

Online-Training SIMATIC Programming 1 with S7-SCL in the TIA Portal (TIA-SCL1)

Short Description

In order to provide you with the best possible support and training in your personal learning environment (own office/home office), we have implemented selected courses as digital online training for you. We provide you with live theory lectures from our experts, which convey the course content described in the learning objectives in a practical and comprehensive manner, utilising our virtual exercise environment for practical exercises. In our virtual classroom, our expert is also available to you at any time during your individual practical exercises for in-depth questions and technical discussions.

Objectives

The Totally Integrated Automation Portal (TIA Portal) provides the working environment for end-to-end engineering with SIMATIC STEP 7 and SIMATIC WinCC.

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).

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.

Note

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

To take part in this course you will require access to a PC/Laptop with capability to use the following software, microphone and speakers or headset, good Wi-Fi or cabled internet connection, an additional visual display unit, and also a separate device to access the pdf course notes:-

- MS Teams Tenant – required to facilitate instructor presentation and interaction via the Virtual Classroom.
 - Invitation to access the DI Virtual Lab (VLAB) – all TIA Portal software will be hosted in the Virtual environment.
- VLAB is a digital training and learning platform that provides expert knowledge content as courses that can be used for live hands-on learning experiences and better user experience. VLAB is a cloud-based platform to provide any kind of hardware/software environment.

Host System Requirements

The following are the minimum system requirements that must be set up to work with VLAB.

- PC with internet access and a minimum data transfer rate of 15 Mbit/s.

Note: It is recommended to set up screen with a resolution of 1920*1080 pixels (full HD) to display the course document material and environment system in parallel.

If required, you can also use two screens.

- Firewall must not block access to VLAB.

Note: Your firewall must allow Websockets (wss:// connections over TCP and HTTPS over port 443).

- HTML5-capable web browser (such as Chrome, Safari, or Firefox).

- Siemens login credentials for both internal employees and external participants.

Again, as there will be at least two active sessions of software being utilised on this course, you will find it convenient to connect an additional external monitor to you PC/Laptop. The second device could be used to host the pdf course files.

Type

Online-Training

Duration

3 days

Language

en

Fee

2,000 GBP