

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

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### Type

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Instructor-led Learning

### Duration and Continuing Education Units (CEU)

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3 Days  
2 CEUs

### Target Group

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- Maintenance
- Engineer
- Operator

### Short Description

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This course builds skills for sustaining and operating a Siemens PCS7 Process Safety System. The course begins with an introduction to process safety system concepts, with insight on typical process control architectures. The course then builds skills in hardware components, basic SIMATIC project management, and system troubleshooting. Attendees will review system program elements and tools to learn support systems level troubleshooting. The Safety Matrix, a tool available for safety cause and effect configuration, is also covered. The class will use a functioning safety demo project with minimal system programming.

### Objectives

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- Use the basic knowledge of a process safety control system to properly sustain an existing system
- Configure the proper CPU hardware and signal modules to ensure appropriate system response
- Navigate a safety project using the proper SIMATIC software tools
- Configure the Safety Library blocks to manage a safety shutdown program
- Configure using the Safety Matrix programming tool to manage a safety system
- Operate, control, and troubleshoot a safety system using the Safety Matrix tool
- Troubleshoot the system using various software tools and status indicators

### Content

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- Process Safety Overview
- Siemens Process Safety
- Project Management
- Configuring Hardware (HW)
- Continuous Functions Charts (CFC)
- Safety Matrix
- System Troubleshooting
- Advanced Topics (optional)

### Mandatory Prerequisites

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[PCS7 System Engineering 1: US-PCSYSE1D](#)

OR

[PCS7 System Service 1: ST-PCS7SR1](#)

**Language**

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English

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