

Upon completion of this course, you should be able to troubleshoot a previously operational CompactLogix[™] system and restore normal operation. In this course you will develop and practice these skills by:

- Learning basic concepts and terminology used with:
 - CompactLogix system hardware
 - Studio 5000 Logix Designer® application
- Practicing a systematic strategy for diagnosing and troubleshooting problems:
 - Faulty/malfunctioning field devices
 - Controller, I/O, or other hardware issues
 - Electrical Noise
 - Configuration issues
- Performing hands-on exercises

All Logix5000™ systems use the same control engine; therefore, tasks are similar. You will see applicable references for other systems.

Monday, Oct. 7

Tuesday, Oct. 8 - Friday, Oct. 11
8AM - 5 PM

SMC Springfield 585 N Washington Ave Springfield, MO 65806

Cost: \$3,525 Includes Lunch *except Monday



Course Agenda



- Locating CompactLogix Systems Components
- Navigating through the Logix Designer Application
- Connecting a Computer to a Communications Network
- Downloading and Going Online
- Locating I/O Tags and Devices
- Interpreting Logix Designer Project Organization and Execution
- Interpreting Ladder Logic Structure
- Locating and Editing Tag Values
- Interpreting Bit Instructions
- Interpreting Frequently Used Instructions
- Interpreting Arrays
- Interpreting Tags of User-Defined Data Types
- Searching for Project Components
- Integrated Practice Interpreting a Basic Project
- Forcing I/O and Toggling Bits

- Troubleshooting Digital I/O Problems
- Troubleshooting Analog I/O Problems
- Troubleshooting Banked Local I/O and Distributed I/O Problems
- Updating Logix5000 Firmware
- Troubleshooting Controller Problems
- Troubleshooting Power Supply Problems
- Analyzing and Troubleshooting a System Using a Trend Chart
- Integrated Practice-Troubleshooting Basic Projects
- Editing Ladder Logic Online
- Managing Logix Designer Project Files
- Documenting and Printing Components
- Troubleshooting Noise-Related Problems

PREREQUISITES



- Ability to perform basic Microsoft Windows tasks
- Previous experience with common industrial control system concepts

