

S7 Service 3 Course (ST-SERV3)

Short Description

This 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 focusing upon commissioning, maintenance and integration of system blocks into a program. 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

On completion of this course the participant will be able to:-

- Commission a simulated assembly line program.
- Eliminate software errors that lead to a CPU stop.
- Eliminate logical software errors.
- Integrate System Blocks into a program.
- Display Diagnostic Messages.
- Profibus DP error analysis using System blocks.
- Use WinCC Flexible for troubleshooting.
- Commission MM420 with Starter Software.

Target Group

This course is aimed at service/maintenance personnel who are interested in solving a variety of SIMATIC S7 tasks, and have attended the S7SERV1 and SERV2 courses.

Content

Hardware and Software Commissioning
Statistical Storage of Data on an HMI Touch Panel
Use of System Blocks including IEC Timers and Counters
Use of the Multi Instance model in Data Blocks
Analysing error messages using System blocks
Profibus DP slave diagnosis use integrated blocks
PLC - HMI co-ordination

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. The main emphasis of this course is error evaluation and analysis.

Prerequisites

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 and ST-SERV2 Courses.

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-SERV3](#)

Note

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 Siemens Industry Training on 0161 446 6111 or our website at www.siemens.co.uk/sitrain.

Type

Face-to-face training

Duration

5 days

Language

en

