

[Siemens S5 to S7 Basic](#)

Downloaded on Wednesday 8th February 2012

|                          |                                       |
|--------------------------|---------------------------------------|
| <b>Software</b>          | Simatic Manager                       |
| <b>Duration</b>          | 3 Days                                |
| <b>PLC-Type</b>          | Siemens S5 PLC to S7                  |
| <b>Pre-Requisites</b>    | Basic Understanding of Siemens S5 PLC |
| <b>Maximum Delegates</b> | 6                                     |

### Brief Description

- \* Understand the differences between S5 and S7
- \* Be able to recognise S7 hardware and be able to replace modules when a fault occurs.
- \* Be able to operate the Step7 software to make it perform certain tasks.
- \* Understand basic S7 instruction set and be able to make minor modifications to software.
- \* Be able to backup and restore a PLC program when required.
- \* Be able to perform basic system diagnostics when a problem occurs.

### Course Documentation

### Course Content

- \* Overview of S7 Family and Hardware
- \* Basic Hardware
- \* Fault Finding (Practical Exercise)
- \* Theory of Operation
- \* I/O Addressing
- \* Numbering Systems
- \* PC to PLC Communications (Practical Exercise)
- \* Introduction to S7 Programming Software
- \* Setting up a project (Practical Exercise)
- \* Block Types (OB, FC, FB, DB etc.)
- \* Program Structure
- \* Program Representation (LAD, CSF, STL)
- \* Uploading and Downloading Programs (Practical Exercise)
- \* Basic Instruction Set
- \* Monitoring a Program Online / Block Status (Practical Exercise)
- \* Status Variables (Practical Exercise)
- \* Search and Cross Reference (Practical Exercise)
- \* Software Fault Finding (Practical Exercise)
- \* Diagnostics Functions
- \* Force Functions
- \* Program Documentation (Comments/Symbols/Printouts)
- \* Common functions in Statement List (STL)

## Equipment

- \* S7 300 PLC
- \* PC or Laptop
- \* Simulator

*Solutions, Not Courses.*