SIEMENS

S7 Programming with Statement List - Virtual (SCT-S7OILSTLP2C)

Type

Virtual Instructor-led Learning

Duration and Continuing Education Units (CEU)

20 Hours (Schedule varies)
2 CEUs

Target Group

- Programmer

Short Description

Designed for today's adult learners and filled with hands-on exercises, STL for Programmers begins with basic skills that help participants transition from Ladder logic to STL logic. Participants build on those programming skills moving to an advanced level by the end of the course. The lab environment is virtual containing a Virtual PLC, Virtual Runtime HMI and Virtual 3D Conveyor system. Participants build a project and write code to interface with the PLC, HMI and control the conveyor system using STL. Key software tools and best practices techniques are taught. Throughout this course participants build and manage a STEP7 project from beginning to end, learning proper program structure and documenting. Software diagnostic tools are used for troubleshooting as necessary. Participants employ structured programming methods using both single use and reusable blocks. Boolean logic, timers, counters, math, comparison, and data conversion and jump instructions are programmed during the labs. Brief lectures followed by engaging, virtual, task-based skills, begin early on class start morning and continue all class long.

Objectives

- Create and troubleshoot basic bit logic operations in a program using STL
- Create and troubleshoot a basic STEP7 program written in STL
- Perform basic data moves, conversions and storage using STL
- Open typical system functions and review parameters, assignments and variables
- Use a typical Data Block function for Data management and diagnostics
- Open typical Organization Blocks and understand their use in a structured program
- Configure a typical Analog signal and manage input and output analog data using STL

Content

- S7 STL Course Intro
- Preparing the Class Project
- STL Basics
- Boolean Logic
- Basic Troubleshooting
- Timers and Counters
- Math, Compare, Data Conversion
- Analog Scaling
- Reusable Blocks
- Code Execution within the S7 Block
- Indirect Addressing

Mandatory Prerequisites

S7 Programming 1: SCT-S7TIAP1C

OR

S7 Programming 1 - Virtual: SCT-S7OILTIAP1C

OR

S7 Automation Maintenance 1: SCT-S7300S1C

Language

English