



SIMATIC S7 Advanced Programming Course (based on STEP7 V5.x) / SIMATIC S7 高级编程课程 (基于STEP7 V5.x) (A7113)

Objectives

This course aimed at users with engineering tasks who want to extend their knowledge from the previous programming courses and learn the complex programming possibilities of SIMATIC S7. They use WinCC flexible for recipe management and start up distributed I/O with PROFINET IO. What you learn about Totally Integrated Automation (TIA) will teach you to take a holistic view of your plant and help you to understand the relationship between the individual components. On completion of the course, you will be able to structure and create complex S7 programs. Using the example of a machining line, you will learn how to create re-usable blocks that can be integrated into any programs. The plant configuring overhead is reduced thanks to the standardization of the created programs and the engineering phase is thus shortened. You also gain new impetus and ideas for production optimization thanks to your comprehensive understanding of TIA. You will reinforce your theoretical knowledge with numerous practical exercises on a TIA plant model.

Target Group

programmers, commissioning engineers, configuring engineers

Content

- Aids for program creation (e.g. structure program)
- Register related instructions
- Functions, function blocks and multi-instances
- Creation and use of complex data structures
- Indirect addressing
- Using library functions
- Error handling with error organization blocks
- Evaluating diagnostics data
- Troubleshooting and messages with an HMI device
- Management of a recipe database with WinCC flexible
- S7 communication (global data, SFB/SFC communication)
- Introduction to Industrial Ethernet
- Use of PROFINET IO with SIMATIC S7
- Integration of a drive via fieldbus
- Monitoring and controlling the drive with the "Starter" software

Prerequisites

Completion of course A7111

Type

Face-to-face training

Duration

8 days

Language

zh

Fee

10,000 CNY