



## Introduction to Functional Safety

CPD

22 hours

Our Introduction to Functional Safety Online course provides a sound basis for anyone involved in the management, specification, design, system integration, operation, modification, and maintenance of safety-related systems.

This course teaches learners about the requirements of international standard IEC 61508, "Functional safety of Electrical, Electronic, and Programmable Electronic safety-related systems" and how you can create an effective safety related system for your organisation.

### Who should take this course

This course is suitable for technical staff, and managerial staff managing functional safety, or involved with, the specification, design, system integration and maintenance involving complex E/E/PE safety-related systems.

### Key features

- This course has been developed by functional safety practitioners including those involved in the development of the relevant international standards.
- The course covers the specific requirements in IEC 61508 and also provides clarity on the application of the standard to varying situations in industry.

### About the content partner

Our content partner Engineering Safety Consultants Ltd have over 25 years of experience in safety-critical systems engineering with Executive Director Ron Bell, OBE chairing one of the two IEC working groups responsible for IEC 61508 international standard.

### Course units include

- The Basics of Functional Safety - 1
- The Basics of Functional Safety - 2
- The Basics of Functional Safety - 3
- Safety Lifecycles & Compliance
- Strategy to achieve Functional Safety: Hardware Safety Integrity: Part 1
- Strategy to achieve Functional Safety: Hardware Safety Integrity: Part 2
- Management of Functional Safety & Competence
- SIL Determination & ALARP Demonstration
- Final Assessment

### What you'll learn

- Understand the concepts and requirements of international standard IEC 61508
- Learn about Multiple Layers of Protection & Mitigation
- Learn about Proof Testing of safety functions
- Integrity and Systematic Capability
- Learn about Cost Benefit Analysis (CBA) and the role it plays in the ALARP demonstration

Content Partner

