

## Exam for the course SIMATIC PCS 7 Process Safety (CP-PCS7-S)

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### Lyhyt kuvaus

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Attendance of the SIMATIC PCS 7 Process Safety course in connection with this eTest is a prerequisite for further certification as a Siemens Functional Safety Professional (SFSP).

You find more information about SIMATIC PCS 7 Process Safety under following link:

["Safety Integrated for optimum process safety"](#)

In a theoretical performance test, your basic knowledge for the creation and project planning of fail-safe systems for the new SIMATIC PCS 7 process control system will be tested. After passing the exam, you will receive a certificate of successful participation in the "ST-PCS7SAF" course. This qualification is proof of your skills and knowledge in safety technology in the process industry. Further certification is carried out in cooperation with TÜV Süd.

### Tavoitteet

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- Creating of a PCS 7 conform with safety applications.
- Assessment of safety instrumented functions..
- Calculate and adjust F- relevant times

### Kohderyhmä

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

Process Safety specialists within the scope of the Siemens partner program who use fail-safe technology in the process industry and who are engineering projects with PCS 7 and F-Systems.

### Sisältö

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- 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.xlsx (reaction-, monitoring times)

### Edellytykset

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- General basic knowledge of process control technology
- Independent work with SIMATIC PCS 7
- Experience in engineering and operating visualization with PCS 7 (OS)
- Experience in configuring the hardware, as well as programming in CFC with PCS 7 (AS)

Content:

- Attending the course ["SIMATIC PCS 7 Process Safety \(ST-PCS7SAF\)"](#)

### Tyyppi

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Kasvokkain tapahtuva koulutus

### Kesto

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2 työaika

### Kieli

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