

Automatisierungstechniker/in Service entspr. ZVEI in TIA Portal (CPT-FAST2)

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, ET 200SP 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. Within the framework of these new guidelines, we offer the course to qualify as an automation technician for service according to ZVEI.

This course consists of two days of theory as the ideal preparation for a 5 hour examination on the third day! Your skills from SIMATIC service training (courses TIA-SERV1 - TIA-SERV3) 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 and the expansion of this PLC program. After passing the examination successfully you will receive a recognized certificate that attests your specialist knowledge.

Target Group

Maintenance personnel
Service personnel

Content

Service SIMATIC controller with the SIMATIC STEP 7 V18 software in TIA Portal.

- Systematic troubleshooting in a complex automation system
- Error/fault evaluation and handling using software
- Understanding the structure and documentation of extensive user programs and making changes where necessary

Industrial communication

- Error diagnostics in a PROFINET IO system with an HMI device
- Configuration of CPU-CPU communication via Industrial Ethernet

Human Machine Interface

- Alternative message methods
- Consistent transfer of entire data records (recipe management)
- System error diagnostics with an HMI device

Motion control

- Connection of drives

Functional safety technology

- Significance of security technology in the prevention of accidents

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

Prerequisites

With regard to course content: Attendance of the TIA-SERV3 course.
Knowledge according to the course

[TIA-SERV3](#) is required.

Note

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

Type

Face-to-face training

Duration

3 days

Language

de