SIEMENS

SIMATIC S7-1200 Basic Course (TIA-MICRO1)

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. 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.
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

Target Group

Service personnel Operators, users Maintenance personnel Programmers Commissioning engineers, configuring engineers

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 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
- 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.

Type

Face-to-face training

Duration

3 days

Language

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Fee

426 EUR
(price without 20% VAT)

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