

TUV SUD Functional Safety Certification (US-TUVFSE1A)

Type

Instructor-led Learning

Duration and Continuing Education Units (CEU)

5 Days
3.3 CEUs

Target Group

- Engineer
- Reliability

Short Description

This course is intended for application engineers and system integrators with some experience in Functional Safety, project and safety managers, and designers and safety specialists working in machinery applications.

The objective of this course is to relate the safety concept of IEC 61508-3 and cover the main principles for Functional Safety. ISO 13849 and IEC 62062 are covered by demonstrating safety principles according to these standards and how they relate to IEC 61508-3. Software development of safety related control systems is covered in day three followed by a fourth day question and answer session with resulting final exam.

Objectives

- Analyze the main requirements of IEC 61508-3 and ISO 13849 for the design of safety related parts
- Identify risk analysis and selection of protective devices to achieve required risk reduction
- Review of documentation requirements for machine safety applications
- Examine typical safety circuits, schematics
- Identify safety validation requirements
- Review the software related to safety related control systems

Content

- IEC 61508-3 Safety Concepts
- Safety Principles relating to ISO 13849 & IEC 62062
- Software Development of Safety Related Control Systems
- Final Exam

Language

English
