

Course Details

SIEMENS SIMATIC PCS7 Service Course ST-PCS7SRV (5 days)

HRDF CLAIMABLE

*Subject to Approval

Requirements

Basic knowledge of process control technology, open-loop and closed-loop control technology and handling Windows application. Recommended to attend SIEMENS SIMATIC Wincc Course.

Objectives

The course is designed for personnel whose main area of activity is the care, servicing and maintenance of existing installations with SIMATIC PCS 7 control systems. The focus is on typical servicing skills such as replacing wear parts and obtaining diagnostics data.

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

The course provides you with basic knowledge of the SIMATIC PCS 7 process control system and an introduction to the processes of SIMATIC PCS 7 Asset Management. Through practical exercises on training equipment on which you will perform the work you would also carry out during live operation, you will be able to put your newly acquired theoretical knowledge to practice.

When you have completed this course, you will be in a position to quickly obtain comprehensive diagnostics data of a running SIMATIC PCS 7 system and will be able to carry out simple maintenance work without stopping the installation. In this way, you will enable downtime to be reduced and this will increase the efficiency of your automation system.

Topics

After attending the course, you can do the following:

- Initial activities when servicing a running system
- SIMATIC PCS 7 documentation and online support
- Basics of fieldbus systems used
- Procurement of diagnostics data with the SIMATIC diagnostics tool
- Introduction to integrated asset management with SIMATIC PCS 7
- Reading out diagnostics data on the SIMATIC PCS 7 hardware
- Exchanging modules and components during running operation
- Handling data and project backups and creating and importing backup images

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Course Certificate

Certificate of participation will be awarded after the training.

Contact Information

SIEMENS MALAYSIA SDN. BHD. (93008-X)
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e-Pass: [siemens.asia/e-pass_v2/ASEAN](https://www.siemens.com.my/e-pass)

Website: www.siemens.com.my/sitrain

Bank Details

Bank Name: Deutsche Bank (M) Sdn Bhd

Bank Account Number : 0020768000

Bank Address : 18th – 20th Floor, Menara IMC 8,
Jalan Sultan Ismail,
50250, Kuala Lumpur

Bank Swift Code : DEUTMYKLXXX

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Daywise Schedule

Day 1

1. System Overview

- Totally Integrated Automation
- Uniform System Architecture
- Components of Process Control Sys.
- SIMATIC S7 as System Base
- SIMATIC PCS7 Automation Systems
- SIMATIC PCS7 Distributed I/O
- SIMATIC PCS7 Field Devices
- Human Machine Interface

Day 2

2. AS Hardware

- Overview and Core Component of the AS
- I/O Systems

3. System Bus

- Layout of the System Bus (Principle)
- Connecting the Automation System
- Connecting the Engineering System
- Connecting the OS (Standalone Units)
- Connecting the OS (Multi-User Units)

Day 3

4. The Structure of a Project

- What is a Project?
- Plant View & Process Object View
- Assignment
- Hardware Configuration (AS)
- Configuration (ES/OS)
- Network Configuration (NetPro)
- Highlighting the DP Master
- Compiling and Downloading
- Setting the PG/PC Interface
- Downloading in STOP Mode

5. Configuring Functions with CFC

- Principles
- Execution sequence
- Blocks
- Hardware-Specific Preparation
- Servo Loop with Simulation

Day 4

6. Configuring Sequences with SFC

- Overview
- Step and Transition
- Sequence Structures
- Action and Transition
- Operating State Logic
- Run Behavior of an SFC

Day 5

7. HMI

- Configuration & Monitoring of PCS 7
- Multi-Client OS
- WinCC Editors (Standard)
- WinCC Explorer: Overview
- User Interface and faceplates
- SFC Visualization Option
- Data Management for SIMATIC PCS7
- Tag management
- Editors

8. S7 Diagnostic Aids

- AS Information (Diagnostics)
- Basic CPU diagnostics
- CPU Diagnostics Buffer
- CP Diagnostics
- Integrated DP Master
- ET200M - Diagnostics
- Summary

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Time-wise Schedule

Day	Time	Topics
Day – 1	09:00 Hrs – 09:20 Hrs 09:20 Hrs – 10:00 Hrs 10:15 Hrs – 12:00 Hrs 13:00 Hrs – 15:00 Hrs 15:15 Hrs – 17:00 Hrs	Operating Systems Configuration Overview SIMATIC PCS7 HMI and SIMATIC NET Integration and redundancy
Day – 2	09:00 Hrs – 10:00 Hrs 10:15 Hrs – 12:00 Hrs 13:00 Hrs – 15:00 Hrs 15:15 Hrs – 17:00 Hrs	AS Hardware AS Overview System Bus Practical on the above
Day – 3	09:00 Hrs – 10:00 Hrs 10:15 Hrs – 12:00 Hrs 13:00 Hrs – 15:00 Hrs 15:15 Hrs – 17:00 Hrs	Structure of a Project Practical on the above Configuration Functions with CFC Practical on the above
Day – 4	09:00 Hrs – 10:00 Hrs 10:15 Hrs – 12:00 Hrs 13:00 Hrs – 15:00 Hrs 15:15 Hrs – 17:00 Hrs	Configuration Sequences with SFC Functions and Operating modes HMI Options an Engineering Practical on the above
Day – 5	09:00 Hrs – 12:00 Hrs 13:00 Hrs – 15:00 Hrs 15:15 Hrs – 16:00 Hrs	HMI (Cont.) Diagnostic Aids Feedback & Valedictory session

Break Timings:

10:00 Hrs – 10:15 Hrs	Morning Tea Break
12:00 Hrs – 13:00 Hrs	Lunch Break
15:00 Hrs – 15:15 Hrs	Afternoon Tea Break
17:00 Hrs – 17:15 Hrs	Recess & End of Day