

Intermediate Logix

< Maintenance Track >

Course Description and Topics Covered



Course Description:

Learn how to program and operate CompactLogix Programmable Logic Controllers (PLCs) during this one-day course that covers a combination of instructor-led discussions, demonstrations, and hands-on labs. The **Intermediate Logix** class picks up right where the **Introduction to Logix** class left off.

Using a PLC Workstation, Remote IO Workstation, & hand-held PLC test module, students will utilize RSLinx and Studio 5000 software to learn how to configure and program Ethernet Remote I/O Adapters, Digital Point I/O modules, Analog Point I/O modules, Very High-Speed Counter (VHSC) modules, and more using the Ladder Logic programming language.

Maintenance Track Class:

This is a maintenance track class so the participants will not be required to do any actual programming. In contrast, the instructor will program the devices in front of the students and explain how instructions operate and how to troubleshoot PLC ladder that others have programmed and they are responsible for isolating misbehaving or failed equipment.

Differences between Programmer and Maintenance Track Classes:

Programming track classes are designed for personnel that desire to learn how to program industrial control equipment from the ground up. The maintenance track style classes are designed for personnel that do not have programming responsibility, but in contrast, they are required to troubleshoot misbehaving equipment and/or replacing failed control equipment and returning equipment into service.

Topics Covered:

- Discuss IP and subnet mask Ethernet network basics
- Discuss Ethernet static and dynamic IP addresses
- Ethernet Remote I/O adapter configuration and operation
- Digital Point I/O configuration and operation
- Analog Point I/O configuration and operation
- Discuss identifying and monitoring Add-on Instructions (AOIs)
- Very High-Speed Counter (VHSC) configuration and operation
- Creating and executing Periodic and Event tasks
- Calling routines via JSR instructions
- Understanding differences between controller (global) and local tags
- Ethernet Device Level Ring (DLR) configuration and operation
- Extensive practice using Studio 5000 software to implement hands-on labs