

Original Equipment Manufacturers

ControlLogix, FactoryTalk View ME, Kinetix 6000, and PowerFlex 40 Fundamentals and Troubleshooting



Course Number

OEM100

Course Purpose

This course provides you with the skills necessary to maintain and troubleshoot:

- Studio 5000 Logix Designer® applications that operate on a ControlLogix® platform
- FactoryTalk® View Machine Edition (ME) applications that run on PanelView™ Plus terminals
- Kinetix® 6000 motion systems
- PowerFlex® 40 drives

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

- Learning basic concepts and terminology used with:
 - ControlLogix hardware, PanelView Plus terminal, Kinetix 6000 systems, and PowerFlex 40 drives
 - Studio 5000 Logix Designer applications
 - FactoryTalk View ME applications
- Diagnosing and troubleshooting problems with controller, I/O, or other hardware issues

COURSE AGENDA

DAY 1

- Assigning a Computer's IP Address
- Connecting a Computer to a Network
- Assigning EtherNet/IP Addresses
- Configuring EtherNet/IP Addresses
- Downloading and Going Online
- Updating Firmware
- Locating I/O Tags and Devices
- Locating and Editing Tag Values

DAY 2

- Identifying Tasks, Programs, and Routines
- Drafting Basic Ladder Logic
- Selecting Ladder Logic Instructions
- Editing Ladder Logic Online
- Programming Timer, Counter, Math, and Compare Instructions

DAY 3

- Programming Move Instructions
- Forcing I/O and Toggling Bits
- Configuring Produced and Consumed Data
- Tuning a PID Loop
- Managing Project Files
- Troubleshooting Using a Trend Chart
- Testing a Ladder Diagram

DAY 4

- Troubleshooting Digital and Analog I/O Modules
- Modifying FactoryTalk View Application Communications
- Downloading Runtime Files
- Configuring Display Security
- Configuring Graphic Displays

DAY 5

- Configuring Interactive Controls
- Isolating Workstation Problems Interpreting Motion Indicators and Instructions
- Modifying PowerFlex Drive Parameters

WHO SHOULD ATTEND

This course is intended for OEMs who need to maintain and troubleshoot a ControlLogix-based machine – but have little to no working experience with ControlLogix systems.

Curriculum Note: This course contains many of the lessons in courses CCP299, CCP151 and CCV204 – in an accelerated format. Do not take this course with the other three courses.

PREREQUISITES

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

- Performing basic Microsoft Windows tasks
- Performing basic voltage and current checks
- Reading wiring diagrams

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.

- FactoryTalk View ME and PanelView Plus Procedures Guide
 - Provides the steps required to complete basic tasks that are common to all PanelView Plus terminals
- ControlLogix Troubleshooting Guide
 - 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 using an Integrated Architecture® system workstation (Catalog Number ABT-TDIA-A). 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>

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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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