SIEMENS

SIMATIC Programming 2 in TIA Portal (TIA-PRO2)

Descrição resumida

The Totally Integrated Automation Portal (TIA Portal) forms the work environment for integrated engineering with SIMATIC STEP 7 and SIMATIC WinCC. The second part of the SIMATIC TIA Portal programming training is based on the knowledge of the TIA Portal gained in the SIMATIC S7 TIA Portal programming 1 course, including STEP 7, SIMATIC S7, HMI and PROFINET IO. You will expand your knowledge of complex operations and you get an introduction in the programming language Structured Control Language (SCL). Along with analog value processing and data administration with complex data types, the evaluation and handling of program-related errors are also considered. Thanks to the knowledge imparted, you will gain new impetus and ideas for efficient PLC programming.

Objetivos

After attending the course, you can do the following:
- Understand the interaction of TIA components
- Apply classical program development methods
- Solve comprehensive programming tasks
- structure programs and using software units in the TIA Portal
- use complex / PLC data types
- Implement data administration (arithmetic and management functions) with the SIMATIC S7 automation system
- Apply system blocks and versioned blocks
- Program classical software error handling and evaluation
- Operator control and monitoring system (WinCC Unified Panel)
- Configure TIA system comprising SIMATIC S7, HMI and PROFINET IO

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, WinCC Unified Panel and a virtual model.

Grupo alvo

Programmers
Commissioning engineers
Engineering personnel

Conteúdo

TTools for program creation (e.g. structograms)
Analog value processing
Functions, function blocks, and multi-instances using the IEC-compliant timer/counter as an example (International Electro technical Commission)
Ways to structure programs and using software units in the TIA Portal
Working with complex data
Classical software error handling and evaluation with error organization blocks (OBs)
Evaluation of diagnostic data
Integrating WinCC Unified Panel
Working with Structured Control Language (SCL)
Deeper understanding of contents through practical exercises in the virtual learning environment of a production plant

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 - SW Units , 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.

Pré-requisitos

SIMATIC S7 knowledge corresponding to TIA-PRO1 and practical experience in using the knowledge
You can use the available online entry test to ensure that the selected course matches your area of expertise.

- Online Assessment Test

Observações

In this course you will work with SIMATIC S7-1500 and software SIMATIC STEP 7 based on TIA Portal.
This is the second of three courses that prepare you for certification as a "Siemens Certified Programmer, based on the TIA Portal". The examination is a "SITRAIN Certification Program" module.

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.

Tipo

Treinamento presencial

Duração

5 dias

Idioma

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