ControlLogix/ Studio 5000

Accelerated Logix5000
Maintainer Certificate Level 1

Rockwell Automation

Allen-Bradley
by ROCKWELL AUTOMATION

Course Number

CCP300

Course Purpose

This accelerated course is for individuals who can quickly learn and apply Logix5000™ concepts, terminology, hardware troubleshooting skills, and interpretation of ladder logic in a Studio 5000 Logix Designer® project.

This course prepares you for the Logix5000 Maintainer Certificate Course Level 1 certificate exam, which is included in the course price.

You will have the opportunity to develop and practice these skills by:

- Learning basic concepts and terminology used with:
  - Logix5000 system hardware
  - The Studio 5000 Logix Designer application
  - RSLinx® Classic software
- Practicing a strategy for diagnosing and troubleshooting problems:
  - Configuration issues with controllers, I/O, or other hardware
  - Electrical noise
  - Faulty/malfunctioning field devices
  - EtherNet/IP™ network issues

Upon completion of this course, you should be able to troubleshoot a previously operational Logix5000 system and restore normal operation.

COURSE AGENDA

DAY 1

- Understanding Control Systems
- Locating Logix5000 System Components
- Connecting a Computer to a Communication Network
- Assigning IP Addresses for an EtherNet/IP Network using RSLinx Classic Software and Rotary Switches
- Navigating Through the Studio 5000 LogixDesigner Application

DAY 2

- Downloading, Uploading, and Going Online
- Locating I/O Tags and Devices
- Interpreting, Monitoring, and Editing Tag Values
- Isolating Problems in a Logix5000 System
- Troubleshooting Electrical Problems
- Troubleshooting Digital I/O Module Problems

DAY 3

- Troubleshooting Analog I/O Module Problems
- Troubleshooting Logix5000 System EtherNet/IP Network Problems
- Troubleshooting Distributed I/O Module Problems
- Integrated Practice – Troubleshooting Logix5000 Hardware and EtherNet/IP Network Problems
- Interpreting Simple Ladder Logic Structure
- Documenting and Searching Ladder Logic

DAY 4

- Forcing I/O and Toggling Bits
- Editing Ladder Logic Online
- Interpreting Timer and Counter Instructions
- Interpreting Math, Comparison, and Move Instructions
- Interpreting Copy and File Fill Instructions

DAY 5

- Interpreting Program Control Instructions
- Analyzing and Troubleshooting a System Using a Trend Chart
- Troubleshooting Logix5000 Controller Problems
- Updating Logix5000 Firmware
- Managing Studio 5000 Logix Designer Project Files

WHO SHOULD ATTEND

This course is intended for individuals who need to maintain and troubleshoot a Logix5000 system and have current working experience with Logix5000 systems.

Curriculum Note: This course contains many of the lessons in courses CCP153, CCP299, and CCCL21 – in an accelerated five-day format. Do not take all three courses.

PREREQUISITES

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

- Experience reading wiring diagrams
- Completion of at least one Rockwell Automation Logix5000 course in the last two years (course completed on or after 11/30/2019)
- Pursuing a Logix5000 Certificate for Maintainers

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 common to all Logix5000 controllers. By following the procedures in this job aid, you can immediately apply what you learn to your own work.

CERTIFICATE ASSESSMENT

Access to the certificate assessment is valid for 90 days from end of class and will be provided by email.

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 a ControlLogix® with 5069 Compact I/O™ workstation (Catalog No. ABT-TDCLX4). These exercises focus on the skills introduced in each lesson.

COURSE LENGTH

This is a five-day course.

IACET CEUS

Rockwell Automation is authorized by IACET to offer 3.5 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.

Connect with us.

rockwellautomation.com — expanding **human possibility**™

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

Publication GMST-PP739D-EN-P – January 2020 | Supersedes Publication GMST-PP739C-EN-P –April 2018