CTI 2500 Series® System Training
Course 1: Basic System Architecture and Application Development

Classic

Description

This course is intended for students that have experience with Automation and Control Systems including control devices and PLCs. The student should also have some basic knowledge of RLL or control programming and be competent using a PC with Windows® 10.

The following topics are covered:

- Basic PLC concepts
- Basic system architecture and hardware description
- Use of Workshop program package
- PLC program load/edit/save
- Description and use of common instructions
- Description and use of program control instructions
- PLC number formats
- Handling analog values in Ladder
- Status words
- Troubleshooting

Hands-On Experience

The student will receive hands-on experience with a live training system. Each Training System will provide a 2500 Series® Base, power supply, processor, digital input module, digital output module, and an analog input/output module connected to a PC Application Development Station. Upon Completion, the student will be able to:

- Assemble a CTI 2500 Series® System
- Understand the System Operation and Architecture
- Write and edit a discrete RLL program
- Monitor the operation of an RLL Program
- Troubleshoot a 2500 Series® System

Course Agenda

PLC Fundamentals

- Hardware Description
- Address and Memory Structure
- Configuration
- Discrete Programming
- Timer and Compare Discrete Programming
- Counter and Move Word Instructions
- Event Drum and Load Data Constant

Discrete Programming

- Shift Register
- Program Control
- End
- MCR (Master Control Relay)
- Jump and JumpEnd
- Skip to Label
- GTS (Go to Subroutine)
- Tasks

Word Programming

- Number formats and conversion
- Analog Inputs
- Analog Outputs
- Ladder Math

Troubleshooting

- Status Words
- PLC Webserver
- PLC Event Log
- Remote Base Communication Troubleshooting

Understanding Your PLC Application

- Debugging with system status words
- Tuning PLC scan time configuration
- Accessing embedded web server
- Event log
- Run-time statistics

Profibus DP

- Profibus Network Setup
- Profibus Operation
- Profibus Status Indicators

Ordering Information

2500-TR-S1   Course 1: Basic System Architecture and Application Development

Contact CTI or your CTI distributor for pricing and training schedule or visit controltechnology.com/training

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