

AUTOMATION ACADEMY

A u t o m a t i o n S y s t e m s T r a i n i n g S p e c i a l i s t s

Course Title: Siemens S5 Controller Maintenance Training Course

The Siemens S5 Controller training course has been designed to familiarise Electricians, Technicians and Maintenance Engineers with little or no experience of S5 systems to the different aspects associated with the operation and maintenance of Siemens S5 controllers and the Siemens Step 5 DOS programming software.

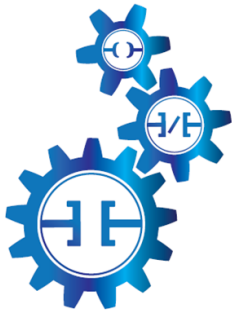
Where possible, application specific exercises, actual drawings and plant programs will be used to allow the students to gain the greatest possible benefit from the course.

Course Objectives:

- ☒ To introduce students to the concepts and operation of Siemens S5 Controllers.
- ☒ To recognise and understand the hardware associated with a Siemens S5 controller.
- ☒ To be able to understand the structure of the Step 5 project in DOS and to have the confidence to implement minor changes to the program.
- ☒ To be able to use the DOS programming software to connect online to monitor and use the cross reference to search through the Siemens S5 program to determine problems on plant.
- ☒ To be able to locate and replace faulty modules by understanding and using the system diagnostics available when an error is present.
- ☒ To be able to create a new backup copy of the Siemens S5 program and to be able to restore a program back into the controller from a backup copy.

Course Content:

The hardware architecture of the Siemens S5 range of controllers.
Understanding Siemens S5 I/O modules, their plant wiring and LED indicators.
Addresses used in the Siemens S5 range of controllers.
An overview of the Siemens S5 program block types.
First steps using the DOS Siemens Step 5 programming software.
Creating a training project to demonstrate plant programming examples.
Getting an online connection to the Siemens S5 controller.
Downloading blocks and full programs to the Siemens S5 controller.
Online monitoring and the XRF search facility within Step 5.
An overview of the programming methods (LAD, CSF and STL) used on plant programs.
A demonstration of simple program editing and modifying plant programs.
Reading the Siemens S5 controllers instruction set.



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Programming examples including relay, maths, move, compare and logic functions.
Using and creating program documentation.
Using program documentation for fault finding purposes.
Analogue modules and analogue signal processing.
Diagnostic buffer information and module information used for fault finding.
Understanding the ISTACK and BSTACK cpu error codes.

Customised training included in the course cost.

As part of this training course we will include custom application exercises for your own plant and processes, this value added option creates immediate payback for students on plant. It will have the benefit of the students becoming familiar with key areas of your PLC project(s) during the training course. This option does require the supply of your plant drawing and program listings at least 2 weeks prior to the course start date.

Course Duration: 5 Days

Documentation: Siemens S5 Programming and Maintenance Training Manual.

Equipment per student: Siemens S5 controller
Programming laptop
Plant simulator

Web link: [Siemens S5 Controller Maintenance Training Course](#)