

## SIMATIC S7-1200 Aufbaukurs (TIA-MICRO2)

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### Short Description

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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

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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

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Programmers  
Commissioning engineers  
Engineering personnel  
Maintenance personnel  
Service personnel

### Content

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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 SMATIC S7-1200 system model

### Prerequisites

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SIMATIC S7-1200 knowledge corresponding to TIA-MICRO1  
You can use the available online entry test to ensure that the selected course matches your area of expertise.

- [Online Assessment Test](#)

### Note

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None

### Type

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Face-to-face training

### Duration

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3 days

### Language

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