

S7-1200 advanced course (TIA-MICRO2)

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, ET 200 distributed I/O, Touchpanel, drive, and a belt model.

Objectives

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

The second part of the SIMATIC S7-1200 training is based on the knowledge of the TIA Portal gained in the SIMATIC S7-1200 basic course, including SIMATIC STEP 7 Basic and HMI. You will expand your knowledge of programming in SCL, connecting drives, use of the TIA Portal diagnostic tools for clearing hardware faults and software errors, and PROFINET IO. You will also learn about the technology functions of the PID controller and drive functions that are offered by the SIMATIC S7-1200. You will thus be able to adapt your plant to new demands.

After attending the course, you can do the following:

Set up SIMATIC S7-1200 PROFINET IO networks

Understand the interaction of TIA components

Perform specific commissioning of TIA components

Use the PID controller technology functions and drive functions of the SIMATIC S7-1200

Systematically diagnose and correct hardware and software errors in the SIMATIC S7-1200 automation system with the diagnostic tools of the TIA Portal engineering portal

Create simple programs in the programming languages LAD, FBD, and SCL

Target Group

Programmers

Commissioning engineers

Engineering personnel

Maintenance personnel

Service personnel

Content

- Hardware diagnostic functions of the TIA Portal in the SIMATIC S7-1200 automation system
- Software diagnostic functions of the TIA Portal in the SIMATIC S7-1200 automation system
- Possible applications of various block types (FC, FB, OB, DB)
- Presentation of the SCL programming language
- Commissioning of distributed I/O on PROFINET IO
- Commissioning of a WinCC project
- PID controller technology functions and drive functions
- Deeper understanding of contents through practical exercises on SIMATIC S7-1200 system model

Prerequisites

SIMATIC S7-1200 knowledge corresponding to TIA-MICRO1

Type

Face-to-face training

Duration

3 days

Language

pl