

PLC (Industrial)



Description

The Industrial PLC curriculum uses an industrial grade PLC, programming software, and simulation software to expose students to the world of programmable logic controls. The PLC is programmed to perform various real-world applications.

Skills

- The Industrial PLC curriculum uses an industrial grade PLC, programming software, and simulation software to expose students to the world of programmable logic controls. The PLC is programmed to perform various real-world applications.

Objectives

- Use Boolean algebra in PLC applications.
- Use binary logic in PLC applications.
- Use a flow chart to describe the program flow within a PLC controller.
- Use the CCW program to create PLC programs.
- Identify the components of a PLC system.

Activities

- Lesson 1 Introduction to PLC
- Lesson 2 PLC Fundamentals
- Lesson 3 Ladder Diagrams
- Lesson 4 Connected Components Workbench
- Lesson 5 PLC Programming Language
- Lesson 6 NOT Function
- Lesson 7 OR Function
- Lesson 8 AND Function
- Lesson 9 NOT/OR/AND Combination
- Lesson 10 Multiple Outputs
- Lesson 11 Signal Edges
- Lesson 12 Setting and Resetting an Output
- Lesson 13 Pulse Timer and Clamping Device
- Lesson 14 Lifting and Sorting Device
- Lesson 15 Embossing Device
- Lesson 16 Traffic Light
- Lesson 17 Trouble-Shooting
- Lesson 18 Mechatronics
- Lesson 19 Operational Safety
- Lesson 20 Challenge and Review

Standards

DEPCO courseware is developed from the Manufacturing Skill Standards Council (MSSC) and the National Skill Standards Board (NSSB). Close correlation with these standards will provide students with the skills and knowledge necessary for success in the workplace.

Module Includes:

Training Manuals; Instructor's Manual; Installation CD; DEPCO Industrial PLC Trainer with PC Interface including 16 Input Switches, 16 Output Lights (LED), Allen Bradley Micro 830 PLC, and Easy-to-Carry Case; Rockwell Automation Connected Components Workbench; Safety Glasses (2), and Headphones (2).

Computer is required and sold separately.

Requirements

Computer required and sold separately.

Curriculum Specifications

Industrial Training Manuals 1 and 2, Instructor's Manual, Installation CD