

## **TIA-SAFETY – Commissioning, service and creation of systems of industrial safety on the basis of SIMATIC S7-300F/S7-400F controllers / К y p c TIA-SAFETY (TIA-SAFETY)**

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### **Short Description**

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The Totally Integrated Automation Portal (TIA Portal) forms the work environment for integrated engineering with SIMATIC STEP 7 and SIMATIC WinCC. In this course, you will learn about configuring, programming, starting up, diagnosing and troubleshooting of the failsafe CPUs of the SIMATIC S7 Safety PLC (no H systems) and the failsafe, distributed ET200 systems. After attending the course, you can do the following: starting up failsafe CPUs of the SIMATIC PLC programming of safety-related programs in the languages F-FBD and F-LAD diagnosing and troubleshooting of safety-related programs.

### **Target Group**

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Programmers  
Service personnel

### **Content**

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- Overview and guidelines
- AS S7 Safety (principle, system configuration and I/O)
- Configuring of the failsafe I/O with STEP 7 Safety Advanced
- Programming of a safety-related user program
- Failsafe communication PROFIsafe (CPU-CPU communication, master-slave communication)
- Diagnostics facilities (CPU diagnostics, I/O diagnostics, advanced diagnostics)
- Exercises for I/O configuration, communication, troubleshooting
- Programming examples (emergency stop, protective door, safety-related shutdown, passivation, special programming features)
- Deeper understanding of contents through practical exercises on the system SIMATIC S7-1500F

### **Prerequisites**

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Basic knowledge of SIMATIC S7 according to the courses TIA-SERV2 or TIA-PRO2

### **Note**

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In this course you will work with the SIMATIC STEP 7 software based on TIA Portal.

### **Type**

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Face-to-face training

### **Duration**

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4 days

### **Language**

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