

## TIA WINCC SCADA Virtual training in english (TIA-WINCCS)

### Short Description

The Totally Integrated Automation Portal (TIA Portal) provides the working environment for end-to-end engineering with SIMATIC STEP 7 and SIMATIC WinCC. The SCADA functionality (Supervisory Control and Data Acquisition) of WinCC Professional is designed for visualization and operation of processes, manufacturing cycles, machines and plants. The course is based on the possibilities of WinCC Professional in TIA Portal at the time.

### Objectives

You will learn how to create and dynamize the required interface. You will also be shown how to log messages and values and how to design and implement the appropriate logs. After learning how to use the system safely, you can use the engineering phase effectively. The course content is supported by a host of practical exercises on a system model. This comprises the SIMATIC S7 programmable controller (PLC).

On completion of this course the participant will be able to do the following:

Use SIMATIC WinCC Professional efficiently and reliably on the basis of the "TIA Portal" engineering platform

Understand and edit SIMATIC WinCC Professional projects for use in the SCADA area

Optimally structure the user interface

Implement logging concepts for messages, alarms and measured values

Selectively access values in the SIMATIC S7 and display and further process these values in the HMI system

### Content

- System overview of SIMATIC WinCC: for example, overview of the various WinCC licenses, possible system configurations
- WinCC projects: Creating projects, types of projects, data structure
- Communication with controllers: Overview of possible controllers, configuration of a connection to the SIMATIC S7, configuration limits for communication, diagnostic options
- Creating tags and groups, working effectively with the Configuration Studio, internal and external tags, system info channel, simulation of tag values
- Cross Reference Editor
- Benefits and opportunities of TIA
- Working effectively with the Graphics Designer
- Dynamization of objects in screens using tag connection, configuration dialog, dynamic wizard, animation , dynamic dialog, direct connection, C scripts and VB scripts
- Diagnostic and performance guidelines for C scripts and VB scripts
- Global Script Editor for user-created functions and screen-independent actions
- User administration: WinCC users and groups, authorization levels
- Faceplate technology via screen window with tag prefix and via faceplate types
- Tag logging: Archives and archive tags, archive configuration, types of archiving, OnlineTrendControl
- Alarm logging: Alarm procedures, alarm classes and types, archive configuration, alarm control, system alarms, status tags
- Data archiving with the User Archives option (introduce)
- Communication with S7-1500 (with PLCSIM Advanced )
- Report Designer for reporting (introduce)
- Deeper understanding of contents through practical exercises on SIMATIC S7-300 system model

### Type

Online-Training

### Duration

4 days

### Language

en

### Fee

1,900 EUR