

## SIMATIC S7 Service Training 1 (ST-SERV1)

### Short Description

You will reinforce your theoretical knowledge in numerous practical exercises on a SIMATIC plant model. This consists of an S7-300 automation system, an ET200S distributed I/O, a TP 177B Touch Panel, a Micromaster 420 drive and a conveyor model.

### Objectives

This first component of the SIMATIC service course teaches the basic knowledge of the design of automation systems, the configuration and parameterization of the hardware, handling with the STEP 7 Basic Software and the fundamentals of programming. You also get an overview of human machine interfacing, PROFIBUS DP and the integration of drives.

What you learn about the integrated factory automation will teach you to take a holistic view of your plant and to understand the relationships between components. On completion of the course, you will thus be able to diagnose simple hardware faults or replace modules, to coordinate components optimally, carry out safe fault diagnostics and thus reduce downtimes.

### Target Group

Maintenance personnel  
Service personnel  
Operators

### Content

System overview and essential performance features of the SIMATIC S7 system family  
The components of the STEP 7 Basic Package  
Program execution in the automation system  
Binary and digital operations  
Configuring and assembling an automation system  
Addressing and wiring of the signal modules  
Hardware and software startup of the automation system  
Hardware configuration and parameterization in the case of S7-300  
Reinforcement of the content through exercises on the device  
Introducing the TP177B Touch Panel  
Introducing the MM420 drive  
Configuration and parameterization of PROFIBUS DP  
Backing up and documenting executed program changes  
Deeper understanding of contents through practical exercises on the SIMATIC S7-300 system model

### Prerequisites

Basic knowledge of automation

You can use the online tests to find out whether you have sufficient prior knowledge to participate effectively in the course you wish to attend.

- [Online Assessment Test](#)

### Note

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

### Type

Face-to-face training

### Duration

5 days

### Language

en