

## S7 Service 2 Course (ST-SERV2)

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### Short Description

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The course uses a 'hands-on' practical approach to reinforce the theoretical aspects of the training. Practical tasks are undertaken using a simulation rig, distributed profibus nodes and S7-300. This course is for SIMATIC S7-300-400 PLC users with basic SIMATIC control system knowledge who install or maintain automation systems and their application programs. This course continues skill development in troubleshooting and modifying a control system. Participants will use STEP7 software tools to build new features, diagnostics and communications into the application project. Program development using organization blocks, system functions, function blocks and data blocks along with analogue signal processing are included. Configuration and integration of an HMI and drive system into the student's application project builds experience managing a complete automated control system. The course format consists of instruction and hands-on exercises. Students will use test, debug and diagnostic tools to complete the commissioning, programming and system integration exercises.

### Objectives

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On completion of this course the participant will be able to:-  
Be familiar with ways you can use different block types (FC, FB, OB, and DB).  
Become familiar with the principles of analogue value processing  
Eliminate software errors that lead to a CPU stop.  
Eliminate logical software errors, such as multiple assignments.  
Save and document program changes that have been made.  
Use the data block access functions.  
Access and use the processed analog values.

### Target Group

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This course is aimed at service/maintenance personnel who are interested in solving a variety of SIMATIC S7 tasks, and have attended the S7SERV1 course.

### Content

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Hardware and Software Commissioning - review  
Data Storage in Blocks  
Functions and function blocks  
Organization Blocks  
Analogue processing and programming  
Troubleshooting  
System information  
MPI Network Commissioning  
Tags and HMI Messages  
Drive to PLC Configuration  
Each of the above topic areas are backed up by practical exercises using a conveyor model and simulator. Working examples are provided and tested out during the course.

### Prerequisites

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The ability to use a MS Windows PC, keyboard and mouse to include opening and closing programs, locating files, copy and paste objects /data (text, etc). Drag and drop files, objects/data (text, etc). Use of menus and multi-menus, manipulation of windows within a multi-window environment. Use of MS Windows Help.  
Must have attended the Siemens ST-SERV1 Course.  
You can use the online tests below to find out whether you have sufficient prior knowledge to participate effectively in the course you wish to attend. If you answer more than 70 % of the questions correctly you are well prepared to take part in the course.

### [Test ST-SERV2](#)

### Note

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Completion of this course satisfies part of the examination entry requirements for the Siemens Certified Service Technician Levels 1 and 2. This training course is not appropriate for trainees using S7-200, S7-1200 or S7-1500 based systems. For more information concerning details of S7-200, S7-1200 or S7-1500 training contact Sitrain on 08458 507600 or our website at [www.siemens.co.uk/sitrain](http://www.siemens.co.uk/sitrain)

### Type

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Face-to-face training

### Duration

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5 days

### Language

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en

### Fee

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2,365 GBP

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