

# SIEMENS

## S7 Process Control Systems Course – Code - ST-PCS7SYS

**Duration – 10 Days**

### **Prerequisites**

Successful completion of the **ST-7PRO1** or the **ST-7SERV1 & ST-7SERV2** courses.

### **Content**

#### **Day 1**

- Introduction
- Training units
- The SIMATIC Manager
- Hardware Configuration
- Block Architecture and Block Editor
- Symbols
- Binary Operations
- Digital Operations

#### **Day 2**

- Data Storage in Data Blocks
- Functions and Function Blocks
- Organization Blocks
- SIMATIC PCS7 System Overview
- Configuration Overview
- Configure the Workstation

#### **Day 3**

- Configure the AS
- Network Configuration
- Create Project Structure
- Create OS Structure and Screens
- Introduction to WINCC
- Configuring Objects
- Introduction to CFC's

#### **Day 4**

- Programming with CFC's
- Create first exercises for Reactor Project
- Create interlocking and alarms
- Create WINCC pictures

#### **Day 5**

- Introduction to SFC's
- Create SFC for first Reactor
- Create Reactor pictures in WINCC
- Create online trends
- Create Archive trends
- Admin rights and setting up users

#### **Day 6**

- PID Selftuner
- Introduction to CFC Chart in Chart
- Create lower-level Chart
- Parameter assignments in lower-level Chart for WINCC
- Using STL as source to create own CFC
- Create alarms from this new block for WINCC

#### **Day 7**

- Introduction to Multiprojects
- Create a Multiproject with a Master Data Library
- Create Process Tag Types
- Create second Reactor
- Update and do screens in WINCC
- Create a Model
- Create third and fourth reactors
- Update and do screens in WINCC

#### **Day 8**

- Create a sub-sequence for first Reactor(SFC)
- Introduction to SCL
- SCL exercises

#### **Day 9**

- WINCC OS Project Editor
- Standard Object Configuration
- Group Display setup
- WINCC Special Features (Customized Objects)
- WINCC Message System
- C and VBS scripting

#### **Day 10**

- Time Synchronization
- Lifebeat Monitoring
- WINCC Report System
- Server-Client setup