Networks
NetLinx System Maintenance and Troubleshooting Course Description

COURSE AGENDA

- Identifying NetLinx Networks
- Identifying Hardware Components of an EtherNet/IP System
- Connecting a Computer to a Logix5000 System Over an EtherNet/IP Network
- Troubleshooting an EtherNet/IP Network's Media Components Using Software and Hardware Tools
- Monitoring and Troubleshooting EtherNet/IP Media Components from an RSLogix 5000 Project
- Identifying ControlNet Media Components and Creating Cables
- Identifying ControlNet Media Signal Measuring Equipment
- Connecting to a ControlNet Network Using RSLinx Classic Software
- Troubleshooting a Scheduled ControlNet Data Connection for a ControlLogix Controller
- Troubleshooting a ControlNet Network Using RSNetWorx for ControlNet Software
- Identifying DeviceNet Network Components
- Commissioning Nodes on a DeviceNet Network
- Troubleshooting a DeviceNet Network Using Hardware Indicators
- Troubleshooting a DeviceNet Network Using RSNetWorx for DeviceNet Software
- EtherNet/IP Integrated Practice
- ControlNet Integrated Practice
- DeviceNet Integrated Practice
- NetLinx Integrated Practice (EtherNet/IP, ControlNet, and DeviceNet)

Course NUMBER: CCP177

Course Purpose

This course is designed to provide you with the necessary skills to effectively troubleshoot EtherNet/IP, ControlNet, and DeviceNet hardware and software. You will build your skills by using troubleshooting best practices and network troubleshooting tools in order to safely and efficiently return a network to operation.

The course covers cable system components for each network. You will gain experience troubleshooting EtherNet/IP, ControlNet, and DeviceNet networks by maintaining connectivity to the networks. You will learn a variety of software packages and hardware indicators to ensure that the Logix5000 controllers and devices on the networks maintain communications to sustain optimal performance.

Who Should Attend

Individuals who are responsible for maintaining and troubleshooting existing EtherNet/IP, ControlNet, and DeviceNet networks should attend this course.

LISTEN.
THINK.
SOLVE.

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Prerequisites

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

- Ability to perform basic Microsoft Windows tasks

- Completion of the *RSLogix 5000 Level 1: ControlLogix System Fundamentals* (CCP146) course or knowledge of common ControlLogix terminology and the ability to program and interpret basic ladder logic instructions in RSLogix 5000 software

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 your learning experience, the following materials are provided as part of the course package:

- *Student Manual:*
  - Contains the topical outlines and exercises
  - Used to follow presentations, take notes, and work through exercises
- *Logix5000 Documentation Reference Guide CD:*
  - Searchable, electronic resource
  - Contains frequently referenced technical documentation
- *RSLogix 5000 and Logix5000 Procedures Guide:*
  - Provides the steps required to complete basic RSLogix 5000 software tasks that are common to all RSLogix hardware platforms
- *DeviceNet and RSNetWorx Troubleshooting Guide:*
  - Contains a systematic approach to diagnosing and troubleshooting common DeviceNet network problems
- *DeviceNet and RSNetWorx Procedures Guide:*
  - Provides the steps required to complete RSNetWorx for DeviceNet software tasks that are common to DeviceNet networks
- *DeviceNet Documentation Reference Guide CD*:
  - Searchable, electronic resource
  - Contains frequently referenced technical documentation

Student Materials (continued)

- *ControlNet and RSNetWorx Troubleshooting Guide:*
  - Contains a systematic approach to diagnosing and troubleshooting common ControlNet network problems
- *ControlNet and RSNetWorx Procedures Guide:*
  - Provides the steps required to complete RSNetWorx for ControlNet software tasks that are common to ControlNet networks
- *ControlNet Documentation Reference Guide CD:*
  - Searchable, electronic resource
  - Contains frequently referenced technical documentation
- *EtherNet/IP Procedures Guide*:
  - Provides the steps required to complete software tasks common to EtherNet/IP network
- *EtherNet/IP Documentation Reference Guide CD*:
  - Searchable, electronic resource
  - Contains frequently referenced technical documentation

Course Length

This is a 4-day course.

Course Number

The course number is CCP177

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

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