SIEMENS

SIMATIC PCS 7 AS-Engineering (ST-PCS7ASE)

Short Description

In this course, SIMATIC PCS 7 users will become familiar with the possibilities of the SIMATIC PCS 7 process control software with an emphasis on the AS.

Objectives

In this course, SIMATIC PCS 7 users will become familiar with the possibilities of the SIMATIC PCS 7 process control software with an emphasis on the AS.
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
- Technologists
- configuring engineers, programmer
- Commissioning engineers

Content

Project management
- Multiproject and multiuser engineering: Configuring in the network
- Update of block types in Run (TCiR)
- Comparison and versioning of project versions with Version Train and Version Cross Manager
- Licenses and configuration limits in PCS 7 as well as the current license model with the CPU 410-5H
Type/instance concept, process tag type and IEA
- Bulk data processing with the Import/Export Assistant (IEA) and IEA file editor
- Changes to process tag type and synchronization of process tags
- Adaptation of existing charts as process tags (branches)
Type/instance concepts with control modules and technological list editor
- Basics of the type concept with control module types
- Configuring of control module types
- Bulk data processing with the technological list editor
- Variants of control modules based on optional blocks
- Synchronization behavior
System layout and hardware configuration
- Memory concept and system architecture
- Important CPU settings and response to maximum cycle time violation
- Updating of the HW Catalog
- Time synchronization
- Current redundancy concepts of PCS 7
Configuring of interlocks with the SIMATIC PCS 7 Logic Matrix
- Positioning, definition of terms and signal processing
- Engineering and visualization of SIMATIC Logic Matrix
Sequential control systems with SFC types
- Calculations, state logic and state transitions in the SFC
- Basics and configuring of SFC types
- Change of control strategy and setpoints for an SFC instance
Technological SFC configuration
- Definition of terms
- Type/instance concept for the engineering of equipment modules and equipment module types
- Type/instance concept for the engineering of equipment phases with equipment phase types
- SFC visualization of the equipment phase / equipment module / control module
- Synchronizing of changes in master data library and project

Prerequisites

- Basic knowledge of electrical engineering, control and feedback control systems and process control engineering.
- Attendance of the system course "ST-PCS7SYS" is recommended
- Practical experience in the project planning of SIMATIC PCS 7

Note

Course language is English

After attending this course, you can be certified as a "Siemens Certified SIMATIC PCS 7 Engineer".
Book your participation here => Siemens Certified SIMATIC PCS 7 Engineer

This theoretical and practical proof of performance tests your advanced SIMATIC PCS 7 knowledge.
After passing the exam, you will receive a certificate.

Type

Face-to-face training

Duration

5 days

Language

en