# **SIEMENS**

## Online-utbildning Simatic Programmering 1 med S7-SCL i TIA Portal (TIA-SCL1)

#### **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. Using simple examples, 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

Following the course, you will be able to:

- Read, understand, expand, test and commission basic programs written in a high-level programming language (SCL).
- Reduce the time spent creating programs for basic applications and reduce the maintenance of basic programs compared to using a Statement List (STL).

You can deepen your theoretical knowledge with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-1500 automation system, ET 200SP distributed I/O, Touchpanel TP700, drive SINAMICS G120 and a belt model.

#### Target Group

Programmers Commissioning engineers Configuration engineers Maintenance engineer Maintenance personnel Service personnel

#### Content

Basics of the SCL programming language SCL editor Data types SCL instructions Control structures Implicit & explicit conversions Calling and formulating functions and function blocks in SCL Program draft in SCL Working with arrays Working with tags and symbolic block names Introduction to the basic SCL command set Creating, commissioning and testing your own SCL programs Reinforcement of the content using practical exercises on the SIMATIC S7-1500 system model

### Prerequisites

Knowledge of SIMATIC STEP 7 based on TIA Portal corresponding to TIA-SYSUP, TIA-SERV2 or TIA-PRO1. You can use the available online entry test to ensure that the selected course corresponds to your level of competence.

#### Note

In this course you will work with the SIMATIC STEP 7 software based on TIA Portal.

Туре	
Online-Training	
Duration	
3 days	
Language	
sv	
Fee	
18,600 SEK	