

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.

LISTEN.
THINK.
SOLVE.®

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)

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 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 lesson for immediate feedback.
- *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

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 using an ABT-TDCLX3-B ControlLogix® workstation. Exercises focus on the skills introduced in each lesson.

The skills taught in this course can be applied to all Logix5000 platforms.

Next Learning Level

Once you have an understanding of the topics and the skills covered in this course, you may want to attend specific training such as:

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

Course Length

This is a two-day course.

IACET CEUs

Rockwell Automation is authorized by IACET to offer 1.4 CEUs for this program.



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>

Rockwell Automation is accredited by the International Association for Continuing Education and Training (IACET) and is authorized to issue the IACET CEU. [Click here](#) to view the Rockwell Automation Certificate of Accreditation.

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