

FS 101 | Functional safety for maintenance and operation

Course Content

Introduction/Basics

- Presentation of relevant standards and identification of potential consequences
- What is risk and how do I deal with it?
- Manage safety properly

Analysis

- How are hazards identified and classified?
- Demonstration of the procedures using HAZOP, risk matrix and risk graph examples

Realisation

- Everything begins with a good specification
- What needs to be considered when generating software?
- How can software development be optimized?
- What is important for operation?
- Which are the key elements of a factory acceptance test (FAT)?
- What should take place during start-up?
- Checklists: a universal aid?
Examples for appropriate use
- Validation

Operation

- Safety must be ensured during plant operation
- Proper (important) recording of faults
- Fault analysis
- Proof tests



Functional Safety – A question of qualification

Personnel qualification is essential for functional safety. To prevent hazardous incidents, current standards such as the statutory order on hazardous incidents or IEC 61508/11 increasingly demand proof of adequate training for operating staff at all levels and in all areas.

This HIMA training course helps you demonstrate your functional safety competence. Supported by a range of practical examples, it provides employees working with safety instrumented systems (SIS) the basic principles, informing them about current standards, their requirements and the use of modern tools, technologies and methods.

FS 101 | Functional safety for maintenance and operation

Dates in 2017

Date	Location	Country	Language
27.06.2017	Brühl*	Germany	German
Upon request	Brühl*	Germany	English

* 68782 Brühl near Mannheim

Participant profile

- Operating staff (plant management, shift supervisors, plant operators, on-site personnel, etc.)
- Maintenance personnel from all areas
- Commissioning and installation teams
- Planning staff with no particular focus on functional safety, including:
 - Process engineering planning
 - Mechanical construction/installation
 - Operational implementation

Tailored training

- Courses are also possible on-site if appropriate premises and technical equipment are available (price upon request)
- Course focus can be tailored to individual groups (content, duration)

Further courses on this subject

- TÜV Rheinland Functional Safety Engineer training (FS 132)
- Use of machinery in the process industry in accordance with DIN ISO 13849 (FS 121)
- Basic knowledge in Functional Safety (FS 111)

Duration

- 1 day,
from 8:30 am to 4:30 pm

Number of participants

- Min. number of participants: 4
- Max. number of participants: 8

Prices 2017

- 570,- € per person

Services

- Paper copies of training documentation
- Refreshments and lunch

Registration and contact

General terms and conditions as well as registration at www.hima.com/Lifecycle_Services or using our registration form.

For any other questions please contact

Reemt Westphal

Phone: +49 6202 709-254

training@hima.com

