

## Automatisierungstechniker/in Projektierung entspr. ZVEI (CP-FAP)

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### Short Description

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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 an automation system SIMATIC S7-300, distributed I/O ET200S, Touch Panel TP177B, drive Micromaster 420 and a conveyor belt model.

### Target Group

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Programmers  
Commissioning engineers  
Engineering personnel

### Content

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Configuration of a SIMATIC controller

- Applicative programming in a complex automation system
- Programs for an automation system consisting of a standard PLC with distributed I/O, standard HMI device and bus system
- Programming in compliance with IEC
- Standardized user blocks
- Creation and application of complex data structures
- Variables of a composite and complex data type
- System blocks
- Indirect addressing of complex data structures and parameters

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 S7-300 system model

### Prerequisites

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With regard to course content: Attendance of the ST-PRO3 course.

### Note

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In this course, you will work with the SIMATIC STEP 7 V5.x software.

### Type

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Face-to-face training

### Duration

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3 days

### Language

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