

Learning Journey - SIMATIC PCS 7 System course (ST-PCS7SYS-LJ)

Short Description

In this Learning Journey, you will learn how to implement the variety of engineering options in a structured and rational manner by using the SIMATIC PCS 7 process control system.

An optimal mix of guided live modules (online) and self-learning modules will provide you with all of the content imperative for your work and sustainable learning success. Various practical tasks in our virtual exercise environment throughout the learning journey help you to prepare for practical application. The learning journey provides curated on-demand content to support you in your own personal practice transfer..

By doing exercises in a virtual training environment, you will implement software for the process automation of a plant right up to the operator control and monitoring system. 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.

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 produce more in the highest quality in the long term and to establish new products on the market much faster.

Objectives

After this learning journey you will be able to ...

- understand the system architecture of PCS 7 and plan a plant accordingly.
- create a PCS 7 multi-project correctly and configure the hardware of automation systems and operator stations.
- set up stations and networks for a compliant communication.
- map a plant according to the plant hierarchy.
- operate and set up the engineering editor (CFC) and understand the programming of the systems.
- develop an understanding of your own libraries and use the PCS 7 libraries to your advantage.
- know the basic functions for operation and monitoring.
- develop and operate of sequential function controls (SFCs) in PCS 7.
- establish, configure and operate of operator stations and the handling of the associated alarm system
- use the basics of archiving projects.
- know the interlocking functions and operating modes in process control technology.
- Bulk engineering using Control Module Types and their instances using the Technological List Editor.

Target Group

- Configuring engineers
- Programmers
- Commissioning engineers
- Technologists

Content

The Learning Journey ST-PCS7SYS-LJ (Level: Basic) consists of:

- 8 live modules (4 live modules with 4 hours & 4 live modules with 6 hours)
- 26 self-study modules (approx. 14 hours)

Topics

- Engineering Toolset and configuration steps
- Introduction to the multiproject
- Hardware configuration with distributed peripherals
- Introduction to the plant hierarchy
- Basic principles of function blocks and CFC charts
- Connection to the process
- Basic automation with the APL
- Process object view
- Operating modes in the APL
- Creating sequential function charts (SFC)
- The operating state logic of SFC and sequence chains
- User permissions and user administration for the PCS 7 OS
- Adapting the OS layout with the OS Project Editor
- Tabular workflows with the WinCC Configuration Studio

- Creating process images with the Graphics Designer
- Reading back process values
- Alarm system
- Alarm Management
- Archiving System
- Overview of the interlock types of the APL
- Engineering mass data

A learning membership to work through the self-learning modules and access to on-demand content is included for 1 year.

As an introduction to the digital learning platform, we recommend the following learning path:

[Process Control Technology for Beginners](#)

Prerequisites

Basic knowledge of electrical engineering, control and feedback control systems and process control engineering.
With the help of the available online entrance test, you will ensure that the course you choose matches your competences.

- [Online Assessment Test](#).
- [Technical requirements](#)

Note

Participation in the learning journey is personal and non-transferable.
This learning journey mainly corresponds to the content and objectives of the learning events [ST-PCS7SYS](#) or [Online training ST-PCS7SYS](#)

Type

Learning Journey

Duration

54 hours

Language

de, en