

COURSE DESCRIPTION

Logix5000™ Controllers

RSLogix™ 5000 Level 3: ControlLogix® Maintenance & Troubleshooting

COURSE AGENDA

Day 1

- Connecting a Computer to a Network
- Communicating with a Controller
- Interpreting Project Organization and Execution
- Monitoring & Editing Tags
- Identifying Local I/O Tags

Day 2

- Monitoring Arrays and Tags of User-Defined Data Types
- Editing Ladder Logic Online
- Documenting & Printing Components
- Searching for Project Components
- Integrated Practice-Interpreting a Basic Project

Day 3

- Applying Preventative Maintenance and Troubleshooting Strategies
- Troubleshooting Controller Problems
- Monitoring GSV/SSV Instructions
- Forcing I/O and Toggling Bits
- Troubleshooting Digital I/O Module Problems
- Troubleshooting Analog I/O Module Problems

Day 4

- Troubleshooting Remote I/O Problems
- Troubleshooting Power Supply Problems
- Troubleshooting Noise-Related Problems
- Troubleshooting and Monitoring a System Using a Trend Chart
- Managing Project Files
- Integrated Practice-Troubleshooting Basic Projects



COURSE NUMBER: CCP153

Course Purpose

This course provides students with the necessary resources and hands-on practice to efficiently troubleshoot a previously operational ControlLogix or other Logix5000™ system (i.e., CompactLogix™, FlexLogix™, DriveLogix™, and SoftLogix™). It builds upon the student's fundamental knowledge of common controller terms and operation, the student's ability to identify and create fundamental RSLogix 5000 project components, and the student's experience interpreting basic ladder logic.

This course adds to the student's skill set by introducing new tasks such as connecting to a network, interpreting project execution, editing ladder logic, and more.

After practicing such skills, students will be presented with a systematic strategy for diagnosing and troubleshooting a variety of system errors, for example, software configuration, electrical noise, controller, I/O, and other possible problems.

LISTEN. THINK. SOLVE.™

**Rockwell
Automation**

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Logix5000™ Controllers

Who Should Attend

Individuals who need to maintain and troubleshoot a ControlLogix or other Logix5000 system.

Prerequisites

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

- Completion of *the RSLogix 5000 Level 1: ControlLogix Systems Fundamentals* course (Course No. CCP146) and
- Knowledge of basic ladder logic instructions (bit, timer, counter, etc.) through a course *RSLogix 5000 Level2: Basic Ladder Logic Interpretation* (Course No. CCCL21 or CCP151) or personal experience)

Student Materials

To enhance and facilitate each student's learning experience, the following materials are provided as part of the course package:

- *Student Manual*, which contains the key concepts, definitions, and examples presented in the course and includes the hands-on exercises.
- *Logix5000 Standard Procedures Guide*, which provides all of the steps required to complete RSLogix 5000 software tasks common to all Logix5000 hardware platforms. By following the procedures in this job aid, students can immediately apply what is learned in the course to their own job.
- *ControlLogix Controllers Troubleshooting Guide*, which contains a systematic approach to diagnosing and troubleshooting common ControlLogix system problems.

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. These exercises focus on the skills introduced in each lesson.

You will also have the opportunity to combine and practice groups of key skills by completing two integrated practices during the course.

Hands-On Practice (cont.)

To complete the exercises, you will use a ControlLogix hardware workstation. Because the basic skills taught in the course apply to all Logix5000 platforms, you can then apply what you have learned to the specific platform that you use in your plant.

Next Learning Level

Once students have mastered the maintenance and troubleshooting skills covered in this course, they may want to attend specific network maintenance training, such as, the *DeviceNet and RSNetWorx Configuration and Troubleshooting* (CCP164) course or the *ControlNet and RSNetWorx Maintenance and Troubleshooting* (CCP172) course

Course Length

This is a four-day course.

Course Number

The course number is CCP153.

IACET CEUs

CEUs Awarded: 2.8



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>

www.rockwellautomation.com

Power, Control and Information Solutions

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 SA/NV, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, 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