

This course is designed for individuals who need to maintain and troubleshoot a ControlLogix system — but have no current working experience with ControlLogix systems. Upon completion of this course, you should be able to troubleshoot a previously operational ControlLogix® system and restore normal operation. All Logix5000™ systems use the same control engine; therefore, tasks are similar. You will see applicable references for other systems.

You will have the opportunity to develop and practice these skills by:

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

This course will award 3.2 CEUs.





HANDS-ON

Throughout this course, you will have the opportunity to practice the skills you have learned through a variety of hands-on exercises.





To register, contact Erica Masterson at emasterson@smcelectric.com by April 28, 2022.

COURSE NUMBER CCP299

- · Locating ControlLogix Components
- \cdot Navigating through the Studio 5000 Logix Designer Application
- · Connecting a Computer to a Communications Network
- · Downloading and Going Online
- · Locating I/O Tags and Devices
- · Interpreting Studio 5000 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 Remote 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 Studio 5000 Logix Designer Project Files
- · Documenting and Printing Components
- · Troubleshooting Noise-Related Problems