

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

Objectives

The Totally Integrated Automation Portal (TIA Portal) forms the work environment for integrated engineering with SIMATIC STEP 7 and SIMATIC WinCC.

In this course you will learn about the major differences between SIMATIC Manager and TIA Portal, and between STEP 7 V5.x and STEP 7 based on TIA Portal. You will learn how to configure and program a SIMATIC S7 automation system with the "TIA Portal" engineering platform.

You can deepen your theoretical knowledge with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-1500 automation system, ET200SP distributed I/O, Touchpanel TP700, drive SINAMICS G120 and a belt model.

After attending the course, you can do the following:

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

This blended learning course combines web-based training on the Internet with a 3-day attendance course: To prepare for the attendance course, you will receive the web-based training courses (WBT) "PROFINET" and "Industrial Ethernet". This allows you to improve your personal learning achievement in the attendance course.

Target Group

Programmers
Commissioning engineers
Engineering personnel
Maintenance personnel
Service personnel
Operators

Content

TIA Portal components: SIMATIC STEP 7 and SIMATIC WinCC

Configuration of devices and networks for the SIMATIC S7 system family

Working with the SIMATIC STEP 7 symbol table

Program blocks and editor

Data management with data blocks

Programming of organization blocks (OBs)

Working with troubleshooting tools

Presentation of the Structured Control Language (SCL) und S7-Graph editors

Presentation of the operator control and monitoring system (HMI)

Backup and documentation of programs

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

Migration of a SIMATIC WinCC flexible project to SIMATIC WinCC based on TIA Portal

Deeper understanding of contents through practical exercises on TIA system model

- SIMATIC S7-1500, SIMATIC STEP 7 (TIA Portal)
- Comfort Panel TP700, SIMATIC WinCC (TIA Portal)
- Drive SINAMICS G120, Startdrive (TIA Portal)

Prerequisites

Basic knowledge of automation technology/PLC programming

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

Type

Face-to-face training

Duration

4.5 days

Language

en

