SIEMENS

Learning Journey - TIA Portal Programming Expert (TIA-PROEXP-LJ)

Short Description

Choose this course if you want to become a SIMATIC S7-1500 expert using a higher level programming language (SCL). You expand your knowledge of the runtime and memory-optimized creation of standardized building blocks for a corporate library. Using a practice-oriented exercise environment with a virtual model of a manufacturing plant, you will deepen your knowledge of the higher programming language.

An optimal mix of guided live modules (online) and self-learning modules will provide you with all of the content imperative for your work and sustainable learning success. Various practical tasks in our virtual exercise environment throughout the learning journey help you to prepare for practical application. The learning journey provides curated on-demand content to support you in your own personal practice transfer..

More information on learning journeys

Objectives

After this learning journey you will be able to ...
- Indirect addressing of optimized data
- Programming of reusable STEP 7 blocks based on IEC 61131-3.
- Create versioning of blocks and user libraries
- Program STEP 7 blocks with program-technical error handling and evaluation
- Develop and implement in-house standards

You will deepen your theoretical knowledge through numerous practice-oriented exercises in our virtual learning environment. This consists of a SIMATIC S7-1500 and a virtual model of a production plant.

Target Group

Programmers

Content

The Learning Journey TIA-PROEXP-LJ (Level: Expert) consists of:
- 6 live modules (3,5 hours each)
- 9 self-study modules (approx. 7 hours); In addition to the live modules, you should plan about 1 hour of self-study time per day as well as dial-in and follow-up times.
- On-demand themed content
- Individual transfer support in the form of a 1:1 coaching (1 hour)

A learning membership to work through the self-learning modules and access to on-demand content is included for 1 year.

topics
- Reusable building blocks with optimized data access
- Indirect addressing of complex data structures by using the parameter types ARRAY*, VARIANT and REF_TO
- Versioning using typing in the project and global library
- Block creation according to the IEC 61131-3
- Use of ProDiag to generate block messages
- Deepening of the SCL programming language
- Deepening of the content through practice-oriented exercises on the SIMATIC S7-1500 and a virtual model of a production plant.

Prerequisites

SIMATIC S7 knowledge corresponding to TIA-PRO2-LJ, TIA-PRO2 or TIA-SYSUP and practical experience in using the knowledge.
Basic knowledge of the SCL programming language according to TIA-SCL1 is mandatory.
You can use the available online entry test to ensure that the selected course matches your area of expertise.

- Online Assessment Test
- Technical requirements > VLab

Note

Participation in the learning journey is personal and non-transferable.

Type

Learning Journey

Duration

24 hours

Language

en