#### Course description

# T143e Functional Safety

## Course goal

The goal of this course is to learn concepts of Function Safety.

## Learning objectives

Upon completion, participant will be able to:

- Identify hazards and specify and assess the risks in the phases of the IEC 61511 safety lifecycle.
- Describe the safety requirement specification for the phases of IEC 61511 safety lifecycle.
- Identify hardware and software design for IEC 61511 safety lifecycle.
- Explain operation phases from 5 to 8 of the IEC 61511 safety lifecycle.
- Describe the importance of Functionality Safety Certification and Documentation.
- List the ABB safety certificates

# Participant profile

This training is targeted to system and application engineers, commissioning and maintenance personnel, service engineers and system integrators.

## Prerequisites

Students shall know the fundamentals of working with Control Systems and have basic knowledge of Windows 7/2008 Server and networking technologies.



#### **Topics**

- Functional Safety Background
- SIS, SIF and SIL
- IEC 61508 and IEC 61511
- Hazard and Risk Analysis
- Safety Requirement Specification Planning
- Hardware and Software design
- Using the Safety System
- Certification, Competence and Documentation
- Assessment.

## Course type and methods

This is an e-Learning course

## Course duration

2 hours

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