

Siemens Step 7 1200/1500 via TIA Portal

Level (3)

Course Description

This training course provides you the programming of the Sematic Manager using the high-level language SCL, learn more about multi-instance and direct / indirect addressing. Participants learn through exercises and theory how SCL is part of STEP7 and how the most common SCL instructions are used.

Target Audience

The course is primarily aimed at those who have to project, program or commission a TIA Portal S7 system, where the program is written in whole or in part in the high-level language SCL (Structured Control Language).

Pre-requisites

- Basic computer skills with Windows 7 very helpful.
- Few C++ experience or knowledge.

Duration

- **Class room:** 5 days, 6 hours/day.
- **On line:** 10 days, 3 hours/day.

Course Outline

- Review on data blocks.
- Multi-instance data block,
- Direct addressing,
- Indirect addressing,
- Installing the SCL Software,
- General Introduction to Basic SCL Terms,
- Structure of an SCL source file,
- Programming with SCL,
- Data types of SCL,
- Declaring local variables and block parameters,
- Declaring global data,
- Expressions, operators and addresses,
- Control statements,
- Calling functions and function blocks,
- Counters and timers,
- SCL standard functions,
- Function call interface.

Course Agenda

Day 1	<ul style="list-style-type: none"> • Review on data blocks. • Multi-instance data block, • Direct addressing, • Indirect addressing,
Day 2	<ul style="list-style-type: none"> • Installing the SCL Software, • General Introduction to Basic SCL Terms, • Structure of an SCL source file, • Programming with SCL,
Day 3	<ul style="list-style-type: none"> • Data types of SCL, • Declaring local variables and block parameters, • Declaring global data, • Expressions, operators and addresses,
Day 4	<ul style="list-style-type: none"> • Control statements, • Calling functions and function blocks. • Counters
Day 5	<ul style="list-style-type: none"> • Timers, • SCL standard functions, • Function call interface. • Show how we apply on SIMATIC Manager.