

## On line-Training Corso avanzato SIMATIC S7-1200 (TIA-MICRO2)

### Short Description

The Totally Integrated Automation Portal (TIA Portal) forms the work environment for integrated engineering with SIMATIC STEP 7 Basic and SIMATIC WinCC. 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 SIMATIC HMI. You will expand your knowledge of programming in SCL, connecting drives SINAMICS, 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.

### Objectives

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 SIMATIC WinCC Comfort/Advanced project
- PID controller technology functions and drive functions

Theoretical knowledge will be deepened with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-1200 automation system, a SIMATIC WinCC Advanced operator control, a SINAMICS G120 and a conveyor model.

### Prerequisites

MICRO1 course or equivalent knowledge of automation systems.

### Note

This course is also available in Virtual Classroom mode: E-MICRO2.

At the end of the course you can deepen the topics covered through our **SIE-learning 4.0**: SIE-12TSCB, SIE-12CMS.

### Type

Online-Training

### Duration

18 hours

### Language

it