

SLC™ 500 Processors

SLC™ 500 and RSLogix™ 500 Advanced Programming Course Description

COURSE AGENDA

Day 1

- Setting Up an SLC 500 System on a DH+ Network
- Planning Program Flow Strategies
- Applying Immediate I/O Update Instructions
- Programming STI (Selectable Timed Interrupt) Routines

Day 2

- Programming DII (Discrete Input Interrupt) Routines
- Programming Fault Routines
- Programming Shift Register Instructions

Day 3

- Programming Sequencer Instructions
- Applying Indirect and Indexed Addressing
- Programming a Message Instruction for DH+ Communications
- Programming a Proportional Integral Derivative Instruction

Day 4

- Assigning SLC 500 Remote I/O Addresses
- Configuring an SLC 500 System for Discrete Data Transfers on a Remote I/O Link
- Configuring an SLC 500 System for Block Transfers on a Remote I/O Link



COURSE NUMBER: CCPS42

Course Purpose

This course is designed to provide you with the skills necessary to develop advanced ladder logic projects for SLC 500 systems using RSLogix 500 software. This course also covers several networking options available with SLC 500 processors, including DH+™ and remote I/O communications. You will be introduced to SLC 500 processor and RSLogix 500 software configurations that facilitate DH+ and remote I/O communications and will have the opportunity to program advanced instructions for data transfer over a Data Highway Plus™ network and a remote I/O link.

Who Should Attend

Individuals who need to be able to program advanced ladder logic instructions or set up and configure SLC 500 systems for DH+ and/or remote I/O communications should attend this course.

Prerequisites

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

- Experience with basic control and electrical principles
- Completion of the *SLC 500 and RSLogix 500 Programming* course (Course No. CCPS41)
- Experience operating a computer within a Microsoft® Windows 2000® or Windows XP® environment

Technology Requirements

All technology is provided for student use in the classroom by Rockwell Automation. It is not necessary for students to bring any technology with them when attending this course.

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 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, you can immediately apply what is learned in the course to your own job.
- *SLC 500 Documentation Reference Guide*, which contains several relevant technical publications. This searchable, electronic resource contains the most frequently referenced information and is a quick and efficient on-the-job resource.

Hands-On Practice

Hands-on practice is an integral part of learning and this course provides extensive hands-on opportunities for programming and configuring SLC 500 systems. To gain real-world programming experience, you will be given a functional ladder logic specification for each exercise and will be able to test your project using real and simulated devices on an SLC 500 workstation. This experience can then be directly applied to your own RSLogix 500 applications.

Next Learning Level

Once you have mastered the SLC 500 programming skills covered in this course, you can expand your communications knowledge by attending a Rockwell Automation DeviceNet course, such as *DeviceNet and RSNetWorx Configuration and Troubleshooting* (Course No. CCP164), which addresses the use of SLC 500 processors on a DeviceNet network.

Course Length

This is a four-day course.

Course Number

The course number is CCPS42.



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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