

Functional Safety Engineer Training Course and TÜV Exam



As many companies are involved with the implementation of international safety standards IEC 61508 and IEC 61511, Honeywell offers training to help implement the requirements of these standards and related safety standards for the process industry.

TÜV Rheinland Functional Safety Program

Automation, Software and Information Technology (ASI) of TÜV Industrie Service GmbH specializes in finding solutions to problems related to ensuring the safety, quality and reliability of software, measuring and control systems and monitoring equipment, and process automation. Honeywell offers a TÜV training program that supports engineers and others in the functional safety business to deepen their knowledge, experience and skills in the area of functional safety according to IEC 61508 and IEC 61511 and other relevant standards. Additionally, the program offers engineers the possibility of obtaining an official verification of their expertise.

Those participants who complete the training and pass an exam will receive a TÜV certificate with appropriate logo and ID number. The certificate is valid for five years but can be extended after completing a short exam covering updates in standards and best practices in functional safety or a recent written case study.

Eligibility Requirements

The following requirements must be met to participate in the TÜV Functional Safety Program:

- A minimum of 3 to 5 years experience in the field of functional safety
- University degree or
- Equivalent engineer level responsibilities as certified by employer

Who Should Attend

- HSE managers
- HAZOP leaders
- Instrumentation engineers
- Process operations
- Maintenance and testing engineers

Training Material

The following training material will be provided:

- Presentation slides
- Case study material
- White papers
- Demo version of SafeCalc software

Price

The total price of the course is 2204 Euros (price may deviate by location). This price includes course materials, lunches, registration and cost for issuing the TÜV certificate.

Standard Honeywell training terms and conditions apply.

Agenda

Day 1	9.15 - 10.00	General intro on training and process safety
	10.00 - 10.45	Legislation and standardization
	Break	
	10.45 - 12.00	IEC 61508 introduction
	Lunch	
	13.00 - 14.30	IEC 61508 introduction
	14.30 - 15.15	Functional Safety Management
	Break	
	15.30 - 16.00	Piper Alpha video
16.00 - 16.45	Risk analysis and SIL classification	
Day 2	9.00 - 10.00	Safety Requirements Specification
	10.00 - 10.30	FLD case - first 3 steps (3 of 10 steps)
	Break	
	10.45 - 11.30	SIS design concepts
	11.30 - 12.00	Case Cause and Effect diagram
	Lunch	
	13.00 - 14.15	Reliability analysis techniques
	14.15 - 14.45	Reliability analysis exercises
	Break	
15.00 - 16.00	Votings, DC and RBD presentation	
16.00 - 16.45	Votings, DC and RBD exercises	
Day 3	9.00 - 9.45	FMEA presentation
	9.45 - 10.30	FMEA exercises
	Break	
	10.45 - 11.30	Markov presentation
	11.30 - 12.00	Markov exercises
	Lunch	
	13.00 - 13.10	BP Texas video
	13.10 - 13.40	SafeCalc introduction
	13.40 - 14.00	SafeCalc demonstration
	14.00 - 14.30	Bhopal video
	Break	
	15.00 - 15.45	Common cause presentation
15.45 - 16.00	Common cause case	
16.00 - 16.30	Modification and documentation	
16.30 - 17.00	FLD case - next 7 steps (7 of 10 steps)	
Day 4	9.00 - 10.00	Safety-related software
	10.00 - 10.30	IEC 61511 introduction
	Break	
	10.45 - 11.30	Reliability data, collection and databases
	11.30 - 12.00	Q&A
	Lunch	
13.00 - 17.00	TÜV FS Engineer Exam	

Honeywell TÜV Functional Safety Experts

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