Basic principles of Functional Safety acc. to IEC 61508.

Understanding Key Principles and Requirements of Functional Safety.

Seminar	3 Termine verfügbar	Teilnahmebescheinigung
Präsenz / Virtual Classroom	8 Unterrichtseinheiten	Online durchführbar

Seminarnummer: 07277

Stand: 12.10.2026. Alle aktuellen Informationen finden Sie unter https://akademie.tuv.com/s/07277

This seminar introduces main aspects of Functional Safety and key principles as well as requirements referring to the international standard IEC 61508.
The following points are also discussed in detail:

- What are the requirements for safety components?
- How should the development effort be estimated?
- Where do you need to adapt your development process to the standards?

Nutzen

- You will get details about safety requirements for safety components.
- Considerations for developing safety components will be discussed.
- You will understand the standard's defined safety life cycle phases.
- You will learn how to interpret and compare safety-related parameters and specifications.

Zielgruppe

Product developers; marketing, sales; product management, project management, quality management, inspectors and managers.

Inhalte des Seminars

Legal aspects of the international standard IEC 61508
Overview of the contents of IEC 61508

® TÜV, TUEV und TUV sind eingetragene Marken. Eine Nutzung und Verwendung bedarf der vorherigen Zustimmung.

- Risk Analysis
- How much safety is necessary?

Risk assessment according to IEC 61508-5

- Functional Safety Management
- Definition of lifecycle-phases
- Documentation
- Functional Safety Assessment
- Modifications
- Competence
- Suppliers of products or services

Safety-related Parameters

- Hardware fault tolerance
- Safe Failure Fraction (SFF)
- Average probability of failure (PFDAV)
- Relation between PFDAV and Proof Test Interval (PTI)
- Probability of a dangerous failure per hour (PFH)
- SIL claim
- Interpretation of safety-relevant parameters (What is good, what is bad?)

Product Liability
Machinery Standards

- EN ISO 13849-1 range of application
- Determination of performance level
- EN 62061 range of application
- Application software development

Terminübersicht und Buchung

Buchen Sie Ihren Wunschtermin jetzt direkt online unter https://akademie.tuv.com/s/07277 und profitieren Sie von diesen Vorteilen:

- Schneller Buchungsvorgang
- Persönliches Kundenkonto
- Gleichzeitige Buchung für mehrere Teilnehmer:innen

Alternativ können Sie das Bestellformular verwenden, um via Fax oder E-Mail zu bestellen.

® TÜV, TUEV und TUV sind eingetragene Marken. Eine Nutzung und Verwendung bedarf der vorherigen Zustimmung.