



## SIMATIC TIA Portal system retraining course for SIMATIC S7-1500 / SIMATIC S7-1500 与 TIA Portal (TIA 博途) 升级课程 (A7816)

### Objectives

The Totally Integrated Automation Portal (TIA Portal) forms the work environment for integrated engineering with all automation devices — controller, HMI and drives. In this course you will learn about the major differences between SIMATIC S7-300/400 and SIMATIC S7-1500, the engineering tools SIMATIC Manager and TIA Portal, as well as STEP 7 V5.x and STEP 7 based on TIA Portal. You will learn the possibilities of the configuration and the advanced programming of a SIMATIC S7-1500 automation system with the "TIA Portal" engineering platform. You can deepen your theoretical knowledge with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7-1500 automation system, ET200 distributed I/O, Touchpanel, drive, and a conveyor model. After attending the course, you can: Efficiently use the "TIA Portal" engineering platform; Configure and program components of the SIMATIC S7-1500 automation system with the TIA Portal; Perform a commissioning of TIA components.

### Target Group

programmers, commissioning engineers, configuring engineers, service personnel, operators, users, maintenance personnel

### Content

- Engineering tools TIA Portal components: SIMATIC STEP 7 and SIMATIC WinCC
- Introduction of the SIMATIC S7-1500 hardware
- Configuration of devices and networks of the SIMATIC S7 system family using SIMATIC S7-1500 as an example
- Working with the PLC Tag Table in TIA Portal
- Program blocks and editor
- Advanced programming possibilities of a SIMATIC S7-1500
- Troubleshooting with TIA Portal tools and the SIMATIC S7-1500 CPU display
- Presentation of the SIMATIC WinCC operator control and monitoring system
- Migration of a SIMATIC STEP 7 V5.x project to SIMATIC STEP 7 based on TIA Portal
- Integrating and Commissioning a Drive with Startdrive
- Introduction of S7-SCL
- Introduction of S7-Graph
- Deeper understanding of contents through practical exercises on the SIMATIC S7-1500 TIA system model

### Prerequisites

Basic knowledge of automation technology, S7-300/400 PLC programming

### Type

Face-to-face training

### Duration

5 days

### Language

en, zh

### Fee

7,800 CNY