Functional Safety for Drives and Encoders.

Understand standards, reduce risks, and develop drives and encoders that are ready for assessment and certification.

Seminar	3 Termine verfügbar	Teilnahmebescheinigung
Präsenz / Virtual Classroom	8 Unterrichtseinheiten	Garantietermine vorhanden

Seminarnummer: 42289

Stand: 01.11.2026. Alle aktuellen Informationen finden Sie unter https://akademie.tuv.com/s/42289

Drives and encoders are key safety-related components of modern machinery. In practice, a single product often has to comply with multiple standards, each with different requirements and assessment approaches across development, audits, and certification.

The seminar “Functional Safety for Drives and Encoders” provides a practical understanding of the relevant standards EN ISO 13849-1, EN 61508, EN 61800-5-2 and EN IEC 61800-5-3. Participants learn how to classify similarities and differences between these standards and derive a pragmatic approach for product development.

Using well-known safety functions such as Safe Torque Off (STO), Safe Operating Stop (SOS), and Safely Limited Speed (SLS), the seminar helps participants make compliant decisions, avoid common pitfalls, and prepare effectively for product assessments, management audits, and certifications.

Nutzen

- Clear orientation in the landscape of functional safety standards for drives and encoders
- Improved preparation for product assessments, audits, and certifications
- Increased confidence in interpreting normative and non-normative requirements
- Reduced development risks through early identification of critical issues
-

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

Practical decision support for architecture, documentation, and safety arguments

- Better understanding of what is safety-relevant — and what is not
- More efficient communication between development, management, and certification bodies

Zielgruppe

This seminar is intended for developers, design engineers, and system engineers working with drives and encoders, as well as product managers, project managers, and functional safety managers. It also addresses professionals from quality management, certification management, and regulatory affairs who are involved in product assessments, audits, or certification processes. Technical decision-makers seeking a cross-standard perspective on functional safety will also benefit.

Inhalte des Seminars

- Introduction to functional safety for drives and encoders
- Overview of normative foundations and areas of application:
  - EN ISO 13849-1
  - EN 61508
  - EN 61800-5-2
  - EN 61800-5-3
- One product – multiple standards:
  - Commonalities between the standards
  - Key differences and boundaries
- Typical questions arising in product assessments and management audits
- Pragmatic approaches to product development

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

- Safety functions in practical application:
  - Safe Torque Off (STO)
  - Safe Operating Stop (SOS)
  - Safely Limited Speed (SLS)
  - Safe position / safe speed
  - ... and much more
- Typical pitfalls and common mistakes
- Discussion of participant-specific questions

Terminübersicht und Buchung

Buchen Sie Ihren Wunschtermin jetzt direkt online unter https://akademie.tuv.com/s/42289 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.