SIEMENS

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

Short Description

In this course, you will learn about configuring, programming, commissioning, diagnosing and troubleshooting fail-safe SIMATIC controllers and fail-safe, distributed ET 200 systems. In practical exercises you will put your theoretical knowledge to use on a training system with the STEP 7 Safety software in TIA Portal.

Objectives

After attending the course, you can do the following:
- Commissioning fail-safe SIMATIC controllers
- Programming of safety-related programs in the languages FBD and LAD
- Diagnosing and troubleshooting of safety-related systems and programs

You will deepen your theoretical knowledge through numerous practice-oriented exercises in our exercise environment.

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 according to Programming Guideline Safety for SIMATIC S7-1200/1500
- Fail-safe communication (CPU-CPU communication with couplers and I device)
- Diagnostics facilities (CPU diagnostics, I/O diagnostics, advanced diagnostics)

This course includes a 4-week Learning Membership for our digital learning platform SITRAIN access. Here you will find web-based trainings on TIA Safety Integrated (Curriculum) as well as other topics such as TIA Portal - Diagnostics and Troubleshooting (Curriculum) and many more. With the Learning Membership, you can deepen or repeat the content of this learning event as well as continue your education on other interesting topics.

Prerequisites

Basic knowledge of SIMATIC S7 according to the course TIA-PRO1 or TIA-SERV1.
So you may assure that the course of your choice fits to your competences an online entrance test is available for you.

Note

In this course you will work with the SIMATIC STEP 7 Safety software in TIA Portal.
Additionally you have the opportunity to take an examination and receive certification on a separate date. You'll find further information and the registration at CPT-TIASAF.

The Learning Membership starts 7 days before the start of the course and ends 16 days after the end of the course. During this period, you have access to all of the more than 270 web-based trainings available.

Type

Face-to-face training

Duration

3 days

Language

en