SIEMENS

DCS: SIMATIC PCS7 AS ENGINEERING (AS-PCS7A_ASE)

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. 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 put newly acquired theoretical knowledge into practice. This will increase your learning success.
- After the course, you will be able to configure process automation optimally and efficiently.

Target Group

- Project manager, project staff, Technologists
- Configuring engineers, programmer
- Commissioning engineers
- Maintainer

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 configurationr :
- Memory concept and system architecture
- Important CPU settings and response to maximum cycle time violation
- Updating of the HW CatLog
- 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

Application of APC Library :
- Overview APC Tools in the PCS7 Libraries and APC-Examples, Controller optimization using the PID Tuner
- Digitalization offerings in Process Industries

Hands on :
- Exercises defined based on Topic explained.
- Hands on practice.

Prerequisites

- Completion of the PCS7 Basics course is recommended
- Basic knowledge of process control engineering
- Practical experience in configuring SIMATIC PCS 7

Note

Software Version: PCS7 V9.0

Type

Face-to-face training

Duration

5 days

Language

en

Fee

65,000 INR
18% GST additional on Course fees