
SECTION HEADING

ELEC 2230: Programmable Logic Controllers

Description

Programmable Logic Controllers describes how PLC's work and provide practical information about installing, programming and maintaining a PLC system. Students will be given a wide range of generic programming assignments and exercises for practice with the PLC.

Credits

4

Prerequisite

ELEC 2205

Topics to be Covered

1. Purpose, function and operation of programmable logic controllers
2. Ladder Logic and basic programming
3. Tag-based addressing
4. Timing and counting functions

Learning Outcomes

1. Describe function of a Programmable logic controller
2. Describe parts of a programmable logic controller
3. Describe I/O configuration
4. Describe discrete and analog I/O
5. Describe programming languages
6. Explain timing and counting functions
7. Program basic control circuits
8. Program on-delay and off-delay timers
9. Program counters
10. Program circuits using tag-based addressing
11. Troubleshoot programmable logic control circuits

Credit Details

Lecture: 1

Lab: 3

OJT: 0