SIEMENS

Learning Journey - Programming Fail-Safe SIMATIC Controllers (TIA-SAFETY-LJ)

Short Description

On this learning journey, you will learn to configure and program fail-safe SIMATIC Controllers with TIA Portal.

An optimal mix of guided live modules (online) and self-learning modules will provide you with all of the content imperative for your work and sustainable learning success. Various practical tasks in our virtual exercise environment throughout the Learning Journey help you to prepare for practical application. The Learning Journey provides curated on-demand content to support you in your own personal practice transfer.

More information on Learning Journeys

Objectives

After this learning journey
- 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.

Target Group

- Programmers
- Commissioning engineers
- Engineering personnel

Content

This learning journey consists of:
- 8 live modules (3–5 hours each)
- 8 self-learning modules (approx. 10 hours)
- Curated on-demand content

A learning membership to work through the self-learning modules and access to on-demand content is included for 1 year.
The learning journey ends with the exam "Siemens Certified Automation Engineer for SIMATIC Safety – Configuration and Programming".

Topics
- Overview of directives & standards
- Overview of safety systems
- Sensor/actuator connection & hardware configuration
- Programming
- Optimization (performance & workflow)
- Fail-safe controller-controller communication
- Verification of the safety program
- Diagnostics & trouble-shooting

Prerequisites

- Basic knowledge of SIMATIC S7 according to the course TIA-PRO1 or TIA-SERV1.
- Technical requirements

Note

Course documentation: English
Self-study modules: English or German
This learning journey roughly corresponds to the content and objectives of the learning events TIA-SAFETY and CPT-TIASAF.
Participation in the Learning Journey is personal and non-transferable.

Type

Learning Journey

Duration

40 hours

Language

de, en, fr, nl