

Logix5000™ Controllers

RSLogix™ 5000 Level 2: Basic Ladder Logic Programming Course Description

COURSE AGENDA

Day 1

- Starting a Ladder Diagram
- Testing a Ladder Diagram
- *Optional Review: Selecting Basic Ladder Logic Instructions*
- Programming Timer Instructions
- Programming Compare Instructions
- Programming Move Instructions
- Programming Math Instructions

Day 2

- Programming Counter Instructions
- Handling Expressions
- Documenting and Searching Ladder Logic
- Programming a Procedure
- Separating the Procedure from Equipment Control
- Programming a BTM Instruction



COURSE NUMBER: CCP151

Course Purpose

This course is a skill-building course that provides you with a basic understanding of RSLogix 5000 ladder logic instructions and terminology. This course also provides the resources and hands-on practice required to program basic ladder logic instructions for any Logix5000 controller.

You will have an opportunity to use RSLogix 5000 software to perform basic software tasks to meet the requirements of a given functional specification. In addition to using ladder logic, you will be introduced to ladder logic techniques, established standards, and common rules for programming ladder logic.

Who Should Attend

Programmers who have little or no practical experience with controllers, who are responsible for programming Logix5000 controllers using RSLogix 5000 software, and who need to learn how to draft ladder logic for any application should attend this course.

Prerequisites

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

- Ability to perform basic Microsoft® Windows® tasks, such as using a mouse, browsing for files, opening, closing, sizing and moving windows)
- Completion of *RSLogix 5000 Level 1: ControlLogix System Fundamentals* course (Course No. CCP146)

Or

- Ability to go online, configure I/O modules, download, assign tags, verify a project, change operating modes on a controller, and enter or edit basic ladder logic instructions in RSLogix 5000 software

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 5000 and Logix5000 Procedures Guide*, which provides all of the steps required to complete basic RSLogix 5000 software tasks that are common to all Logix5000 hardware platforms. By following the procedures in this job aid, you can immediately apply what is learned in the course to your own job.
- *Logix5000 Documentation Reference Guide CD*, 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.

Hands-On Practice

This course provides you with separate hands-on exercises that target your specific job responsibilities. To gain real-world programming experience, you will develop an entire RSLogix 5000 project for a fictitious application. As you develop the project, you will be given opportunities to verify it using a hardware workstation. This experience can then be transferred to your own job responsibilities.

Next Learning Level

Once you have mastered the basic ladder logic skills covered in this course, you will have the knowledge and skills necessary to attend the next level of ControlLogix/Logix5000 training. In particular, this course will benefit you when enrolling in the *RSLogix 5000 Level 3: Project Development* course (Course No. CCP143).

Course Length

This is a two-day course.

Course Number

The course number is CCP-151



IACET CEUs

CEUs Awarded: 1.4

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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