

DCS: SIMATIC PCS 7 Basic (AS-PCS7B)

Objectives

- By doing exercises on original SIMATIC PCS 7 training units, you will implement software for the process automation of a plant right up to the HMI level. Features of SIMATIC PCS 7 such as integration of all subsystems, plant-oriented engineering, data management and project management are supplemented by advanced functions that enable efficient and cost-effective engineering with SIMATIC PCS 7.
- Utilize the benefits of Totally Integrated Automation (TIA) for yourself and learn how to get an integrated view of your plant. Because of this integration you will be able to diagnose faults quickly and correct them with safety. In addition, projects can be created in advance in such a way that you can work with multiple application. This enables time-optimized and cost-effective engineering.

After attending the course, you can do the following:

- Create a proper PCS 7 Multiproject and configure the hardware of AS and PC stations.
- Create user programs compliant to PCS 7 standards using the most important tools like CFC, SFC and graphical tools of the PCS 7 engineering toolset..
- Bulk engineering using the Import/Export-Assistant

Target Group

- Project manager, Configuring engineers
- Programmers
- Commissioning engineers
- Technologists

Content

In this course you will learn how to implement the diversity of engineering possibilities with SIMATIC PCS 7 process control system.in a structured and efficient way.

Hardware

- Introduction to standard architecture of PCS 7 like ES, AS, OS-Server & OS-Clients
- Introduction to AS Hardware like PS, CPU & CPs

Commissioning Project from Scratch:

- Working with SIMATIC Manager in PCS7 fashioned way.
- Creating the Multi project and Configuring Hardware (AS & OS)
- Working with different views like Component View & Plant View
- Working with CFC Charts and develop logic using CFC charts
- Optimization of the charts
- Working with SFC Charts and develop sequences using SFC charts
- Various control modes available with SFC charts
- Configuration of sequential controls with SFC
- Compiling, downloading & testing CFC & SFC charts
- Implementation of Automatic and Manual Mode Control

Working with OS::

- Compiling Operator Station.
- Creating process pictures in Graphics editor.
- User interface in Process Control mode.
- Working with standard faceplates, Messages and Trends.
- Basics Operating and Monitoring.
- Implementation of Automatic and Manual Mode Control
- Customizing the OS
- Archiving System
- Introduction to OS Project Editor & Licensing Concept in PCS 7
- Picture tree manager & user administration

Bulk Engineering:

- Mass Data engineering tools like Process Object View, Process Tag Type & Models using Import Export assistant

Communication:

- Station and network configuration.
- Communication of remote stations with AS
- AS-OS Communication
- AS-AS communication
- Introduction to server client architecture

Diagnostics:

- Fault Diagnostics in software / hardware options
- Forcing, Simulation, Readback, Book back
- Project Backup
- Locking functions and operating modes
- Hardware Replacement
- Life beat monitoring

Settings for AS & OS

- Introduction to Time synchronization, Life beat monitoring
- Final steps of configuration
- User block – attributes and visualization
- Syntax Rules
- SIMATIC PCS 7 Documentation and Support

Hands on:

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

Prerequisites

- Engineers working in DCS controlled plant having knowledge in process automation.
- Basic Know how about STEP 7 & WinCC Explorer software

Type

Face-to-face training

Duration

10 days

Language

en

Fee

120,000 INR
18% GST additional on Course Fee