

## Programmazione SCL con SIMATIC STEP 7 V5.x (ST-7SCL)

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### Short Description

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This course is aimed at you if you want to program SIMATIC S7-300/400 with the help of a higher-level programming language. Using simple examples, we explain the benefits offered by a higher-level programming language. The aim of the course is to teach you the entire language and performance scope of the SCL development environment. In particular, SCL is the ideal supplement for configuring engineers who want to expand their S7 block range themselves. On completion of the course, you will be able to use high-level languages to reduce the overhead for program creation dramatically when compared with AWL.

### Objectives

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After attending the course, you can:

- Efficiently use the SIMATIC Manager program editor tools
- Build and modify SCL programs
- Use the SIMATIC STEP 7V5.x program monitor, diagnostics and troubleshooting tools
- Package an SCL program into a custom library block and use within a STEP 7 project
- Explore the SCL syntax requirements and the system debug functions

### Target Group

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Programmers  
Commissioning engineers  
Configuration engineers  
Maintenance engineer  
Maintenance personnel  
Service personnel

### Content

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- SCL editor
- Program design
- Data types, operations
- Formulating FBs, FCs, OBs, etc., in SCL
- Using variables with symbolic names
- Control structures: IF, FOR, WHILE, REPEAT, ...
- Creating, starting up, and testing your own SCL programs

The theoretical knowledge will be deepened with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-300 automation system and a conveyor model.

### Prerequisites

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SERV1 or PRO1 courses or equivalent basic knowledge of automation systems.

### Note

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In this course, the SIMATIC S7-300 automation system and the SIMATIC STEP 7 V5.x software are used; TIA-SCL course is available for the SIMATIC STEP 7 (TIA Portal) software.

### Type

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Face-to-face training

### Duration

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2 days

### Language

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