SIEMENS

SITRAIN: SIMATIC TIA Portal - S7-1500 system retraining cursus (Face-to-face Training) (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 S7-GRAPH
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-PRO1 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

For beginners in STEP 7 programming, we recommend attending the TIA-PRO1 / TIA-PRO2 courses.
For maintenance personnel with knowledge of SIMATIC S7-300/400, we recommend the transition course TIA-INSTUP.
For maintenance personnel without knowledge of SIMATIC S7-300/400, we recommend the TIA-SERV1 / TIA-SERV2 courses.
In this course you will work with SIMATIC S7-1500 and software SIMATIC STEP 7 based on TIA Portal.

Included in the course price: Free access to the digital learning platform SITRAIN access – starting one week before the start of the course until two weeks after the end of the course.
With the Learning Membership, you can deepen or repeat the content of this Learning Event as well as continue your education on other interesting topics.

Type

Face-to-face training

Duration

5 days

Language

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