

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

### Breve descripción

In this course, you will learn about configuring, programming, commissioning, diagnosing and troubleshooting fail-safe SIMATIC controllers and fail-safe, distributed ET 200 systems. In practical exercises you will put your theoretical knowledge to use on a training system with the STEP 7 Safety software in TIA Portal.

### Objetivos

After attending the course, you can do the following:

- you have an overview of the Machinery Directive and relevant standards,
- select fail-safe hardware and configure it according to your functional safety requirements,
- create high-performance and resilient safety programs with STEP 7 Safety in TIA Portal,
- verify safety programs,
- put safety systems into operation and
- diagnose and trouble-shoot safety systems quickly and efficiently.

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

### Dirigido a

- Programmers
- Commissioning engineers
- Engineering personnel

### Contenido

- 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](#)
- Fail-safe communication (CPU-CPU communication with couplers and I device)
- Diagnostics and error handling

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.

### Prerrequisitos

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

So you may assure that the course of your choice fits to your competences an [Online Assessment Test](#) is available for you.

### Nota

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 available web-based trainings.

### Modalidad

Curso presencial

### Duración

3 días

### Idioma

en