

## SIMATIC S7-1500 Advanced Service Course (based on TIA Portal) / SIMATIC S7-1500 高级维护课程 (基于TIA 博途) (A7812)

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### Objectives

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In this course, you will expand your knowledge in terms of program troubleshooting and error handling and learn how to display these errors in an operator control and monitoring system. A HMI will be connected to the realtime process communication. You will set up communication between SIMATIC CPUs (based on Industrial Ethernet) to send process data and status information. You will work with Technology Objects. The basis for this is to also interpret and expand existing programs in the programming languages Ladder Diagram (LAD) / Function Block Diagram (FBD), Structured Control Language (SCL) and Structure Text Language (STL). Thanks to this comprehensive understanding, you gain new impetus and ideas to optimize your plant and can thus reduce or eliminate downtime in your entire plant.

### Target Group

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service personnel, maintenance personnel

### Content

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- Commissioning a TIA system with software troubleshooting and debugging
- Error analysis and handling per SIMATIC STEP 7 program:
  - Possible uses for error organization blocks
  - Reading out, evaluating, and display of diagnostic messages
- Diagnosis of errors in a PROFINET IO system with an HMI device
- Diagnosis of SIMATIC S7 system errors with an HMI device
- Configuration of CPU-CPU communication via Industrial Ethernet
- Working with Structure Text Language (STL)
- Deeper understanding of contents through practical exercises on SIMATIC S7-1500 system model

### Prerequisites

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Complete A7811 or A7816 course

### Type

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Face-to-face training

### Duration

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5 days

### Language

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en, zh

### Fee

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7,200 CNY