

# ControlLogix/Studio 5000

Studio 5000 Logix Designer Level 1:  
ControlLogix System Fundamentals



**Rockwell  
Automation**



**Allen-Bradley**  
by ROCKWELL AUTOMATION

## Course Number

CCP146

## Course Purpose

After completing this course, you should be able to perform basic ControlLogix® and Studio 5000 Logix Designer® tasks, such as:

- Creating and configuring a project
- Communicating with a controller

The course will assist you in developing and building a solid foundation with a fundamental knowledge of ControlLogix and other Logix5000™ systems.

You will be introduced to basic Logix5000 concepts and terminology, and you will be exposed to Logix5000 system hardware, including hands-on experience with the ControlLogix platform.

## COURSE AGENDA

### DAY 1

- Understanding Control Systems
- Locating ControlLogix System Components
- Locating and Configuring Studio 5000 Logix Designer Application components
- Creating and Modifying a Studio 5000 Logix Designer Project
- Selecting and Connecting to Industrial Networks in a Logix5000 System
- Downloading and Going Online to a Logix5000 Controller

### DAY 2

- Locating I/O Tags and Devices in a ControlLogix System
- Configuring Local 1756-I/O Modules in a Studio 5000 Logix Designer Project
- Creating Tags and Monitoring Data in a Studio 5000 Logix Designer Project
- Drafting Basic Ladder Logic for a Studio 5000 Logix Designer Routine
- Selecting Basic Ladder Logic Instructions for a Studio 5000 Logix Designer Routine
- Entering Ladder Logic Components in a Studio 5000 Logix Designer Routine
- Integrated Practice - Creating and Verifying a Studio 5000 Logix Designer Project

## WHO SHOULD ATTEND

Individuals who have little or no working experience with Logix5000 systems or other programmable controllers should attend this course.

## PREREQUISITES

To successfully complete this course, you must be able to perform basic Microsoft Windows tasks, such as:

- Use a mouse
- Browse for files
- Open, close, size and move windows

## 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.
- 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 workstation. Exercises focus on the skills introduced in each lesson. Integrated practices combine and practice several key skills at once.

## NEXT LEARNING LEVEL

Once you have mastered the fundamental skills covered in this course, you will have the knowledge and skills necessary to attend the next level of Logix5000 training. In particular, this course will benefit those enrolling in the following courses:

- Studio 5000 Logix Designer Level 2: Maintenance and Troubleshooting (Course No. CCP153)
- Studio 5000 Logix Designer Level 3: Basic Ladder Logic Interpretation (Course No. CCCL21)
- GuardLogix Fundamentals and Troubleshooting (Course No. SAF-LOG103)
- Studio 5000 Logix Designer Level 2: Basic Ladder Logic Programming (Course No. CCP151)
- Studio 5000 Logix Designer Level 3: Project Development (Course No. CCP143)

## 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.

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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