

COURSE AGENDA

- Identifying PLC-5 System Components
- Getting Started with RSLogix 5 Software
- Communicating with a PLC-5 Processor
- Identifying Memory Layout
- Monitoring and Entering Data
- Interpreting Bit Instructions
- Editing Ladder Logic
- Documenting a Project
- Searching Ladder Logic
- Interpreting and Editing Counter Instructions
- Interpreting and Editing Timer Instructions
- Integrated Practice: Searching and Interpreting Basic Ladder Logic
- Interpreting and Editing Compare Instructions
- Interpreting and Editing Data Manipulation Instructions
- Interpreting and Editing Program Control Instructions
- Forcing Inputs and Outputs
- Configuring and Previewing a Project Report
- Creating a Histogram
- Creating a Trend Chart
- Troubleshooting Noise-Related Problems
- Troubleshooting Discrete I/O Problems
- Troubleshooting Analog I/O Problems
- Troubleshooting I/O Channel and Chassis Problems
- Troubleshooting Processor and Power Supply Problems
- Integrated Practice: Maintaining and Troubleshooting a PLC-5 System

PLC-5[®] and RSLogix[™] 5 Maintenance and Troubleshooting



COURSE NUMBER: CCP412

Course Purpose

This skill-building course provides you with the knowledge and practice needed to interpret, isolate, and diagnose common hardware problems related to noise, power, and discrete and analog I/O. In troubleshooting scenarios, you will be introduced to basic ladder logic interpretation, which is applied to diagnostic tasks. You will practice these diagnostic skills by tracing through ladder logic instructions in an RSLogix 5 project. An integrated practice of multiple troubleshooting skills completes the training.

Who Should Attend

Individuals who are responsible for troubleshooting and maintaining PLC-5 systems using RSLogix 5 software should attend this course.

Prerequisites

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

- Experience maintaining electrically controlled systems
- Working knowledge of programmable controllers or completion of *PLC-5/SLC500 and RSLogix Fundamentals* (Course No. CCP122)
- Experience operating a personal computer within a Microsoft® Windows® environment

Student Materials

To enhance and facilitate your learning experience, the following materials are provided 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 5 and PLC-5 Procedures Guide*, which provides all the steps required to complete common tasks using RSLogix 5 and RSLinx™ software, including the tasks in the exercises. By following the procedures in this job aid, you can immediately apply what is learned in the course to your own job.
- *PLC-5 and RSLogix 5 Troubleshooting Guide*, which contains diagnostic algorithms that lead to possible maintenance and troubleshooting solutions.
- *PLC-5 Documentation Reference Guide*, which contains several relevant technical publications. This searchable, electronic resource contains the most frequently referenced programming information and is a quick and efficient on-the-job resource.
- *1785 PLC-5 Programmable Controllers Quick Reference*, which provides a wide-range of maintenance information about the PLC-5 processors.

Hands-On Practice

Diagnostic and problem-solving skills are sharpened through hands-on exercises using a troubleshooting guide and a PLC-5 processor linked to an interactive I/O simulator.

Throughout the course, you will maintain and troubleshoot a real-world RSLogix 5 project that controls a simulated, paint-mixing and packaging application. This real-world experience can then be applied to common troubleshooting problems.

Next Learning Level

Once you have mastered the maintaining and troubleshooting skills covered in this course, you may wish to expand your knowledge of logic instructions by attending the *PLC-5 and RSLogix 5 Advanced Maintenance and Troubleshooting* course. (Course No. CCP409).

Course Length

This is a four-day course.

Course Number

The course number is CCP412.

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>

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