

# ControlLogix/Studio 5000

## Studio 5000 Logix Designer Level 3: Basic Ladder Logic Interpretation Course Description

### COURSE AGENDA

#### *Day 1*

- Reviewing Basic Ladder Logic
- Interpreting Timer and Counter Instructions
- Interpreting Program Control Instructions
- Interpreting Compare Instructions
- Interpreting Move Instructions

#### *Day 2*

- Interpreting Math Instructions
- Interpreting Expression Handling Instructions
- Interpreting Copy and File Fill Instructions
- Integrated Practice: Interpreting Ladder Logic Instructions



### COURSE NUMBER: CCCL21

#### *Course Purpose*

This course is a skill-building course that provides you with a more detailed understanding of Studio 5000 Logix Designer™ ladder logic instructions and terminology. This course also provides you with the resources and hands-on practice required to interpret ladder logic instructions for any Logix5000 controller.

You will have an opportunity to use the Logix Designer application 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 interpreting ladder logic.

#### *Who Should Attend*

Maintainers who need to interpret ladder logic using the Logix Designer application should attend this course.

### **Prerequisites**

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

- Completion of *Studio 5000 Logix Designer Level 1: ControlLogix System Fundamentals* (Course No. CCP146) or equivalent experience
- Completion of *Studio 5000 Logix Designer Level 2: ControlLogix Maintenance and Troubleshooting* (Course No. CCP153)
- Ability to perform basic Microsoft® Windows® tasks, such as using a mouse, browsing for files, opening, closing, sizing, and moving windows

### **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:*
  - Contains the topical outlines and exercises
  - Used to follow presentations, take notes, and work through exercises
- *Studio 5000 Logix Designer and Logix5000 Procedures Guide:*
  - Provides the steps required to complete basic software tasks that are common to all Logix5000 hardware platforms
- *Logix5000 Documentation Reference Guide:*
  - Searchable, electronic resource
  - Contains frequently referenced technical documentation

### **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.

Exercises are performed on a ControlLogix workstation. The skills taught in this course can be applied to all Logix5000 platforms.

### **Next Learning Level**

After completing this training, you may be interested in one or more of the following courses:

- *Introduction to the Integrated Architecture System* (Course No. CIA101)
- *Motion Control Fundamentals* (Course No. CCN130)

### **Course Length**

This is a two-day course.

### **Course Number**

The course number is CCCL21.



### **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>

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