

# Online training: SIMATIC TIA Portal - S7-1500 system retraining cursus (TIA-SYSUP)

### **Short Description**

The Totally Integrated Automation Portal (TIA Portal) forms the work environment for integrated engineering with all automation devices – controller, HMI and drives. In this course you will learn about the major differences between SIMATIC S7-300/400 and SIMATIC S7-1500, the engineering tools SIMATIC Manager and TIA Portal, as well as STEP 7 V5.x and STEP 7 based on TIA Portal. You will learn thepossibilities of the configuration and the advanced programming of a SIMATIC S7-1500 automation system with the "TIA Portal" engineering platform.

# **Objectives**

After attending the course, you can:

- Efficiently use the "TIA Portal" engineering platform
- Configure and program components of the SIMATIC S7-1500 automation system with the TIA Portal
- Perform a commissioning of TIA components

You can deepen your theoretical knowledge with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-1500 automation system, ET200 distributed I/O, Touchpanel, drive, and a conveyor model.

### **Target Group**

Programmers Commissioning engineers Engineering personnel Service personnel

#### Content

Engineering tools TIA Portal components: SIMATIC STEP 7 and SIMATIC WinCC

Introduction of the SIMATIC S7-1500 hardware

Configuration of devices and networks of the SIMATIC S7 system family using SIMATIC S7-1500 as an example

Working with the PLC Tag Table in TIA Portal

Program blocks and editor

Advanced programming possibilities of a SIMATIC S7-1500

Troubleshooting with TIA Portal tools and the SIMATIC S7-1500 CPU display

Presentation of the Structured Control Language (SCL) editor

Presentation of the SIMATIC WinCC operator control and monitoring system

Migration of a SIMATIC STEP 7 V 5.x project to SIMATIC STEP 7 based on TIA Portal

Adaption of a SIMATIC S7-300/400 program to the SIMATIC S7-1500

Presentation of the 'Startdrive' engineering tool with interfacing to a SINAMICS G120 drive

Deeper understanding of contents through practical exercises on the SIMATIC S7-1500 system model

### **Prerequisites**

SIMATIC S7 knowledge according to ST-S7SYS2 and practical experience in using the knowledge

You can use the available online entry test to ensure that the selected course matches your area of expertise.

Online Assessment Test

### Note

In this course you will work with SIMATIC S7-1500 and software SIMATIC STEP 7 based on TIA Portal.

### Type

Online-Training

## Duration

5 days

### Language

de, en, fr, nl