SIEMENS

Online-Training - SIMATIC - Motion Control in TIA Portal (TIA-MC)

Краткое описание

In order to be able to provide you with the best possible support and training in your personal learning environment (own office/home office), we have implemented selected training courses for you in the form of digital online training.
With the help of our virtual learning environment for practical exercises, we provide you with live theory lectures from our expert speakers, which convey the training content described in the learning objectives in a practical and comprehensive manner. In our virtual classroom, our subject specialist is also available to you at any time during your individual practical exercises for in-depth questions and technical discussions.
In this course, you will learn to program the motion control functions integrated in the SIMATIC S7-1500 or S7-1200 controllers using TIA Portal. Core topics are the technology objects speed axis, positioning axis and synchronous axis.

Цели

You will program the SIMATIC S7-1500 or S7-1200 controllers in TIA Portal. You will be able to precisely control the motion of axes with the integrated motion control functions.
In this technology course, you will learn step by step the benefits and the use of these functions. After each learning step, you will deepen your knowledge with hands-on programming.
After attending the course you will understand the interaction of the technological functions. You will be able to select and configure appropriate technology objects, such as speed axis, positioning axis and synchronous axis, and integrate them in your program.
You will deepen your theoretical knowledge through numerous practice-oriented exercises in our virtual learning environment with SIMATIC S7-1500.

Целевая группа

Programmer
Commissioning engineers
Engineering personnel

Содержание

Overview of the S7-1500T Technology-CPU, basics of Motion Control
SpeedAxis and PositioningAxis technology objects
Programming with Motion Control instructions
Homing and traversing movements
Closed-loop control and optimization
Error messages and diagnostics
Output cam and measuring input technology object
SynchronousAxis technology object
Absolute and relative gearing
Cam disc technology object
Kinematics technology object
Interplay between Motion Control and Safety Integrated
Practical exercises on training devices with SIMATIC S7-1500(T) and SINAMICS drives

Требования к участнику

- Knowledge of programming in the TIA Portal (equivalent to knowledge after completion of the TIA-PR01 or TIA-SERV2 course)
- Technical requirements > V Lab

Примечания

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 SINAMICS Converters as well as other topics such as Industrial Automation Systems SIMATIC 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.

Тип

Онлайн тренинг

Продолжительность

5 Дн.

Язык

en

copyright by Siemens AG 2026