

COURSE NUMBER CCP299

CONTROLLOGIX® / STUDIO 5000 LOGIX DESIGNER® LEVEL 1: CONTROLLOGIX® FUNDAMENTALS & TROUBLESHOOTING

# TRAINING EVENT

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

FRI. SEP. 28

8 AM - 4 PM

**SMC JOPLIN** 

923 W. 4TH ST.

**JOPLIN, MO 64801** 

- 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.



# COST

\$2,575 Includes lunch Tuesday-Friday



# REGISTER

To register, contact Suzan McPherson at smcpherson@smcelectric.com by Monday, September 3.

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#### **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-Troubleshooting Basic Projects
- · Editing Ladder Logic Online
- · Managing Studio 5000 Logix Designer Project Files
- · Documenting and Printing Components
- · Troubleshooting Noise-Related Problems