

## Programming Fail-Safe Controllers with STEP 7 Safety in TIA Portal (Online Training) (TIA-SAFETY)

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### Short Description

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In this online training, you will learn about configuring, programming, commissioning, diagnosing and troubleshooting fail-safe SIMATIC controllers and fail-safe, distributed ET 200 systems. In our virtual exercise environment you will put your theoretical knowledge to use with the STEP 7 Safety software in TIA Portal.

### Objectives

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After attending the course, you can do the following:

- Commissioning fail-safe SIMATIC controllers
- Programming of safety-related programs in the languages FBD and LAD
- Diagnosing and troubleshooting of safety-related systems and programs

You will deepen your theoretical knowledge through numerous practice-oriented exercises in our virtual exercise environment.

### Target Group

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- Programmers
- Commissioning engineers
- Engineering personnel

### Content

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- Overview and guidelines
- Product overview and operating principle Safety Integrated
- Configuring of the fail-safe components with STEP 7 Safety in TIA Portal
- Programming of a safety program
- Programming tips according to [Programming Guideline Safety for SIMATIC S7-1200/1500](#)
- Diagnostics facilities (CPU diagnostics, I/O diagnostics, advanced diagnostics)

Included in the course price: Free access to the digital learning platform [SITRAIN access](#). Here you will find web-based trainings on [TIA Safety Integrated \(Curriculum\)](#) as well as other topics such as [TIA Portal - Diagnostics and Troubleshooting \(Curriculum\)](#) and many more. With the Learning Membership, you can deepen or repeat the content of this learning event as well as continue your education on other interesting topics.

### Prerequisites

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- Basic knowledge of SIMATIC S7 according to the course [TIA-PRO1](#) or [TIA-SERV1](#).
- [Technical requirements](#) > VLab

So you may assure that the course of your choice fits to your competences an [online entrance test](#) is available for you.

### Note

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In this course you will work with the SIMATIC STEP 7 Safety software in TIA Portal.

Additionally you have the opportunity to take an examination and receive certification on a separate date. You'll find further information and the registration at [CPT-TIASAF](#).

The Learning Membership starts 7 days before the start of the course and ends 14 days after the end of the course. During this period, you have access to all of the more than 480 web-based trainings available.

### Type

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Online-Training

### Duration

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3 days

### Language

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