

## S7 Programming Part 1 (ST-7PRO1)

---

### Short Description

---

S7 Programming Part 1

### Objectives

---

#### Aims and Objectives

This course is directed at users with engineering experience in the fields of configuring, design & commissioning of SIMATIC S7 programmable controllers. The course provides an optimal entry level to the product-specific & in depth supplementary courses.

### Content

---

The SIMATIC S7 family.  
Programming devices.  
The SIMATIC Manager & customizing options.  
Configuration & addressing of modules.  
CPU properties, symbols tables.  
Creating projects in LAD/STL/FBD.  
Cyclic program execution.  
Basic functions & jumps.  
Number formats, Timers & Counters.  
Data handling including arrays & structures.  
Functions & Function Blocks with assignable parameters.  
Multiple instance Model.  
Diagnostics with B, I, L stacks.  
Monitor/modify variables & debugging.  
Testing program execution using breakpoints.  
OB's & startup considerations.  
Analog Value processing.  
Documenting, Saving, Archiving.  
Communication via MPI GD table & subnets.  
Discussion of configuring Multi-computer Operation.  
Totally Integrated Automation principles.  
▪ S7-GGRAPH, S7-HIGGRAPH & S7-SCL high-level languages discussion.

### Prerequisites

---

Programmers and System integrators involved with SIMATIC 7 programmable controllers.

### Type

---

Face-to-face training

### Duration

---

5 days

### Language

---

en

### Fee

---

26,187 ZAR