

PCS7 Advanced AS Engineering (ST-PCS7ASE)

Objectives

As SIMATIC PCS 7 Engineer you will learn in this course the potential of the SIMATIC PCS 7-process control software with focus on AS-Engineering. As important topics for advanced PCS 7 Engineers the Advanced Process Library (APL), the configuration of SFC-Types, as well as principles and methods supporting an efficient AS-Engineering are in the center of the course. By practical exercises at training equipment you will put your newly acquired theoretical knowledge into the practice. Through this you increase your learning success. On completion of the course, you are able to engineer a process automation optimally and efficiently.

Target Group

Commissioning engineers, configuring engineers
Service personnel
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
- 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 N/F-PCS7SYS recommended
Basic knowledge of process control engineering
Practical experience in PCS 7 project engineering

Note

Course documentation : English
Instructor : English

Type

Face-to-face training

Duration

5 days

Language

en

