SIEMENS

SIMATIC S7-1500/1500T Motion Control in the TIA Portal / SIMATIC S7-1500/1500T 运动控制系统调试课程（基于TIA博途）(A7824)

Objectives

You will program the SIMATIC S7-1500 or S7-1200 controllers in the 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, and understand how camming works. You will be able to select and configure appropriate technology objects, such as speed axis, positioning axis and synchronous axis, be able to efficiently assign parameters for cam technology objects, and integrate them in your program.

Target Group

Programmers, Commissioning engineers, Engineering personnel

Content

- Basics of motion control
- SpeedAxis technology object
- PositioningAxis technology object
- Homing and traversing movements
- Programming with PLCopen
- Error messages and diagnostics
- Communication and libraries
- Output cam and measuring input
- Closed-loop control and optimization
- SynchronousAxis technology object
- 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
- Camming as part of the Motion Control program
- Interplay between S7-1500T and Safety Integrated
- Cam disc creation using libraries
- Practical exercises on training devices with SIMATIC S7-1500T and SINAMICS drives

Prerequisites

Complete A7811 or A7816 course

Type

Face-to-face training

Duration

5 days

Language

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Fee

7,000 CNY