SIEMENS

# Online Training - SIMATIC Programming 2 with SCL in TIA Portal (TIA-SCL2)

## Krátký popis

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 online training if you want to program SIMATIC S7 using a high-level programming language. Using complex examples, we will show you the advantages offered by a high-level programming language. The course aims to inform participants about the complete language and performance scope of the Structured Control Language (SCL) development environment. During the training, you will create your own SCL programs, commission and test them.

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.

**The course has been innovated and renamed, please follow the link to the new course:**
TIA-PROEXP

## Cíle školení

Following the course, you will be able to:
- Significantly reduce the amount of time spent creating and maintaining programs through the use of a high-level programming language (SCL) instead of using a Statement List (STL) as well as LAD/FBD (ladder logic/function block diagram)
- Create, commission and test complex programs in SCL

You will deepen your theoretical knowledge through numerous practice-oriented exercises in our virtual exercise environment on a TIA plant model. This consists of a SIMATIC S7-1500 automation system,

## Cílová skupina

Programmers
Commissioning engineers
Configuration engineers
Maintenance engineer
Service personnel

## Obsah školení

Complex data types
Error handling in the block
Handling of SCL sources
Create SCL blocks for optimized performance
Create blocks that are compatible with libraries
Working with array DBs
Working with multi-instance arrays in SCL
Working with tags and symbolic block names
Creating enclosed functions and function blocks in SCL
Introduction to the extended SCL command set
Strings and string processing in SCL
Use of the data types DB-ANY, ARRAY[*] & VARIANT in SCL
Universal block creation using indirect addressing with the help of the VARIANT data type
Creating, commissioning and testing your own SCL programs
Consolidation of the content through practice-oriented exercises in the virtual exercise environment

Included in the course price: Free access to the digital learning platform SITRAIN access – starting one week before the start of the course until two weeks after the end of the course. Here you will find web-based trainings on
TIA Portal - Complex data types and addressing, and many more. With the Learning Membership, you can deepen or repeat the content of this Learning Event as well as continue your education on other interesting topics.

## Vstupní požadavky na úastníka

Knowledge of SIMATIC S7 based on the TIA Portal corresponding to TIA-SCL1 or extensive experience with related high-level languages such as Pascal, C or Basic. For the latter, experience with SIMATIC STEP 7 based on TIA Portal corresponding to TIA-SYSUP or TIA-PRO2 is mandatory. You must pass the available online entry test in order to register for this course. If you do not pass the test, we recommend attending TIA-SCL1 beforehand.

- Online Assessment Test
- Technical requirements > VLab

## Poznámky

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

The Learning Membership starts 7 days before the start of the course and ends 14 days after the end of the course. During this period, you have access to all available web-based trainings.

**Typ školení**

Webové školení

**Trvání**

2 dny

**Jazyk**

en

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