

This course is designed for individuals who need to develop 5000 Logix Designer® projects for any Logix5000 controller. Upon completion of the course, given a functional specification for a Logix5000 $^{TM}$  application, you should be able to develop a project to meet the specification requirements.

This course covers tasks common to the following hardware, which all use the Logix5000 control engine:

- · ControlLogix® controllers
- CompactLogix™ controllers
- SoftLogix™ controllers



This course will build upon your knowledge of common controller terms and operation and your experience with basic ladder logic programming. You will gain a deeper understanding of project development tasks that are common to all Logix5000 controllers. Such tasks include organizing tasks and routines, organizing controller data, configuring modules, and sharing data.



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



\$2,550 Includes Lunch



To register, contact Erica Masterson at emasterson@smcelectric.com by May 25, 2021.

## COURSE NUMBER CCP143

Throughout this course, you will have the opportunity to practice the skills you have learned through a variety of hands-on exercises. You will also use producer/consumer technology for multicasting to input and output devices, sharing data between controllers, and controlling remote I/O.

This course will award 2.8 CEUs.

## **Prerequisites**

To successfully complete this course, the following prerequisites are required:

- · Ability to perform basic Microsoft Windows tasks
- · Knowledge of common controller terms and operation through experience or one of the following courses:
  - Studio 5000 Logix Designer Level 1: ControlLogix System Fundamentals (Course No. CCP146)
  - RSTrainer for ControlLogix Fundamentals computer-based training (9393-RSTCLX)
- Ability to write basic ladder logic with common instructions, such as bit, timer, counter, move, and comparison instructions through experience or this course:
  - Studio 5000 Logix Designer Level 2: Basic Ladder Logic Programming (Course No. CCP151)

## **SCHEDULE**

- · Locating ControlLogix Components
- 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-TroubleshootingBasic Projects
- · Editing Ladder Logic Online
- Managing Studio 5000 Logix Designer
   Project Files
- Documenting and Printing Components
- · Troubleshooting Noise-Related Problems