COURSE DESCRIPTION

SLC™ 500 Processors

SLC™ 500 and RSLogix™ 500 Maintenance and Troubleshooting

COURSE AGENDA

Day 1

- Identifying System Components
- Getting Started with RSLogix 500 Software
- Communicating with a Processor
- Identifying Memory Layout
- Monitoring and Entering Data

Day 2

- Interpreting Bit Instructions
- Editing Ladder Logic
- Documenting a Project
- Searching Ladder Logic
- Interpreting Timer and Counter Instructions
- Integrated Practice: Tracing Through Ladder Logic

Day 3

- Interpreting Data Handling and Comparison Instructions
- Interpreting Program Control Instructions
- Configuring and Previewing a Project Report
- Creating a Histogram
- Forcing Inputs and Outputs

Day 4

- Troubleshooting Noise-Related Problems
- Troubleshooting Processor and Power Supply Problems
- Troubleshooting Discrete and Analog I/O Problems
- Integrated Practice: Maintaining and Troubleshooting an SLC 500 System

COURSE NUMBER: CCPS43

Course Purpose

This skill-building course provides the necessary practice needed to interpret, isolate, and diagnose common hardware problems related to noise, power, and discrete and analog I/O. In troubleshooting scenarios, students are introduced to basic ladder logic interpretation, which is applied to diagnostic tasks. Students practice these diagnostic skills by tracing through ladder logic instructions in an RSLogix 500 project. An integrated practice of multiple troubleshooting skills completes the training.

Who Should Attend

Individuals who are responsible for troubleshooting and maintaining SLC 500 systems using RSLogix 500 software should attend this course.

COURSE DESCRIPTION

SLC™ 500 Processors

Prerequisites

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

- Experience maintaining electrically controlled systems
- Working knowledge of programmable controllers or completion of the *PLC-5/SLC 500 and RSLogix Fundamentals* (Course No. CCP122)
- Experience operating a personal computer within a Microsoft® Windows 98®, Windows 2000®, Windows ME®, Windows NT®, or Windows XP® environment

Student Materials

To enhance and facilitate students' learning experience, the following materials are provided to each student as part of the course package:

- *Student Manual*, which contains the key concepts, definitions, and examples presented in the course and includes the hands-on exercises.
- *RSLogix 500 and SLC 500 Procedures Guide*, which provides all the steps required to complete common RSLogix 500 software tasks, including the tasks in the exercises. By following the procedures in this job aid, students can immediately apply what is learned in the course to their own job.
- *SLC 500 Documentation Reference Guide*, which contains excerpts from several different technical publications. This guide contains the most frequently referenced information and is a quick and efficient on-the-job resource.
- *SLC 500 and RSLogix 500 Troubleshooting Guide*, which contains diagnostic procedures that efficiently lead the user to possible maintenance and troubleshooting solutions.

Hands-On Practice

Diagnostic and problem-solving skills are sharpened through hands-on exercises using a troubleshooting guide and an SLC 500 processor linked to an interactive I/O simulator. Throughout the course, students maintain and troubleshoot a real-world RSLogix 500 project that controls a simulated, two-compressor, cooling unit.

Next Learning Level

Once students have mastered the maintaining and troubleshooting skills covered in this course, they may wish to expand their logic and programming knowledge by attending the *SLC 500 and RSLogix 500 Programming* course. (Course No. CCPS41).

Course Length

This is a four-day course.

Course Number

The course number is CCPS43.

IACET CEUs

CEUs Awarded: 2.8

To Register

To register for this or any other Rockwell Automation training course, contact your local authorized Allen-Bradley Distributor or your local Sales/Support office for a complete listing of courses, descriptions, prices, and schedules.

You can also access course information via the Web at http://www.rockwellautomation.com/training

www.rockwellautomation.com

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