

## SIEMENS SIMATIC S7 PROGRAMMING – PART 1

### COURSE SPECIFICATIONS

**Course Code:** ST-7PRO1

**Course Length:** 5 Days

### PRE-REQUISITES

Successful completion of ST-PLCINTRO. Programmers and System integrators involved with SIMATIC S7 programmable controllers.

### COURSE OBJECTIVES

This course is directed at users with engineering experience in the fields of configuring, designing, and commissioning of SIMATIC S7 programmable controllers. The course provides an optimal entry level to the product-specific and in-depth supplementary courses.

### LEARNING OUTLINE

1. The SIMATIC S7 Family
2. Programming Devices
3. The SIMATIC Manager & Customizing Options
4. Configuration and Addressing of Modules
5. CPU Properties, Symbols Tables
6. Creating Projects in LAD/STL/FBD
7. Cyclic Program Execution
8. Basic Functions and Jumps
9. Number Formats, Timers & Counters
10. Data Handling Including Arrays and Structures
11. Functions and Function Blocks with Assignable Parameters
12. Multi Instance Model
13. Troubleshooting
14. Diagnostics with B, I, L Stacks
15. Monitor/Modify Variables and Debugging
16. Testing Program Execution Using Breakpoints
17. OB's and StartUp Considerations
18. Analog Value Processing
19. Documenting, Saving, Archiving
20. Communication Via MPI GD Table and Subnets
21. Discussion of Configuring Multi-Computer Operation
22. Totally Integrated Automation Principles
23. S7-GRAPH, S7-HIGRAPH and S7-SCL High-Level Languages Discussion

### CERTIFICATION

Successful participants will receive an **international Siemens certificate**. Siemens LTD is accredited by **merSETA** to fulfil the functions as contemplated in SAQA regulation 13 for the standards and qualification as detailed in the statement of accreditation.

### MERSETA TRAINING PROVIDER

Onetrust Training Solutions has received full accreditation as a **merSETA Training Provider**. (Certification number: 17-QA/ACC/2313/21.) We are in the process of extending our scope of accreditation for most of our individual training courses and skills programmes.

### CONTACT DETAILS

Further enquiries may be directed to:

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