SIEMENS

On line-Training SIMATIC S7 Programmazione 1 (ST-PRO1)

Short Description

This hands-on course is the first in a three part series which builds basic programming skills using SIMATIC STEP 7 V5.x software. You will learn S7 project management, program design and application development. This is an aggressively paced curriculum covering S7 programming with Ladder logic (KOP). The basics of programming with Function Block Diagram (FUP), Statement List (AWL) languages and key software tools are also covered.

Objectives

After attending the course, you can do the following:
- Configure, parametrize, communicate with and commission a Totally Integrated Automation System with SIMATIC STEP 7 V5.x
- Program, document, test and troubleshoot a structured STEP 7 program
- Program using absolute and symbolic addressing
- Use core application instructions to program Organization Blocks (OBs), Function Calls (FCs), Function Blocks (FBs), and library blocks
- Program using binary, digital & analog processing
- Create and use data blocks
- Create and call reusable blocks employing parameter passing techniques
- Cross reference where and how addressed are used, program call structure, and comparing online to offline programs

Target Group

Programmers
Commissioning engineers
Engineering personnel

Content

- System overview and essential performance features of the SIMATIC S7 system family
- Components of the SIMATIC Manager and its use
- SIMATIC STEP 7 V5.x basic operations
- SIMATIC STEP 7 V5.x block types and program structuring
- Programming of parameterizable blocks
- Data management with data blocks
- Programming of organization blocks
- Test tools for system information, troubleshooting and diagnostics
- Hardware configuration and parameterization of the SIMATIC S7-300 modules, a SIMATIC ET 200 PROFIBUS DP slave, a SIMATIC HMI Touch Panel and a drive
- Program documentation and backup

Theoretical knowledge will be deepened with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-300 automation system, a SIMATIC HMI operator control and a conveyor model.

Prerequisites

SEP course or equivalent basic knowledge of automation systems.

Note

This course is also available in Virtual Classroom mode: E-PRO1.
In this course, the SIMATIC S7-300 automation system and the SIMATIC STEP 7 V5.x software are used. Redundant systems SIMATIC S7-400H are not covered here.

Type

Online-Training

Duration

30 hours

Language

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