

SIMATIC S7-1200 Basiskurs (TIA-MICRO1)

Short Description

You can deepen your theoretical knowledge with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-1200 automation system, a Touchpanel, and a belt model.

Objectives

The Totally Integrated Automation Portal (TIA Portal) for SIMATIC S7-1200 forms the work environment for integrated engineering with SIMATIC STEP 7 Basic and SIMATIC WinCC Basic.

In this first part of the SIMATIC TIA Portal S7-1200 training, we teach you the handling of the TIA Portal, basic knowledge about the structure of the SIMATIC S7-1200 automation system, configuration and parameterization of hardware, and the basics of programming. You will learn how to clear simple hardware faults and software errors in the SIMATIC S7-1200 automation system and to create, modify and expand small STEP 7 programs. You will thus be capable of reducing downtime. You will also get an overview on operator control and monitoring.

After attending the course, you can do the following:

- Understand the fundamentals of the interaction of the SIMATIC S7-1200 with an operator control and monitoring device.
- Reliably operate the "TIA Portal" engineering platform
- Create, change, and expand small STEP 7 programs
- Configure, parameterize, and exchange SIMATIC S7-1200 modules
- Diagnose and fix simple hardware faults using the wiring test
- Diagnose and fix simple program errors using the status block
- Perform simple commissioning of the SIMATIC S7-1200

Target Group

Programmers
Commissioning engineers
Engineering personnel
Maintenance personnel
Service personnel
Operators

Content

Overview and significant performance characteristics of the SIMATIC S7-1200 system family
The components of the TIA Portal: SIMATIC STEP 7 Basic and WinCC Basic
Program execution in automation systems
Binary and digital operations in the function block diagram (FBD)
Setup and assembly of the SIMATIC S7-1200 automation system
Addressing and wiring the signal modules
Hardware and software commissioning of the SIMATIC S7-1200 with the TIA Portal
SIMATIC S7-1200 hardware configuration and parameterization
Introduction to the Touchpanel
Saving and documentation of the implemented program changes with the TIA Portal
Deeper understanding of contents through practical exercises on SIMATIC S7-1200 system model

Prerequisites

Basic knowledge of automation technology

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

- [Online Assessment Test](#)

Note

For more in-depth knowledge, we recommend the course TIA-MICRO2.

Type

Face-to-face training

Duration

3 days

Language

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