

ControlLogix Fundamentals, Maintenance & Troubleshooting (RSLogix5000)

Course Description

This training course provides 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 your fundamental knowledge of common controller terms and operation, your ability to identify and create fundamental RSLogix 5000 project components, and your experience interpreting basic ladder logic.

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

After practicing such skills, you will be presented with a systematic strategy for diagnosing and troubleshooting a variety of system errors:

- Controller, I/O, and other hardware problems
- Noise-related problems
- Software configuration problems

Target Audience:

Individuals who need to maintain and troubleshoot a ControlLogix or other Logix5000 system should attend this course.

Pre-requisites:

- Basic computer skills with Windows XP very helpful.
- Few AB-PLC experience or knowledge.

Duration:

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

Course Outline:

- Understanding Control system
- Identifying Allen-Bradley Programmable logic controller Family
- Identifying ControlLogix System Components
- Identifying Logix5000 Systems Communication Networks
- Connecting a Computer to a Communications Network
- Communicating with a Logix5000 Controller.
- Identifying Software Components.
- Interpreting Project Organization and Execution
- Identifying Local IO Tags
- Creating Tags and Monitoring Data
- Drafting Basic Ladder Logic
- Selecting Basic Ladder Logic Instructions
- Editing Ladder Logic Online
- Identifying Analog I/O Modules
- Forcing I/O and Toggling Bits
- Documenting and Printing Components
- Searching for Project Components
- Troubleshooting and Monitoring a System Using a Trend Chart
- Applying Preventative Maintenance and Troubleshooting Strategies
- Troubleshooting Noise-Related Problem
- Troubleshooting Power Supply Problems
- troubleshooting Digital I/O Problems
- Troubleshooting Analog I/O Problems
- Troubleshooting Controller Problems

Course Agenda

Day 1	<ul style="list-style-type: none"> - Understanding Control system - Identifying Allen-Bradley Programmable logic controller Family - Identifying ControlLogix System Components - Identifying Logix5000 Systems Communication Networks - Connecting a Computer to a Communications Network - Communicating with a Logix5000 Controller.
Day 2	<ul style="list-style-type: none"> - Identifying Software Components. - Interpreting Project Organization and Execution - Identifying Local IO Tags - Creating Tags and Monitoring Data
Day 3	<ul style="list-style-type: none"> - Drafting Basic Ladder Logic - Selecting Basic Ladder Logic Instructions - Editing Ladder Logic Online
Day 4	<ul style="list-style-type: none"> - Identifying Analog I/O Modules - Forcing I/O and Toggling Bits - Documenting and Printing Components - Searching for Project Components - Troubleshooting and Monitoring a System Using a Trend Chart
Day 5	<ul style="list-style-type: none"> - Applying Preventative Maintenance and Troubleshooting Strategies - Troubleshooting Noise-Related Problem - Troubleshooting Power Supply Problems - troubleshooting Digital I/O Problems - Troubleshooting Analog I/O Problems - Troubleshooting Controller Problems