

Configurazione e programmazione con Safety Integrated in TIA Portal (TIA-SAFETY)

Short Description

This course introduces you to a Siemens Distributed Safety PLC application. You will receive knowledge on applying the system per relevant standards, Failsafe Hardware Module details and parameterization, Safety Program structure and implementation, Safety Communications, System Diagnostics and introduction to Drive Safety.

Objectives

After attending the course, you can:

- Commissioning fail-safe SIMATIC controllers and fail-safe SIMATIC ET 200SP distributed I/O system
- Programming of safety-related programs in the languages LAD and FBD
- Diagnosing and troubleshooting of safety-related systems and programs

Target Group

Programmers
Commissioning engineers
Engineering personnel

Content

- Overview and guidelines
- Product overview and operating principle Safety Integrated
- Configuring of the fail-safe components with STEP 7 Safety in TIA Portal
- Programming of a safety program
- Programming tips
- Fail-safe communication (CPU-CPU communication with couplers and I device)
- Diagnostics facilities (CPU diagnostics, I/O diagnostics, advanced diagnostics)
- Acceptance test

The theoretical knowledge will be deepened with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-1500F automation system, a fail-safe SIMATIC ET 200SP distributed I/O and a line simulator with safety sensors and actuators.

Prerequisites

TIA-SERV1 or TIA-PRO1 courses or equivalent basic knowledge of automation systems.

Note

At the end of the course you can deepen the topics covered through our **SIE-learning 4.0**: SIE-HMISAF, SIE-G12SAF, SIE-G12SAD. In this course, the SIMATIC S7-1500F automation system and the SIMATIC STEP 7 Safety Advanced (TIA Portal) software are used; PPDS course is available for the SIMATIC S7-300F automation system and SIMATIC S7 Distributed Safety software.

Type

Face-to-face training

Duration

2 days

Language

it