

TIA Portal Safety Engineering - Virtual (SCT-PTOILSFTE1A)

Global Reference

Programming Fail-Safe Controllers with STEP 7 Safety in TIA Portal (TIA-SAFETY)

Type

Virtual Instructor-led Learning

Duration and Continuing Education Units (CEU)

15 Hours (Schedule varies)
1.5 CEUs

Target Group

- Maintenance
- Engineer

Short Description

This course introduces the student to a Siemens Distributed Safety PLC application. Participants receive knowledge on applying the system per relevant standards, Failsafe/PROFIsafe settings, operation, Hardware Module details and parameterization, Safety Program structure and implementation, Safety Communications, System Diagnostics, and an introduction to Drive Safety.

Objectives

- Locate and understand the applicability of the detailed documentation and development resources
- Load a starting project and configure the Failsafe Hardware components as well as understand their application restrictions
- Properly implement a Safety program in the PLC
- Document, test, and troubleshoot the system using PLCSim Advanced and a virtual Safety Trainer

Content

- Standards discussion
- Product Overview
- Functional Safety Principles
- ET 200SP distributed I/O system
- Safety related Hardware Configuration
- Safety Advanced: Channel Configuration
- Safety Advanced: Programming

Mandatory Prerequisites

[TIA Portal Programming 1: SCT-PTTIAP1A](#)

OR

[TIA Portal Programming 1 - Virtual: SCT-PTOILTIAP1A](#)

OR

[TIA Portal Service 1: SCT-PTTAS1A](#)

OR

[TIA Portal Service 1 - Virtual: SCT-PTOILTAS1A](#)

OR

[AB to S7 with TIA Portal: SCT-PTABSP1A](#)

OR

[AB to S7 with TIA Portal - Virtual: SCT-PTOILABSP1A](#)

Note

The course format is a combination of instruction and hands-on exercises. A realistic model is used for demonstrations and student exercises. Hardware is simulated using PLCSIM Advanced and a virtual Safety Trainer. Exercises allow students to practice tasks such as configuration, programming, and code debugging.

Language

English

Course descriptions are Siemens Intellectual Property and copyright protected. Do not modify without written permission from SITRAIN US. ©2023 Siemens Industry, Inc.