

SIMATIC system retraining (TIA-SYSUP)

Short Description

Learn the major differences between the engineering tools SIMATIC Manager and TIA Portal and the S7-300/400 and SIMATIC S7-1500 CPUs. Become familiar with the possibilities of the configuration and the advanced programming of a S7-1500.

Objectives

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 the possibilities of the configuration and the advanced programming of a SIMATIC S7-1500 automation system with the "TIA Portal" engineering platform.

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

Target Group

Programmers
Commissioning engineers
Engineering personnel
Maintenance personnel
Service personnel

Content

- Engineering tools TIA Portal components: SIMATIC STEP 7 and SIMATIC WinCC
- Introduction of the SIMATIC S7-1500
- Configuration of devices and networks
- 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
- Lots of practical hands-on exercises

Prerequisites

SIMATIC S7 knowledge according to ST-PRO1 and practical experience in using the knowledge.

Note

The course teaching and material language is English. The material is provided for students in electrical form as pdf document.

Training Devices:

- SIMATIC S7-1500
- Profinet I/O ET200 SP
- Comfort-panel
- Sinamics G120
- Belt model

1 training set / 2 students

Type

Face-to-face training

Duration

4 days

Language

en