers and integer moves. Input/output devices are used to examine PLC program logic during the control process. Group 2 course.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Required Prerequisites

EET 221

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 processes.

Learning How to Learn:

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