

Online Instructor-led Training

S5 Maintenance and Programming 2 - Virtual

General Information

Course Code: SCT-S5OILSP5G2A
Length: 5 Days, 5 hours a day

Audience

This virtual course is for maintenance technicians and controls engineers who are responsible for advanced troubleshooting and program modifications for the SIMATIC S5 system.

Prerequisites

- S5 Maintenance & Programming 1

Profile

2.5 CEUs (Continuing Education Credits)

This virtual course provides advanced level skills in system troubleshooting and program modifications. Students will concentrate on the Supplemental Operation Set and the creation and diagnostics of system function blocks. Students will also gain experience with Statement List instructions (STL). Advanced hardware, communications and diagnostics will be reinforced in this course. Students will build skills in analog signal processing and troubleshooting. Students will also modify or develop programs that will be loaded into a SIMATIC S5 controller with field simulation using a programming unit to test its operation. Access to fully functional STEP5 software, virtual tools, and exercises are provided through a cloud-based application.

Objectives

Upon completion of this course, the student shall be able to:

- Utilize STEP 5 instructions from the supplemental operations set.
- Write or modify programs for analog I/O.
- Create user defined function blocks without formal operands.
- Create user created function blocks with formal operands.
- Utilize indirect addressing techniques.
- Create and use basic STL program code.
- Perform advanced hardware configuration and troubleshooting tasks.

Topics

1. Program structure
2. Function Blocks (FBs)
3. Programming user-defined function blocks
4. Organization Blocks (OBs)
5. Analog input and output