

PCS 7 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 SIMATIC PCS 7 Engineers the integration of Profinet in SIMATIC PCS 7, the Advanced Process Library (APL), the configuration of SFC-Types, as well as Type-Instance conceptions 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

Project manager, project staff
Technologists
configuring engineers, programmer
Commissioning engineers

Content

PCS 7 project handling

- Multiproject engineering and Multiuser engineering
- Upgrade of block libraries with CPU 410-5H
- Comparing project versions with the Version Cross Manager, Versioning using Version Trail
- Licenses and current license model with CPU 410-5H

System design - Planing and specifying hardware components

- Memory and cycle time resources of the CPU
- Important CPU settings
- Behavior when maximum cycle time exceeded
- Time synchronization
- Redundant automation systems
- Topology comparison of Profibus vs. Profinet in SIMATIC PCS 7

Type-Instance conceptions in SIMATIC PCS 7

- Central bulk engineering with the Import/Export Assistant
- Structure of the import file
- Creating process tag types and importing process tags,
- Modifying process tag types, Updating and exporting process tags

Introduction of control module types

- Comparison of control module types vs. Process tag types, manually editing,
- Updating control modules and variants / optional blocks

Technologic engineering with APL

- Basic APL functions
- Configuration of dosing functions

Advanced Process Control with APL

- Introduction of APC functions
- Control performance monitoring and PID tuning

Sequential control with SFC types

- Basics, Operating State Logic
- Configuration of SFC types
- Characteristics as interface of SFC types, Changing control strategy and setpoints

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

5 days

Language

en

Fee

26,187 ZAR