SIEMENS

On line-Training Corso di sistema TIA Portal 2 (TIA-SYS2)

Short Description

With this course you will acquire the necessary skills to be able to make small changes and additions to existing hardware configurations and to manage automation networks with both cyclical and acyclical communications. By learning the use of complex program structures and functions, you will be able to carry out simple implementations to existing PLC software, integrating them with the development of pages on SIMATIC HMI. Finally, you will learn more about the functionality of SINAMICS drives by understanding the most common parameters.

Objectives

After attending the course, you can:
- Process analog values
- Perform complex data processing via system functions
- Carry out the commissioning of a SIMATIC HMI application
- Exchange data between PLCs with cyclic to acyclic communications
- Implement the main concepts of Safety Integrated in your plant
- Parameterize a SINAMICS drive according to your needs
- Use the advanced diagnostic tools integrated in the TIA Portal

Target Group

Programmers
Commissioning engineers
Engineering personnel
Service personnel

Content

- Advanced program structures: FB and multi-instance
- Management of analog variables
- Optimized blocks
- Complex data (Slice access, Array through dedicated Array [*], AT_Construct, Gather and Scatter instructions)
- Basic and typical instructions of the SCL programming language
- SIMATIC HMI commissioning
- I-device communication between two SIMATIC S7 PLCs
- Acyclic communication (TCP / IP, S7 connection, SIMATIC HMI area pointers)
- Advanced diagnostic tools (Web server, organization blocks, Trace, instructions for program diagnostics)
- Fail-safe systems: fundamental concepts and I / O card parameterization
- SIMATIC HMI: creation of pages (templates, permanent area, pop-ups), simple elements (buttons, IO fields), alarm management
- Project languages
- SINAMICS drives: typical telegrams, main p / r parameters)

The theoretical knowledge will be deepened with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-1500 automation system, a SIMATIC ET 200SP distributed I/O, a SIMATIC WinCC Comfort operator control and monitoring system, a SINAMICS G120 drive and a conveyor model.

Prerequisites

TIA-SYS1 course or equivalent basic knowledge of automation systems.

Note

At the end of this course you can achieve, after an assessment test, the **SITRAIN Italian Certification Program ADVANCED**.

Type

Online-Training

Duration

18 hours

Language

it