# **ControlLogix/Studio 5000**

Studio 5000 Logix Designer Level 1: ControlLogix System Fundamentals

# **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

Rockwell Automation

• Locating ControlLogix System Components

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- 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.

#### **TO REGISTER**

To register for this or any other Rockwell Automation training course, contact your local authorized Allen-Bradley<sup>®</sup> 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>

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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AMERICAS: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444 EUROPE/MIDDLE EAST/AFRICA: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640 ASIA PACIFIC: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

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