

# TÜV Functional Safety Engineer (certified)



## Objectives

The objective is to provide participants with elementary and necessary knowledge about functional safety based on international standards IEC 61508 and IEC 61511.

## Who should attend?

Instrument Engineers, Application Engineers, Site Engineers, Project Managers, Operation Engineers, Maintenance Engineers and all those who are involved in the design, realization, maintenance and operation of safety systems.

## Prerequisite knowledge

A minimum of 3 years experience in the field of functional safety, Bachelor degree as a minimum or equivalent engineer level and responsibilities status as certified by the employer.

## Programme

### Day 1:

- General introduction
- Module 1: Introduction to Functional Safety
- Module 2: International safety standards IEC 61508 and IEC 61511
- Module 3: HAZOP – SIF – SIL

### Day 2:

- Module 4: Safety Engineering
- Module 5: Functional Safety Management
- Module 6: Failures and hardware fault tolerance

### Day 3:

- Module 7: Common cause influences and other failure types
- Module 8: Safety calculations
- Session for asking questions

### Day 4 (morning):

- Examination

## Examination

At the end of the course participant has to take an exam. The examination consists of 60 multiple choice questions and 7 cases. Pass score is 75%. Those who pass will receive from TÜV Rheinland the certificate TÜV FS Engineer.

## Methods of delivery

Interactive lecture  
Exercises (both group exercises and individual exercises)

## Trainer(s)

Safety Assurance and Consultancy group of Yokogawa Europe

## Duration

3.5 days

## Number of participants

6-12 participants

