

## Siemens Certified Service Technician Level 1 in TIA Portal (CPT-FAST1)

### Short Description

You will deepen your theoretical knowledge with numerous practical exercises on a SIMATIC plant model on which you also take the examination. This consists of a SIMATIC S7-1500 automation system, ET200SP distributed I/O, Touchpanel TP700, drive SINAMICS G120 and a belt model.

### Objectives

The Zentralverband Elektrotechnik- und Elektronikindustrie e.V. (ZVEI) (German Electrical and Electronic Manufacturers' Association) has defined guidelines for further vocational training. Due to the continuous further development of automation engineering and technology towards Totally Integrated Automation solutions involving not only programmable logic controllers (PLCs), but also industrial communication, operator control and monitoring, security technology and the connection of drives, the course to qualify as a PLC technician had to be revised and expanded compared with the previous course. As preparation for the automation technician for service according to ZVEI, we offer the course to qualify as a Siemens certified SIMATIC technician.

This course consists of two days of theory as the ideal preparation for a 4 hour examination on the third day! Your skills from SIMATIC service basic training (courses TIA-SERV1 and TIA-SERV2) will be refreshed and consolidated. The practical assessment includes the commissioning of the hardware of a PLC, a simple PLC program and the components of Totally Integrated Automation. After passing the examination successfully you will receive a certificate that attests your specialist knowledge.

To allow you to expand your skills, we offer the further training course SIMATIC service TIA-SERV3. Following this, you will be capable of qualifying as an automation technician service in accordance with ZVEI.

### Target Group

Maintenance personnel  
Service personnel  
Operators

### Content

SIMATIC controller servicing with the SIMATIC STEP 7 V16 software based on TIA Portal.

- Systematic troubleshooting in an automation system
- Distinguishing hardware and software faults/errors
- Troubleshooting errors/faults in programmable logic controllers and the distributed I/O
- Hardware and software diagnostics functions
- Configuring and assigning parameters to modules with diagnostics
- Digital and analog signal processing
- Putting certain blocks into operation and expanding them

Industrial communication

- Commissioning distributed I/O

Human Machine Interface (HMI)

- Configuration of HMI screens
- Configuring messages

Motion control

- Commissioning of a drive

Deeper understanding of contents through practical exercises on the SIMATIC S7-1500 system model

### Prerequisites

Attendance of the course TIA-SERV1 and TIA-SERV2

Knowledge according to the courses [TIA-SERV](#) is required.

### Note

In this course you will work with the SIMATIC STEP 7 and SIMATIC WinCC software based on TIA Portal.

The course documentation of the TIA-SERV1 and TIA-SERV2 are necessary.

### Type

Face-to-face training

### Duration

3 days

### Language

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