

## Programming of safety related SIMATIC S7 controller via Distributed Safety (ST-PPDS)

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### Short Description

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In this course, you will learn about configuring, programming, starting up, diagnosing and troubleshooting of the fail-safe SIMATIC S7-300 controllers and the fail-safe, distributed ET 200 systems. The course provides an introduction to the creation of safety-related programs in the programming languages FBD and LAD. In practical exercises you will put your theoretical knowledge to use on a training system with the Distributed Safety software.

### Target Group

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- Programmers
- Commissioning engineers
- Engineering personnel

### Content

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- Overview and guidelines
- Fail-safe SIMATIC S7-300 controllers (principle, system configuration and I/O)
- Configuring of the failsafe I/O with Distributed Safety
- Programming of a safety-related user program
- Failsafe communication PROFIsafe (CPU-CPU 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 fail-safe controller SIMATIC S7-300

### Prerequisites

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Basic knowledge of SIMATIC S7 according to the course [ST-PRO1](#) or [ST-SERV1](#).  
Additionally an [online entrance test](#) is available for you. So you may assure that the course of your choice fits to your competences.

### Note

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In this course you will work with the SIMATIC STEP 7 V5.x software.

### Type

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Face-to-face training

### Duration

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3 days

### Language

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