

# SIMATIC S7 Programming 2 (ST-PRO2)

#### **Short Description**

You will reinforce your theoretical knowledge with numerous 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 model.

#### **Objectives**

This course is aimed at users with engineering tasks who want to become familiar with the expanded programming facilities of SIMATIC S7. You 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 help you to understand the relationship between the individual components. We will teach you how to structure and create extensive S7 programs. This enables you on completion of the course to work efficiently with STEP 7, shorten the engineering phase and minimize fault sources through optimal configuration of your plant. The comprehensive understanding you gain will give you new impetus and ideas for production optimization.

### **Target Group**

Programmers Commissioning engineers Engineering personnel

#### Content

Aids for program creation (e.g. structure program)

Functions, function blocks and multi-instances (using the example of the IEC timers/counters)

Jump commands and accumulator operations

Indirect addressing

Integration of a drive (MM420) via PROFIBUS DP

Monitoring and controlling the drive with the "Starter" software

Error handling with error organization blocks

Evaluating diagnostics data

Troubleshooting and messages with an HMI device (TP 177B)

Analog value processing

Deeper understanding of contents through practical exercises on the SIMATIC S7-300 system model

### **Prerequisites**

SIMATIC S7 knowledge according to ST-PRO1 and practical experience in using the knowledge

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.

Online Assessment Test

#### Note

In this course you will work with the SIMATIC STEP 7 V5.x software.

## Туре

Face-to-face training

### **Duration**

4.5 days

### Language

en