

## SIMATIC PCS7 System Engineering 1 (ST-PCS7SYS)

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### Short Description

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In this course you will learn how to implement the diversity of engineering possibilities with SIMATIC PCS 7 process control system in a structured and efficient way.

### Objectives

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By doing exercises on original SIMATIC PCS 7 training units, you will implement software for the process automation of a plant right up to the HMI level. Features of SIMATIC PCS 7 such as integration of all subsystems, plant-oriented engineering, data management and project management are supplemented by advanced functions that enable efficient and cost-effective engineering with SIMATIC PCS 7.

Utilize the benefits of Totally Integrated Automation (TIA) for yourself and learn how to get an integrated view of your plant!

Because of this integration you will be able to diagnose faults quickly and correct them with safety. In addition, projects can be created in advance in such a way that you can work with multiple application. This enables time-optimized and cost-effective engineering.

After attending the course, you can do the following:

- Create a proper PCS 7 multiproject and configure the hardware of AS and PC stations.
- Create user programs compliant to PCS 7 standards using the most important tools like CFC, SFC and graphical tools of the PCS 7 engineering toolset.
- Bulk engineering using the Import/Export-Assistant and Control Module Types and their instances using the Technological List Editor.

Combine your face-to-face course with web-based training on our digital learning platform for industry and thus increase your personal learning success in the face-to-face course.

On SITRAIN access you will find, for example, basic knowledge of process control technology, PROFIBUS in process automation, PROFINET or data communication with Industrial Ethernet.

But also further topics such as an overview of digitization in process automation or an introduction to SIMATIC and the Virtual Controller.

[Click here for more information about SITRAIN access](#)

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### Target Group

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Project manager, Configuring engineers  
Programmers  
Commissioning engineers  
Technologists

### Content

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System design and component specification  
Project setup  
Station and network configuration  
Connection to the process  
Basics control functions  
Basics Operating and Monitoring  
Implementation of Automatic and Manual Mode Control  
Configuration of sequential controls with SFC  
Customizing the OS  
Archiving System  
Locking functions and operating modes  
Mass data engineering  
Digitalization in process industries  
Final steps of configuration  
User block – attributes and visualization  
Demonstration Server-Client System  
Syntax Rules  
SIMATIC PCS 7 Documentation and Support

### Prerequisites

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Basic knowledge of electrical engineering, control and feedback control systems and process control engineering

### Type

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Face-to-face training

### Duration

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4.5 days

### Language

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