

SIMATIC S7-TIA Safety (TIA-SAFETY)

Short Description

You will put your theoretical knowledge to use the training system SIMATIC S7-1500F with the STEP 7 Safety Advanced software in practical exercises.

Objectives

The Totally Integrated Automation Portal (TIA Portal) forms the work environment for integrated engineering with SIMATIC STEP 7 and SIMATIC WinCC. In this course, you will learn about configuring, programming, starting up, diagnosing and troubleshooting of the failsafe CPUs of the SIMATIC S7 Safety PLC (no H systems) and the failsafe, distributed ET 200 systems.

After attending the course, you can do the following:

- Starting up failsafe CPUs of the SIMATIC PLC
- Programming of safety-related programs in the languages F-FBD and F-LAD
- Diagnosing and troubleshooting of safety-related programs.

As a part of this training, you will receive free trial to the digital learning platform SITRAIN access. This gives you access to many web-based training courses 7 days before the start of the course and the test period ends automatically 14 days after the end of the course.

[Mer information om SITRAIN access](#)

In SITRAIN access you will find web-based trainings on TIA Safety Integrated (Curriculum) as well as other topics such as TIA Portal - Diagnostics and Troubleshooting (Curriculum V2). As an introduction to the digital learning platform, we recommend the following learning paths:

[TIA Safety Integrated](#)

[TIA Portal - Diagnostics and Troubleshooting](#)

Target Group

Programmers
Commissioning engineers
Engineering personnel

Content

- Overview and guidelines
- Safety Integrated (Operating principle and system configuration)
- Configuring of the failsafe components with STEP 7 Safety
- Programming of a safety-related user program
- Failsafe communication PROFIsafe (CPU-CPU communication, master-slave communication)
- Diagnostics facilities (CPU diagnostics, I/O diagnostics, advanced diagnostics)
- Exercises for I/O configuration, communication, troubleshooting
- Programming examples (emergency stop, protective door, safety-related shutdown, passivation, special programming features)
- Deeper understanding of contents through practical exercises on a SIMATIC S7-1500 F-CPU

Prerequisites

Basic knowledge of SIMATIC S7 according to the courses TIA-SERV2 or TIA-PRO2
Additionally an online entrance test is available for you. So you may assure that the course of your choice fits to your competences.

Note

In this course you will work with the SIMATIC STEP 7 software based on TIA Portal.
Documentation in English.
Register in the calendar one week before the training starts.

Type

Face-to-face training

Duration

3 days

Language

no

Fee

24,700 NOK
NOK 18 500,-