

SIMATIC S7 TIA Portal upgrade Course for Maintenance Personnel (TIA-INSTUP)

Short Description

Totally Integrated Automation Portal (TIA Portal) is the work environment for a consistent engineering of all automation devices – controllers, HMIs and drives. In this course you will learn about the main features of SIMATIC S7-1500, the Engineering Tool - SIMATIC TIA Portal (STEP 7, WinCC, Startdrive). You will become familiar with the tools of the SIMATIC S7-1500 automation system with the engineering platform "TIA Portal" for troubleshooting and for testing/debugging.

Objectives

After taking part in the course you will:

- Be able to use the "TIA Portal" engineering platform efficiently for troubleshooting and for testing
- Understand simple STEP 7 programs
- Be able to carry out firmware updates for the components of SIMATIC S7-1500
- Be able to save/backup and download the data of the CPU, HMI Panel and G120

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.

Target Group

Maintenance personnel
Operators

Content

Introduction to Engineering Tools TIA Portal: SIMATIC STEP 7 and SIMATIC WinCC
Presentation of the SIMATIC S7-1500 hardware
Save/backup, download, archive data from the CPU, the TP und the G120
Introduction to PLC programming
Commissioning of devices and PROFINET networks of the SIMATIC S7 system family
Troubleshooting with TIA Portal tools and the SIMATIC S7-1500 CPU-Display
Presentation of the SIMATIC WinCC operating and monitoring system
Presentation of the "Startdrive" engineering tool with connection of a SINAMICS G120 drive
Deeper understanding of contents through practical exercises on SIMATIC S7-1500 system model.

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. Here you will find web-based trainings on Maintenance Basics for plant automation with SIMATIC HW and SW (Curriculum) , and many more. 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.

Prerequisites

STEP 7 knowledge equal to ST-SERV1

You can make use of the available online entrance test to ensure that the selected course corresponds to your level of competence.

[Link](#)

Note

This training course is carried out on the basis of SIMATIC S7-1500.

The Learning Membership starts 7 days before the start of the course and ends 14 days after the end of the course. During this period, you have access to all available web-based trainings.

Type

Face-to-face training

Duration

4 days

Language

en