

SIMATIC PCS 7 System Course (ST-PCS7SYS)

Short Description

In this face-to-face 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. You configure the entire control system from the field level through the automation system to the operating and monitoring system.

[Also available as a learning journey](#)

Objectives

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. The perfect interaction of all components enables you to consistently produce more of the highest quality and to establish new products on the market much more quickly.

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 with the Control Module Types and their instances via the Technological List Editor and Plant Generator.

Combine your face-to-face course with web-based trainings 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 SIMIT and the Virtual Controller.

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

Target Group

- Project manager, Configuring engineers
- Programmers
- Commissioning engineers
- Technologists

Content

- System design and component specification
- Creating a multiproject
- Configuration of stations and networks
- Creation the plant hierarchy
- Basics of CFC and blocks
- Connection to the process
- Basic automation with the APL
- Spreadsheet-based engineering with the process object view
- Basic functions for operator control and monitoring
- Implementation of manual and automatic operation
- Sequential controls with SFC
- Monitoring and control of the sequential control systems
- Easy to customize the operating station (OS)
- Basic of the message system
- Project planning of group displays and status displays
- The archiving system
- Interlock functions and operating modes
- Bulk data engineering
- Final configuration steps
- Syntax rules for SIMATIC PCS 7 configuration
- SIMATIC PCS 7 documentation and online support

Prerequisites

Basic knowledge of electrical engineering, open-loop and closed-loop control as well as process control technology

Note

Course Language is English

Type

Face-to-face training

Duration

10 days

Language

en