

Simatic PCS 7 AS Engineering (ST-PCS7ASE)

Objectives

The focus is on application of the various type/instance concepts in SIMATIC PCS 7, which support efficient AS engineering, including working with process tag types and control module types, application of SFC types and technological engineering with equipment modules and equipment phases. With the help of SIMATIC PCS 7 Logic Matrix, you will create complex interlock functions in your user program quickly and easily.

Through practical exercises on training devices, which are handled the same as in real-world use, you will put your newly acquired theoretical knowledge into practice. This will increase your learning success.

After the course, you will be able to optimally and efficiently configure process automation.

Target Group

Project manager, project staff, programmer, commissioning engineers, configuring engineers, service personnel and maintenance personnel

Content

System design

- Memory concept and system architecture

PCS 7 Project handling

- Multiproject engineering and Multiuser engineering
- Version Trail and Version Cross Manager
- Access protection and Block encryption
- License management

Mass data engineering using the Advanced Engineering System

- New type concept
- Edit mass data in AdvES, creation of new control modules in PCS 7
- Handling of optional blocks

Hardware configuration

- Integration of Profinet
- Integration of field devices
- Update of the Hardware catalog
- High-Precision Time Stamping

Efficient engineering

- Libraries in SIMATIC PCS 7 V8.0
- Extended User Authorization Concept
- Run sequence and behavior when maximum cycle time exceeded

Advanced alarm engineering

- Generating additional messages
- Message configuration
- Managing messages in SIMATIC Manager

SFC Advanced

- Operating State Logic and state changes in SFC
- Configuration of SFC-Types

Application of APC Library

- Characterizing Control Loops
- Overview of the APC tools in the PCS 7 Libraries and APC-Examples
- PID algorithm
- Control Performance Monitoring (CPM)
- Controller optimization using the PID Tuner

Prerequisites

Attendance of training course ST-PCS7SYS recommended Basic knowledge of process control engineering Practical experience in SIMATIC PCS 7 project engineering. Basic knowledge of APL, as provided in the System course or in the APL-Workshop You can use the available online entry test to ensure that the selected course matches your area of expertise.

Type

Face-to-face training

Duration

4.5 days

Language

en