SIEMENS

Online-Training - SIMATIC PCS 7 Process Safety (ST-PCS7SAF)

Short Description

In this online training you will learn how to generate a PCS 7 conform and failsafe application with CFC and Safety Matrix.

Objectives

The theoretical parts of the training are backed up with practical exercises. These exercises are done with failsafe CPU 410-5H with failsafe signal modules connected via PROFIBUS and PROFIsafe. After the course you will be able to engineer safety functions and adjust safety relevant times.

Target Group

- Sales employees
- 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 Risk graph by means of a safety instrumented function
- Explanation of SIF (Safety Instrumented Function)
- System architecture and diagnostics in safety components (Hardware, Software, Communication)
- Overview about F-Hardware
- Parameter in HW-Configuration (safety mode, sensor evaluation, addressing, monitoring time, H-parameter, Wiring and Voting)
- Safety program (Acknowledgement, voting blocks, block types, Secure Write Command++, communication)
- Safety mechanisms (F-Shutdown, Partial Shutdown Groups, passivation, reintegration, block type)
- Safety Matrix
- Calculate and adjust F-times using S7ftime.xlsm (reaction-, monitoring times)

Prerequisites

- General basic knowledge of process automation
- Attendance of the system course "ST-PCS7SYS" is recommended
- Basic knowledge operation and monitoring with SIMATIC PCS 7 OS
- Good experience in AS configuration with SIMATIC PCS 7

Technical requirements

For the online training is a virtual training environment required, which is provided by us.
We recommend that you consider the technical requirements for the best possible use.
- Information on the technical requirements with RealVNC in PDF format

Note

- Course language is German

In this theoretical course assessment we request the taught content and the learning objectives from the "ST-PCS7SAF" course.
=> Online eTest zum Kurs SIMATIC PCS 7 Process Safety

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.

Type

Online-Training

Duration

4 days

Language

de