SIEMENS

On line-Training Corso base SIMATIC S7-1200 (TIA-MICRO1)

Short Description

The Totally Integrated Automation Portal (TIA Portal) for SIMATIC S7-1200 forms the work environment for integrated engineering with SIMATIC STEP 7 Basic and SIMATIC WinCC. In this first part of the SIMATIC S7-1200 training, we teach you the handling of the TIA Portal, basic knowledge about the structure of the SIMATIC S7-1200 automation system, configuration and parameterization of hardware, and the basics of programming. You will learn how to clear simple hardware faults and software errors in the SIMATIC S7-1200 automation system and to create, modify and expand small STEP 7 (TIA Portal) programs. You will thus be capable of reducing downtime. You will also get an overview on operator control and monitoring.

Objectives

After attending the course, you can do the following:
- Understand the fundamentals of the interaction of the SIMATIC S7-1200 with an operator control and monitoring device
- Reliably operate the TIA Portal engineering platform
- Create, change, and expand small STEP 7 (TIA Portal) programs
- Configure, parameterize, and exchange SIMATIC S7-1200 modules
- Diagnose and fix simple hardware faults using the wiring test
- Diagnose and fix simple program errors using the status block
- Perform simple commissioning of the SIMATIC S7-1200

Target Group

Programmers
Commissioning engineers
Engineering personnel
Maintenance personnel
Service personnel
Operators

Content

- Overview and significant performance characteristics of the SIMATIC S7-1200 system family
- The components of the TIA Portal: SIMATIC STEP 7 Basic and WinCC Basic
- Program execution in automation systems
- Binary and digital operations in the diagram ladder (LAD)
- Setup and assembly of the SIMATIC S7-1200 automation system
- Addressing and wiring the signal modules
- Hardware and software commissioning of the SIMATIC S7-1200 with the TIA Portal
- SIMATIC S7-1200 hardware configuration and parameterization
- Introduction to the Touchpanel
- Saving and documentation of the implemented program changes with the TIA Portal

Theoretical knowledge will be deepened with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-1200 automation system, a SIMATIC WinCC Advanced 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-MICRO1.
At the end of the course you can deepen the topics covered through our **SIE-learning 4.0**: SIE-12TSCB, SIE-12CMS.
At the end of this course you can achieve, after an evaluation test, the **SITRAIN Italian Certification Program MICRO**.

Type

Online-Training

Duration

18 hours

Language

it