

## On line-Training Programmazione SCL con TIA Portal (TIA-SCL)

### Short Description

The Totally Integrated Automation Portal (TIA Portal) provides the working environment for end-to-end engineering with SIMATIC STEP 7 and SIMATIC WinCC. Select this course if you want to program SIMATIC S7-1500 using a high-level programming language. Starting from simple examples up to the more complex ones, we will show you the advantages offered by a high-level programming language. The course aims to inform participants about the basis of the language and performance scope of the Structured Control Language (SCL) development environment. During the training course, you will create your own basic SCL programs, commission, and test them. You will also be able to perform diagnostics in SCL blocks.

### Objectives

After attending the course, you can:

- Read, understand, expand, test and commission basic programs written in SCL
- Create, commission and test complex programs in SCL
- Reduce the time spent creating programs for basic applications and reduce the maintenance of basic programs compared to using a statement list (STL/AWL) as well as LAD/KOP

### Target Group

Programmers  
Commissioning engineers  
Configuration engineers  
Maintenance engineer  
Maintenance personnel  
Service personnel

### Content

- Fundamentals of the SCL structured control language
- SCL editor
- Structures of the SCL program
- Variable declaration
- Syntax of main PLC functions (query, assignment)
- Mathematical operations in SCL
- Control operations (IF, FOR, WHILE, REPEAT, ...)
- Compilation and testing
- Debugging environment

The theoretical knowledge will be deepened with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-1500 automation system and a conveyor model.

### Prerequisites

S71500S1 or S71500P1 courses or equivalent basic knowledge of automation systems.

### Note

In this course, the SIMATIC S7-1500 automation system and the SIMATIC STEP 7 (TIA Portal) software are used; SCL course is available for the SIMATIC STEP 7 V5.x software.

### Type

Online-Training

### Duration

12 hours

### Language

it