SIEMENS

# On line-Training SIMATIC PCS 7 Process Safety (ST-PCS7SAF)

## Short Description

In this course you learn how to generate a SIMATIC PCS 7 conform and failsafe application with CFC and Safety Matrix.

## Objectives

After attending the course, you can:
- Recognize the fundamental principles of functional safety
- Parameterize a fail-safe device
- Create a fail-safe program
- Use the Safety Matrix

## Target Group

Project managers
Project staff
Technologists
Configuring engineers
Commissioning 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
- 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

PCS7SYS course or equivalent knowledge of process control systems.

## Type

Online-Training

## Duration

6 hours

## Language

it