# ControlLogix<sup>®</sup>/Studio 5000<sup>®</sup>

Studio 5000 Logix Designer<sup>™</sup> Level 1: ControlLogix<sup>®</sup> System Fundamentals Course Description

# **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



# **COURSE NUMBER: CCP146**

#### Course Purpose

After completing this course, you should be able to perform basic ControlLogix and Studio 5000 Logix Designer<sup>TM</sup> tasks, such as:

- Creating and configuring a project
- Communicating with a controller

This course will assist you in developing and building a solid foundation with a fundamental knowledge of  $ControlLogix^{@}$  and other  $Logix5000^{TM}$  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.

You will also have an opportunity to use Studio 5000 Logix Designer application to perform basic system configuration tasks.

# Who Should Attend

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





## **Prerequisites**

To complete this course successfully, you must have the ability to perform basic Microsoft Windows<sup>®</sup> tasks:

- · Use a mouse
- · Browse for files
- Open, close, size and move 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 to each student as part of the course package:

- Student Manual:
  - Includes the key concepts, definitions, examples, and activities
- Labs:
  - Provide learning activities and hands-on practice
- Studio 5000 Logix Designer and Logix5000 Fundamentals Procedures Guide:
  - Provides step-by-step instructions for tasks that are common to all Logix5000 hardware platforms
- Logix5000 System Glossary:
  - Defines key Logix5000 system terminology

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

## 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 students 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.

#### Course Number

The course number is CCP146.

# 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 <a href="http://www.rockwellautomation.com/training">http://www.rockwellautomation.com/training</a>

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