SIEMENS

Online-Training - SIMATIC Programmieren 1 mit SCL in 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 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.

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 trainings 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, utilizing 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

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 will deepen your theoretical knowledge through numerous practice-oriented exercises in our virtual exercise environment on a TIA plant 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
Consolidation of the content through practice-oriented exercises in the virtual exercise environment

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.

- Online Assessment Test

- Technical requirements > VLab

Note

In this course you will work with the SIMATIC STEP 7 software based on TIA Portal.
Choose the TIA-PROEXP if you are deeper Want to get started with SCL programming and develop into an expert for SIMATIC S7-1500.

Type

Online-Training

Duration

3 days

Language

de