

Programmable Electronic (ASICs, FPGAs, CPLDs) in Safety Technology

Workshop on normative requirements for the development of ASICs, FPGAs and CPLDs in Functional Safety engineering.

 Seminar	 1 Termin verfügbar	 Teilnahmebescheinigung
 Präsenz / Virtual Classroom	 8 Unterrichtseinheiten	 Online durchführbar

Seminarnummer: 07279

Stand: 08.02.2026. Alle aktuellen Informationen finden Sie unter <https://akademie.tuv.com/s/07279>

Programmable electronics (ASICs, FPGAs, CPLDs) are increasingly being used in safety-related electronic components. IEC61508 takes this development into account and sets requirements for error prevention in such designs. These are introduced in the normative requirements for the development of ASICs, FPGAs and CPLDs in safety technology. All aspects that must be considered when designing a system with programmable electronics in order to meet the functional safety requirements for a specific safety level are covered. The course teaches how they can be applied in practice.

Nutzen

- You will gain a comprehensive understanding of the normative requirements of IEC 61508 and learn how to effectively apply them in the development of safety-related electronics, including ASICs, FPGAs, and CPLDs.
- You will acquire the skills to effectively implement fault management measures, enhance error prevention strategies, and ensure the functional safety and reliability of your products.

Zielgruppe

This workshop is designed for developers, engineers, and technical professionals involved in the design and development of safety-related control systems. It is particularly relevant for those utilizing programmable electronics (ASICs, FPGAs, CPLDs) to meet functional safety requirements in compliance with IEC 61508.

Voraussetzungen

Participants should have basic knowledge of the IEC 61508 standard and its application in the development of safety-related products.

Inhalte des Seminars

- Introduction to the normative requirements of IEC 61508 in the development of ASICs, FPGAs and CPLDs
- Management of functional safety
- Methods for error prevention and error control
- Requirements for on-chip redundancy and failure rates
- Practical examples of the implementation of error control measures

Terminübersicht und Buchung

Buchen Sie Ihren Wunschtermin jetzt direkt online unter <https://akademie.tuv.com/s/07279> 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.