

Corso di sistema TIA Portal 3 (TIA-SYS3)

Short Description

By participating in this course you will acquire the skills necessary to be able to create an automation system starting from the functional specifications. You will know the most advanced software structures and instructions, as well as become familiar with the most complex network architectures through the topology and OPC UA communication to external systems. The skills learned on technological objects will allow you to deal with process dynamics related to PID regulators and Motion Control. You will also learn about the advanced functionality of the SIMATIC HMI operator control and monitoring systems.

Objectives

After attending the course, you can:

- Make use of all the possibilities provided by the SIMATIC STEP 7 program (TIA Portal)
- Use the Multiuser for team work
- Implement complex PROFINET network architectures
- Manage a SINAMICS drive via technology objects
- Implement advanced functions on a SIMATIC HMI operator control and monitoring system
- Implement simple Safety Integrated systems
- Create custom diagnostics for your automation system

Target Group

Programmers
Commissioning engineers
Engineering personnel

Content

- Software Unit
- Advanced instructions in SCL programming language (Peek, Poke)
- Advanced pointers: Variant and Reference
- Multiuser for Team Engineering
- Network topology and PROFINET IRT communication
- OPC UA communication between PLC and between PLC and external systems
- Advanced SIMATIC HMI commissioning
- Advanced diagnostics (software diagnostics instructions, SIMATIC PRODiag)
- Technology objects (PID, Motion Control)
- Fail-safe systems: software modifications, PROFISAFE communication between PLCs
- Advanced SIMATIC HMI functionality (Sm @ rtServer, SIMATIC WinCC Audit, OPC UA)
- Overview of SIMATIC WinCC Unified systems
- SINAMICS drives (management via object technology, trace, STO safety functionality)

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-SYS2 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 PROFESSIONAL**.

Type

Face-to-face training

Duration

3 days

Language

it