

PLC-5 Processors

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.

COURSE AGENDA

DAY 1-4

- 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

WHO SHOULD ATTEND

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

PREREQUISITES

To successfully complete this course, 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 the students' learning experiences, the following materials are provided as part of the course package:

- Student Manual
 - Includes the key concepts, definitions, examples, and activities presented in this course
- Lab Book
 - Provides learning activities and hands-on practice. Solutions are included after each exercise for immediate feedback
- RSLogix 5 and PLC-5 Procedures Guide
 - Provides all the steps required to complete common tasks using RSLogix5 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
 - Contains diagnostic algorithms that lead to possible maintenance and troubleshooting solutions
- 1785 PLC-5 Programmable Controllers Quick Reference
 - Provides a wide-range of maintenance information about the PLC-5 processors

HANDS-ON PRACTICE

Throughout this course, you will have the opportunity to practice the skills you have learned through a variety of hands-on exercises. These exercises focus on the skills introduced in each lesson.

COURSE LENGTH





This is a four-day course.

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>

To be respectful of the environment, Rockwell Automation is transitioning some of its training courses to a paperless format. Students are asked to complete downloads and bring personal devices to these classes. A full list of digital/paperless courses is currently available through your local distributor.

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