

## SIMATIC S7 Programmazione 2 (ST-PRO2)

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### Short Description

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This course is the second in a three part series which increases skills with SIMATIC STEP 7 V5.x. You will learn to leverage the power of SIMATIC software with advanced structured programming techniques. A systems approach to the integration of efficiently programming the SIMATIC S7-300/400 PLCs, plus connectivity and functionality of a SIMATIC HMI and SINAMICS drive are the central focus of this course. Emphasis on Statement List (AWL) programming for both direct and indirect addressing is an integral part of the course.

### Objectives

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After attending the course, you can do the following:

- Leverage the power of Block and Function libraries
- Use STL for advanced program development
- Employ indirect addressing in a program
- Incorporate System Functions (SFC) in a program
- Integrate a SIMATIC HMI and drive SINAMICS with the PLC
- Use Instance and Multi-Instance data Blocks
- Use interrupt-driven and error processing program execution blocks.
- Leverage SIMATIC STEP 7 advanced diagnostics

### Target Group

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Programmers  
Commissioning engineers  
Engineering personnel

### Content

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- 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 via PROFIBUS DP
- Error handling with error organization blocks
- Evaluating diagnostics data
- Troubleshooting and messages with a SIMATIC HMI
- Analog value processing

Theoretical knowledge will be deepened with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-300 automation system, a SIMATIC HMI operator control and a conveyor model.

### Prerequisites

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PRO1 course or equivalent basic knowledge of automation systems.

### Note

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This course is also available as an evening course: PRO2/S.

In this course, the SIMATIC S7-300 automation system and the SIMATIC STEP 7 V5.x software are used. Redundant systems SIMATIC S7-400H are not covered here.

### Type

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Face-to-face training

### Duration

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5 days

### Language

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