

Siemens Certified Programmer (CP-FAP)

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

Target Group

Programmers
Commissioning engineers
Engineering personnel

Content

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

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

Note

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

Type

Face-to-face training

Duration

3 days

Language

en