DeviceNet Network Communication

Course Description

This course prepares students to successfully design and configure an efficient DeviceNet network using components for the ControlLogix® platform. To meet this objective, students begin by designing a cable system, and then configure a driver, a 1756-DNB scanner module for ControlLogix, and network devices.

This course also prepares students to troubleshoot a malfunctioning DeviceNet network and return it to normal operation with minimum downtime. Students will first verify proper network installation and then perform both hardware and software-based tasks used to isolate DeviceNet problems. Students will also practice the tasks necessary to add and replace network devices.

The specific hardware components used in the course include DeviceNet round and flat cable, taps, connectors, power supplies, scanner modules, and DeviceNet-compatible devices such as photoelectric sensors, operator interfaces, packaged I/O, and drives. The software components include RSNetWorx™ for DeviceNet, RSLinx®, and RSLogix 5000® software (for ControlLogix systems).

Target Audience:

Individuals responsible for designing and configuring a new DeviceNet network in a ControlLogix system should attend this course. Individuals responsible for isolating and correcting problems or performing basic maintenance on a DeviceNet network in a ControlLogix system should also attend this course.

Pre-requisites:

To successfully complete this course, the following prerequisites are required:
- Experience operating a personal computer within a Microsoft Windows environment.
- Completion of the **ControlLogix System Fundamentals** (AB-1) course or knowledge of common ControlLogix terminology and the ability to program and interpret basic ladder logic instructions in RSLogix 5000 software.

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تليفون: ٢٥٧٦٣٤٦٢ ٢ (٢٠)
فاكس : ٢٥٧٦٣٤٦٣ ٢ (٢٠)

Course Duration:

- **2 days, 7hours/day (from 9:00am to 4:00 pm).**

Technical Contents:

- Identifying DeviceNet Network Components

- Designing a DeviceNet Cable System

- Creating a DeviceNet Network Configuration

- Commissioning Nodes on a DeviceNet Network

- Configuring a DeviceNet Scanner Module

- Mapping Inputs and Outputs to scanner module on a DeviceNet Network

- Managing DeviceNet EDS Files

- Configuring the Automatic Device Recovery Feature (ADR) for a DeviceNet Network

- Communicating on a DeviceNet Network Using Messaging with the ControlLogix platform

- Troubleshooting a DeviceNet Network Using RSNetWorx for DeviceNet Software

- Troubleshooting Using DeviceNet and ControlLogix Hardware Indicators

- Troubleshooting a DeviceNet Network Using RSLogix 5000 Software

- Troubleshooting Duplicate Node Addresses on a DeviceNet Network

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