



**AUTOMATION**

**COURSE CCP153**

## **Studio 5000 Logix Designer Level 2: Maintenance and Troubleshooting**

Upon completion of this course, you will be able to troubleshoot a previously operational ControlLogix® system and restore normal operation.

This course adds to your skill set by introducing new tasks such as connecting to a network, interpreting project execution, editing ladder logic online, and more.

You will then be presented with a systematic strategy for diagnosing and troubleshooting a variety of common system errors:

- Controller, I/O, and other hardware problems
- Noise-related problems
- Software configuration problems

**Tuesday, February 9 -  
Friday, February 12**

**8 AM - 5 PM**

**SMC Springfield  
585 N. Washington  
Springfield, MO**

**Cost: \$3,516  
Includes Lunch**



**Authorized  
Service Provider**

A ROCKWELL AUTOMATION PARTNER



To register, please contact Tyler Perry at [tperry@smcelectric.com](mailto:tperry@smcelectric.com)

# Course Agenda

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## DAY 1

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- Optional Locating: ControlLogix System Components
- Connecting a Computer to a Network
- Interpreting Project Organization and Execution
- Locating and Editing Tag Values
- Interpreting Frequently Used Instructions

## DAY 2

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- 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 Module Problems

## DAY 3

- Troubleshooting Analog I/O Module 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

## DAY 4

- Integrated Practice-Troubleshooting Basic Projects
- Editing Ladder Logic Online
- Optional: Editing FBDs Online
- Managing Project Files
- Documenting and Printing Project Components
- Troubleshooting Noise-Related Problems



## PREREQUISITES

To successfully complete this course, completion of the Studio 5000 Logix Designer Level 1: ControlLogix System Fundamentals course (Course No. CCP146) or equivalent experience is required.



Learn more and register at  
[smcelectric.com](http://smcelectric.com)

