

# SLC 500 Processors

SLC 500 and RSLogix 500 Programming



## Course Number

CCPS41

## Course Purpose

This course provides you with the resources and hands-on practice required to efficiently program an SLC™ 500 processor to meet the requirements of a given specification, using RSLogix 500® software.

In this course, you will create a program, step-by-step, to meet the requirements of a given functional specification. As you build the project, you will gain experience that can be applied to your own RSLogix 500 projects. Each lesson in the course is devoted to a step in the programming sequence. Your instructor will present each step and demonstrate the procedure required to complete it.

After each procedure has been demonstrated, you will be given an opportunity to apply what you have learned by selecting the appropriate instructions, drafting and programming ladder logic, and testing your project using the SLC 500 workstation. You will then be able to compare your programming to an existing example.

## COURSE AGENDA

### DAY 1-4

- Identifying SLC 500 System Components
- Getting Started with RSLogix 500 Software
- Communicating with an SLC 500 Processor
- Creating a New Project
- Determining Addresses and Assigning Symbols
- Drafting Ladder Logic
- Selecting and Programming Bit Instructions
- Entering, Editing, and Verifying Ladder Logic
- Determining Program Flow and Creating Subroutines
- Selecting and Programming Timer Instructions
- Selecting and Programming Counter Instructions
- Entering and Searching for Documentation
- Organizing the Data Table
- Selecting and Programming Math Instructions
- Selecting and Programming Data Handling Instructions
- Selecting and Programming Comparison Instructions
- Testing a Project
- Configuring and Previewing a Project Report

## WHO SHOULD ATTEND

Individuals who are responsible for programming SLC 500 applications using RSLogix 500 software should attend this course.

## PREREQUISITES

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

- Experience with basic control and electrical principles
- Experience operating a personal computer within a Microsoft Windows 95 or Windows NT environment
- Working knowledge of programmable controllers or completion of the *PLC-5/SLC 500 and RSLogix Fundamentals* (Course No. CCP122)

## 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 500 and SLC 500 Procedures Guide
  - 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, you can immediately apply what is learned in the course to your own job.

## HANDS-ON PRACTICE

Programming and problem-solving skills are sharpened through hands-on exercises using an SLC 500 processor linked to an interactive I/O simulator. Throughout the course, you will create, draft, and program a real-world RSLogix 500 project that controls a simulated, automated car wash. You will be able to compare your work to an existing example.

## NEXT LEARNING LEVEL

Once you have mastered the maintaining and troubleshooting skills covered in this course, you may want to expand your logic and programming knowledge by attending the *SLC 500 and RSLogix 500 Maintenance and Troubleshooting* course. (Course No. CCPS43).

## 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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