

## SIMATIC WinCC SCADA in the TIA Portal (TIA-WCCS)

### Short Description

WinCC Professional is the powerful SCADA system in the TIA Portal. Want to modernize or perform maintenance on your SCADA system or create a completely new SCADA system? Attend this training course, which is designed to help you learn the basic principles as well as advanced functions.

### Objectives

The SCADA functionality (Supervisory Control and Data Acquisition) of WinCC in the TIA Portal is designed for visualization and operator control of processes, production flows, machines and plants.

You will learn how to create and dynamize the operator interface needed for your SCADA system. You will also be shown how to log messages and values and how to design and implement the appropriate logs. You can effectively use the engineering phase thanks to what you have learned about reliably operating the system.

After attending the course, you can do the following:

- Efficiently and reliably operate SIMATIC WinCC based on the "TIA Portal" engineering platform
- Understand and edit SIMATIC WinCC projects for use in the SCADA area
- Optimally design an operator interface and selectively use faceplates
- Create screen navigation and user administration
- Implement logging concepts for messages, alarms and measured values
- Access specific values from the SIMATIC S7 and display and further process them in the operator control and monitoring system (HMI)
- Create user-defined scripts

### Target Group

You are tasked with creating and/or editing HMI projects. Whether you are someone who is just getting started or has already been exposed to the subject of HMIs, this course will provide you with new information so that you can work confidently with WinCC Professional in the TIA Portal.

- Programmers
- Commissioning engineers
- Configuring engineers
- Service personnel
- Maintenance personnel
- Service personnel
- Operators

### Content

Product version: WinCC V19

- System overview of TIA Portal, SIMATIC WinCC (SCADA)
- Creating a SIMATIC WinCC project
- Configuring the connection to the SIMATIC S7 automation system
- Structuring the operator interface
- Fundamentals of creating graphics displays for human machine interfacing
- Navigating through the plant displays
- User administration
- Message representation, message logging, message configuring
- Data logging, trend configuring, trend plotting
- Trend plotting and message representation including logging of data in the database
- Recipes
- Faceplates for reuse and centralized modification of graphics blocks
- Background processing Global Scripting
- Deeper understanding of contents through practical exercises on the SIMATIC S7-1500 system model

### Prerequisites

Basic knowledge of automation technology

### Note

WinCC (TIA Portal) is divided generally into the machine-level area and SCADA systems.

This training course will be conducted using SIMATIC WinCC Professional (SCADA system based on TIA Portal). In the course, you will work with a WinCC Professional single-user system that communicates with a SIMATIC S7-1500.

For SIMATIC WinCC Comfort and SIMATIC WinCC Advanced (both products are based on TIA Portal), we offer the courses TIA-WCCM and TIA-WCCM2.

For SIMATIC WinCC V7.x (SCADA system), we offer the system course ST-BWINCCS as well as the advanced course ST-WINOND.

For additional courses on SIMATIC WinCC V7.x, visit our Learning Path "SIMATIC WinCC V7.x".

### Type

Face-to-face training

### Duration

5 days

**Language**

---

en