

SIMATIC PCS neo Safety (NEO-SAFETY)

Short Description

In this online training you will learn how to create a PCS neo compliant fail-safe application with CFC, experiencing a perfect combination of theory and practical exercises.

The theoretical parts of the training are supported by practical exercises. These are carried out on CPU 410-5H fail-safe automation systems with fail-safe communication (PROFIsafe) and fail-safe signal modules. The training environment of the online course is virtually recreated with "PCS neo in the cloud" and "SIMIT".

Objectives

After attending the training you can do the following:

- Raise your awareness of the Machinery Directive and relevant standards
- Select and configure fail-safe hardware according to your functional safety requirements
- Commission fail-safe SIMATIC controllers
- Configure safety-related functions and determine and set safety-relevant times
- Perform diagnostics and troubleshooting in fail-safe systems and programs

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

Target Group

- Project managers, project staff
- Programmer
- Commissioning engineers, configuration engineers

Content

- Functional safety basics from IEC 61508 and IEC 61511
- LOPA (Layer of Protection Analysis) and SIF (Safety Instrumented function)
- System architecture and diagnostics in safety components (Hardware, software and communication)
- Overview about F-Hardware
- Parameter in HW-Configuration (safety mode, sensor evaluation, addressing, monitoring time "Wiring and Voting")
- Safety program (Acknowledgement, voting blocks, block types)
- Safety mechanisms (F-Shutdown, passivation, reintegration, block type)
- Calculate and adjust F-times using neoftime.xlsm (reaction- and monitoring time)

Prerequisites

- General basic knowledge of process control technology
- Independent work with SIMATIC PCS neo
- Experience in engineering and operating visualization with PCS neo (OS)
- Experience in configuring the hardware, as well as programming in CFC with PCS neo (AS)

We recommend attending the SIMATIC PCS neo system course "[NEO-BASIC](#)". Alternatively, there is the option of booking our hybrid training variant as a Learning Journey, which can be ideally integrated into the daily business. The Learning Journey "[NEO-SYS-LJ](#)" consists of guided live modules with a trainer and upstream self-study modules.

Technical requirements

- PC with mouse and keyboard or tablet
- Internet connection:
- Data transfer rate of minimum 15 Mbit/s is required with stable internet connection
- Your firewall must not block access to our virtual platform and websockets
- Web browser with HTML5 support (recommended: Google Chrome, Mozilla Firefox)
- Downloads should be allowed by your company (to download exercises and projects)

Note

- Course language is English

After completing the "SIMATIC PCS neo Safety (NEO-SAFETY)" training, you can take the optional theory test:

[=> Online eTest for the course SIMATIC PCS neo Safety](#)

In this theoretical course assessment we request the taught content and the learning objectives from the "PCS neo Safety" training.

After passing the test, you will receive a confirmation of successful participation in the course. This is one of the requirements for the further certification path at TÜV.

Included in the course price:

Free access to the digital learning platform [SITRAIN access](#) – starting one week before the start of the course until two weeks after the end of the course. 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.

Type

Online-Training

Duration

3 days

Language

en

Fee

0 EUR