

## Siemens SIMATIC S7 TIA System Course [English] (TIA-PRO1EN)

### Short Description

In this course you will learn to use the maintenance, test and diagnostic tools of the STEP 7 PLC programs. With the explained functions you are able to write, change, load into the PLC and test programs. All subjects are tested with practical exercises using a SIMATIC S7-1500, an HMI Panel and conveyor model.

### Objectives

**Combined course SIMATIC S7 Systemcourse 1A+1B TIA-Portal in English.  
Only for Groups.**

#### SIMATIC S7 Systemcourse 1A

In this course you will learn the basics of the Automating system SIMATIC S7 and the Engineering software STEP7, WinCC and TIA portal. All subjects are tested with practical exercises using a SIMATIC S7-1500, an HMI Panel and conveyor model. After the course you are able to commission a SIMATIC S7 system and test the programs.

#### SIMATIC S7 Systemcourse 1B

In this course you will learn to use the maintenance, test and diagnostic tools of the STEP 7 PLC programs. With the explained functions you are able to write, change, load into the PLC and test programs. All subjects are tested with practical exercises using a SIMATIC S7-1500, an HMI Panel and conveyor model.

### Target Group

Programmers, Commissioning and maintenance personal

### Content

#### SIMATIC S7 Systemcourse 1A

The subjects is this course are:

- Introduction SIMATIC S7 and SIMATIC STEP7 TIA portal
- Configuration of systems and networks to access the PLC via the PC
- Creating TAG lists
- Structuring the program using the correct program blocks
- Using Binary instructions to create programs
- Programming a Human Machine Interface (HMI)
- Timers and Counters
- functions of the device configuration
- test tools for the program

#### SIMATIC S7 Systemcourse 1B

The subjects is this course are:

- Commissioning remote I/O with Profibus DP and Profinet IO
- data types and related function
- programming parameter assignable Functions (FC) and using temporary variables
- programming parameter assignable Function blocks (FB) and using static variables
- data blocks
- using analog in- and output signals
- test and diagnostic tools for soft- and hardware
- Programming a Human Machine Interface (HMI)
- introduction programming language SCL
- introduction programming language GRAPH

### Prerequisites

Basic knowledge of industrial automation.

### Note

Exercises are tested with a S7-1500 system. A few days before the start of the course you will get access to a WBT about Basic PLC functionality.

### Type

Face-to-face training

### Duration

5 days

### Language

en

### Fee

2,500 EUR