



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

# TrainingFacts

### 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 training is run by our team of FS Experts all with practical experience gained over many years.

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

Acquiring your certificate through a HIMA training course, will let you benefit from the Functional Safety competence of a world leader in safety-related automation solutions.

### 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, ...)

FUNCTIONAL SAFETY-TRAINING  
FS 132 | FUNCTIONAL SAFETY ENGINEER  
(TÜV RHEINLAND)

### Dates in 2018

Date	Location	Country	Language
16.01.-19.01.2018	Melbourne	Australia	English
20.02.-23.02.2018	Perth	Australia	English
20.03.-23.03.2018	Sydney	Australia	English
17.04.-20.04.2018	Adelaide	Australia	English
15.05.-18.05.2018	Rome	Italy	English
15.05.-18.05.2018	Gladstone	Australia	English
12.06.-15.06.2018	Port Harcourt	Nigeria	English
19.06.-22.06.2018	Auckland	New Zealand	English
17.07.-20.07.2018	Perth	Australia	English
21.08.-24.08.2018	Darwin	Australia	English
18.09.-21.09.2018	Melbourne	Australia	English
16.10.-19.10.2018	Brisbane	Australia	English

### Participant profile

- Persons involved in analysis, design and operation of safety instrumented systems.
- Site and quality managers
- System integrators and independent consultants
- Process and control engineers
- Risk, reliability, safety, and quality engineers
- Loss prevention engineers
- Anyone interested in a Functional Safety Engineer (TÜV Rheinland) certificate

### Theory and practice

In addition to the theoretical part, the training course contains practical parts which cover, among others:

- Hazard & Risk Analysis (HAZOP / Risk Graph / FMEA)
- Allocation, design, selection of devices and verification of safety functions

### Further courses on this subject

To prepare for the Safety Instrumented Systems (SIS) Training of the TÜV Rheinland Functional Safety Program, HIMA recommends the 1-day introductory course:

- Basic knowledge in Functional Safety (FS 111) – 1 day

### Duration

3,5 days

Begin: Tuesday 9:00 pm

End (test): Friday noon

### Number of participants

- Min. 6 participants
- Max. 12 participants

### Prices 2018

For a quotation and detailed course description please contact our Training Center

### Services

- Paper copies of training documentation
- Refreshments and lunch
- FS Engineer (TÜV Rheinland) certificate upon achieving the required pass mark in the final exam

### Registration and Contact

General terms and conditions as well as registration at <https://www.hima.com/en/products-services/seminars/> or using our registration form.

For any other questions please contact:

E-Mail: [training@hima.com](mailto:training@hima.com)

HIMA Paul Hildebrandt GmbH  
Albert-Bassermann-Str. 28 | 68782 Brühl, Deutschland  
Telefon: +49 6202 709-0 | Fax: +49 6202 709-107  
E-Mail: [training@hima.com](mailto:training@hima.com)