

SIMATIC S7 Programming 1 (ST-PRO1)

Short Description

You will reinforce your theoretical knowledge with practical exercises on a TIA plant model. This consists of an S7-300 programmable controller, ET200S distributed I/O, TP 177B Touch Panel, Micromaster 420 drive and a conveyor belt model.

Objectives

This course is aimed at users with engineering tasks who want a compact introduction to programming SIMATIC S7. You will get an overview of human machine interfacing, PROFIBUS DP and the integration of drives. What you learn about Totally Integrated Automation (TIA) will teach you to take a holistic view of your plant and to understand the relationships between the individual components. On completion of the course, you will thus be able not only to structure, create and modify simple SIMATIC S7 programs, but also to make optimal use of the engineering phase through more efficient working with STEP 7.

Target Group

Programmers
Commissioning engineers
Engineering personnel

Content

system overview of the SIMATIC world and essential performance features of the SIMATIC system family
Components of the STEP7 Basic Package and its use
STEP7 basic operations
STEP7 block types and program structuring
Programming of parameterizable blocks
Data management with data blocks
Programming of organization blocks
Test tools for system information, troubleshooting and diagnostics
Hardware configuration and parameterization of the S7-300 modules, a PROFIBUS DP slave (ET-200S), a Touch Panel (TP 177B) and a drive (MM420)
Program documentation and backup
Deeper understanding of contents through practical exercises on the SIMATIC S7-300 system model

Prerequisites

Basic knowledge of automation
You can use the online tests to find out whether you have sufficient prior knowledge to participate effectively in the course you wish to attend.
This blended-learning course combines Web-based training (WBT) on the Internet with a 5-day attendance course: To prepare you for the attendance component, you will receive the WBT "PLC Knowledge for First-Time Users". For an optimized post processing of the attendance course you get the WBT "RPOFIBUS". By using these learning media, you increase your personal learning success in the attendance course.

Note

In this course you will work with the SIMATIC STEP 7 V5.x software.
This is the first of three courses which will lead you to the exam for the "Siemens Certified Programmer (CP-FAP)". The exams are modules of the "SITRAIN Certification Program".

Type

Face-to-face training

Duration

5 days

Language

en