ControlLogix/Studio 5000

Accelerated Logix5000 Maintainer Certificate Level 1 Course Description

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 Logix Designer Application
- Downloading, Uploading, and Going Online

Day 2
- 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
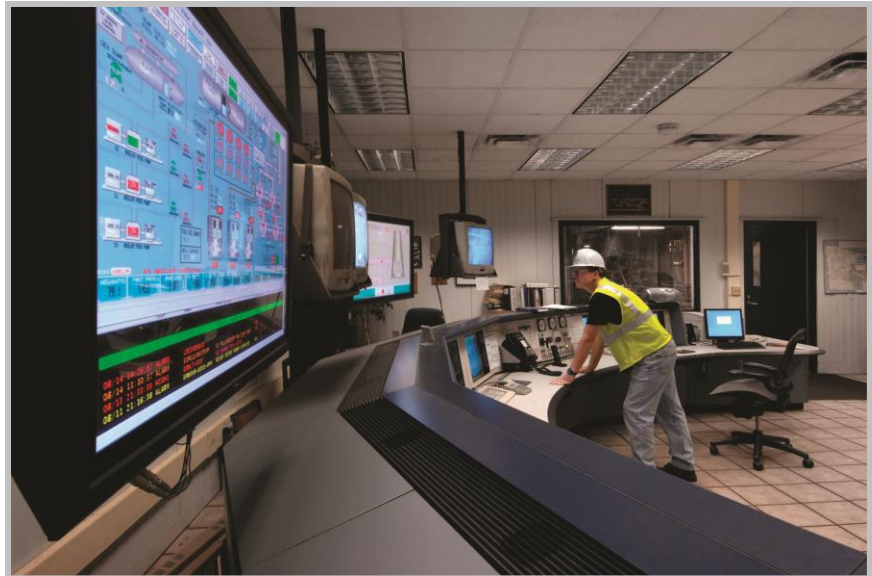- Troubleshooting Analog I/O Module Problems

Day 3
- 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
- Forcing I/O and Toggling Bits
- Editing Ladder Logic Online

Day 4
- Interpreting Timer and Counter Instructions
- Interpreting Math, Comparison, and Move Instructions
- Interpreting Copy and File Fill Instructions
- Interpreting Program Control Instructions
- Interpreting Logix5000 Data Shared Over an EtherNet/IP Network
- Analyzing and Troubleshooting a System Using a Trend Chart

Day 5
- Documenting and Searching Ladder Logic
- Troubleshooting Logix5000 Controller Problems
- Integrated Practice - Troubleshooting a Logix5000 Controller System
- Updating Logix5000 Firmware
- Managing Studio 5000 Logix Designer Project Files

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.

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: Along with new material and labs, this course contains lessons from 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 past two years.

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 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.

– ADD IN ACCESS TO CERTIFICAT EXAM VALID FOR 90 DAYS FROM END OF CLASS 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. Exercises focus on the skills introduced in each lesson.

Course Length
This is a five-day course.

IACET CEUs
CEUs Awarded: 3.5

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