

## FS 132 | Functional Safety Engineer (TÜV Rheinland)

## TrainingFacts

### Presence Training

### Safety Instrumented Systems (SIS) Training of the TÜV Rheinland Functional Safety Program

International standards as IEC 61508 and IEC 61511 require your ability to demonstrate competency for all steps of the Safety Lifecycle, where you are involved.

HIMA is an accepted course provider of the TÜV Rheinland Functional Safety Program. This training will provide you with valuable skills and knowledge which can be used in your daily activities.

The course has been developed to provide an overview of current industry standards, functional safety concepts and current tools used to determine safety integrity levels (SIL), while applying industry recognized techniques and methodologies.

#### Participant requirements

A minimum of 3 years of experience in the field of Functional Safety  
University degree or equivalent engineer level responsibilities status as certified by employer

#### Certificate

The successful completion of the final exam will provide you with a "FS Engineer (TÜV Rheinland)" certificate.

**Duration:** 3,5 days,  
beginning Tuesday, 09:00 ending Friday, 13:00

**Number of participants:** minimum 2, maximum 16 participants

**Registration:** <http://academy.hima.com>

**Contact:** [training@hima.com](mailto:training@hima.com)

### Course Content

- Introduction to Functional Safety, standards, basic terms and definitions
- Functional Safety Management (Safety Lifecycle, competence, independence, verification, validation, modification, ...)
- Hazard & Risk Analysis
- Safety Requirement Specification (SRS)
- Safety Instrumented Systems (SIS) hardware design (SFF, HFT, architectures, choice of equipment, prior use, certified modules, PFDavg)
- Software design (specification, design, testing, ...)
- SIS Security
- Operation and Maintenance (repair, proof test, bypasses, ...)