

## SIMATIC PCS 7 Process Safety (ST-PCS7SAF)

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### Short Description

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[Also available as Online-Training](#)

### Objectives

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In this course you become familiar with the PCS7 conform generating of failsafe application with CFC and Safety Matrix. The theoretical parts of the training are backed up with practical exercises. These exercises are done with failsafe and optional highly available CPU 410-5H with failsafe signal modules connected via Profibus and Profisafe. After the course you will be able to evaluate safety functions and adjust security relevant times.

### Target Group

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Sales employees  
Project managers, project staff  
Programmer  
Commissioning engineers, configuration engineers  
Technical Consultants and promoters, who use safety technology in process control or attend customers using safety technology  
PCS7 specialists within the scope of the Siemens partner program who are engineering projects with PCS7 and F-Systems

### Content

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Functional safety Basics from IEC61508 and IEC61511, 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 (F-Quites, voting blocks, block typicals, Safety Data Write, communication)  
Safety mechanisms (F-Shutdown, Partial Shutdown Groups, passivation, reintegration, block typical)  
Safety Matrix, Calculate and adjust F-times using S7ftimeb.xls (reaction-, monitoring times)

### Prerequisites

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Attendance of training course ST-PCS7SYS. General basic knowledge of process automation. Basic knowledge of PCS 7 OS. Good experience in AS configuration within PCS 7.

### Note

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This course has replaced the F-Systems Course (ST-PPFS) which is no longer available

### Type

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Face-to-face training

### Duration

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4 days

### Language

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