

## SIMATIC WinCC SCADA Engineering and Sustaining

### General Information

Course Code SCT-S7WINI2A  
Global Code ST-BWINCCS  
Length 4 Days  
CEUs 2.6

### Audience

This course is for PLC users with engineering and/or previous HMI experience who will be creating and sustaining HMI / SCADA applications using Siemens Windows Control Center (WinCC) Classic.

This course is not WinCC SCADA in TIA Portal.

### Prerequisites

- MS Windows and PLC Data Management

### Profile

Using a model application, this course provides a system overview of WinCC with emphasis on its capabilities and distinctive features. Detailed configuration procedures will be studied in an order compatible with the typical development of an industrial application. Students will learn the correct development process beginning with creating a project, concluding with reporting, and printing. Examples of programs that can be written to take advantage of WinCC open architecture are discussed. Throughout this course lecture materials are complimented with virtual-based exercises which build a working WinCC application. Access to fully functional software, tools, and exercises are provided to each participant.

### Objectives

*Upon completion of this course, the student shall be able to:*

- Create and manage WinCC Projects.
- Establish communications with the PLC or OPC Server.
- Configure internal and external tags.
- Describe Use of update cycles for tag connections
- Create Overview and detail graphics
- Implement screen navigation
- Create Customized Objects and faceplates
- Creating reusable popup windows
- Make objects dynamic using various tools
- Define & Administer User Security.
- Create and test the WinCC Alarms and Messages.
- Configure, archive and display Trends & Tables.
- Configure Archive Management
- Configure, preview and print Reports.

### Topics

- WinCC System Overview
  - Hardware Overview
  - WinCC Core Functionality
  - System Network Configurations
  - Open Architecture
  - System Requirements
- WinCC Explorer
  - Starting WinCC
  - Creating a new Project
  - Project and Computer Properties
  - Manual Tag & Channel Configuration
- Graphics Designer
  - Tools & Features for creating a graphic
  - Using Object, Styles & other palettes
  - Use object properties and events
  - Creating a Customized Object
  - Using the Object Library
- Making Objects Dynamic
  - Direct Connect Interface
  - Dynamic Dialog Interface
  - Object C/VBS Scripting
  - Global Actions
  - Script Threading Model
- Advanced Functionality
  - Tag Prefix / Popup windows
  - Creating Faceplates
- Menus and Toolbars
  - Creating a runtime menu navigation system
- User Administration & Security
  - Groups & Users

- b. Log on & Log off
  - c. OS Security
- 8. Alarm-Logging / Messages
  - a. Message Blocks
  - b. Message Classes & Subclasses
  - c. Analog Alarms
  - d. WinCC Alarm Control Configuration
- 9. Archiving & Trending
  - a. Archive configuration
  - b. WinCC Online Trend Control
  - c. WinCC Online Table Control
- 10. Archive Management
  - a. Configuring archive and backup management for Alarms and Trending
- 11. Diagnostics
  - a. Using Cross Reference Editor
  - b. Using AP Diagnosis
- 12. Reports Designer
  - a. Layouts & Print Jobs
  - b. Configuration / Documentation Reports
  - c. Alarm Reports
  - d. Creating & Configuring Print Jobs