SIEMENS

SIMATIC S7-1500 Advanced Programming Course (based on TIA Portal) / SIMATIC S7-1500 高级编程课程(基于TIA博途) (A7813)

Objectives

In this course, you will expand your knowledge regarding the reusability of STEP 7 blocks and their storage in user libraries. You will get to know more complex functions of Structured Control Language (SCL). You get an introduction in ProDiag. You will create user-specific blocks for reporting, handling and analyzing program errors. To save the machine data, you will learn how to manage recipes in SIMATIC HMI (operator control and monitoring system). You will set up communication between SIMATIC CPUs based on Industrial Ethernet. The comprehensive knowledge that is imparted to you will allow you to shorten configuration & programming times, and to react flexibly to the need to optimize your plant.

Target Group

programmers, commissioning engineers, engineering personnel

Content

- Program design methods
- Functions, function blocks, and multi-instances
- Creation and application of complex data structures
- Introduction to S7-SCL
- Reusable blocks and optimized data access
- Block versioning in Project and Global Libraries
- Indirect addressing
- Administration of a recipe database in the operator control and monitoring system (HMI)
- Creating alarms (with Program_Alarm and in the diagnostic buffer) with an HMI device ProDiag
- CPU-CPU communication via Industrial Ethernet
- Integrating and Commissioning a Drive with Startdrive
- Working with Technology Objects
- Deeper understanding of contents through practical exercises on SIMATIC S7-1500 system model

Prerequisites

Complete A7811 or A7816 course

Type

Face-to-face training

Duration

8 days

Language

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