

Motion Control 2 in the TIA-Portal (TIA-MC2)

Short Description

In this course, you will learn to program the motion control functions of the technology controller SIMATIC S7-1500T using TIA Portal. Core topics are gearing, cam discs and Safety Integrated.

[Also available as online training](#)

Objectives

You can already parameterize the integrated Motion Control functions of the SIMATIC S7-1500 and integrate them into your program. Using the technology CPU, you will extend the applications with absolute synchronous axes and camming. 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 completing the course, you will understand how camming works and be able to efficiently assign parameters for technology objects.

Target Group

Programmers
Commissioning engineers
Engineering personnel

Content

Overview of S7-1500T Technology CPU
Absolute and relative gearing
Strategies for synchronization and desynchronization
Cam disc creation using the graphical cam editor and during runtime
Closed-loop control and optimization
Interplay between Motion Control and Safety Integrated
Cam disc creation using libraries
Practical exercises on training devices with SIMATIC S7-1500T and SINAMICS drives

Prerequisites

Experience with programming motion control functions in SIMATIC TIA Portal corresponding to the course TIA-MC1.

Note

The motion control function of standard CPUs is seamlessly extended with technology CPUs. In the TIA-MC2 course, you work with the T-CPU and learn the benefits of functions such as absolute synchronous operation and camming.

Type

Face-to-face training

Duration

2 days

Language

en