



# **Assessment Audits and Confirmation Reviews For ISO 26262:2018 Functional Safety Management Systems Standards**



Course Duration: 5 Days - 8 Hours/day

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#### **Seminar Content**

This five-day course is designed to provide the skills required to conduct audits, assessments, and confirmation reviews for ISO 26262 Functional Safety Requirements as a stand-alone and integrated system. This class will give you the information to Plan, Conduct, and Report audit activities for ISO 26262:2018.

ISO 26262 is the Functional Safety standard that is applied to Safety Related Systems that include electric/electronic systems installed in production passenger vehicles, trucks & busses, and motorcycles. The course combines presentations with hands-on work and is conducted in English.

### **Learning Objectives**

- Identify key definitions, ideas and principles of ISO 26262
- Assess HARA, ASIL, Safety Goals, Safety Plan and Safety Requirements
- Evaluate a Safety Plan and Safety Case
- Evaluate a confirmation measures program
- Evaluate Functional Safety Concept (FSC) and a related Technical Safety Concept (TSC)
- Evaluate associated test plans against ASIL using the correct tables
- Evaluate Control Measures in manufacturing
- Evaluate a Distributed Interface Agreement (DIA)
- Evaluate a Software and Hardware product qualification
- Evaluate a Decomposition and Independence

- Evaluate Safety Evaluations DFMEA and Fault Tree Analysis (FTA)
- Evaluate Safety Metrics in Hardware and Software

#### **Seminar Outline**

- Chapter 1: Introduction and Overview ISO 26262
- Explaining the V Cycle
- Interdependency Between System, Hardware and Software
- Chapter 2: Setting up the Project and Associated Safety Plan
- Impact at the Item and Element Levels
- Safety Element out of Context (SEooC)
- Breakout Exercise 1: Evaluate a Safety Plan
- Chapter 3: What are Safety Goals, FSR, FSC, TSR, TSC, HW and SW SRs?
- Relationship With and Among Safety Architecture
- Breakout Exercise 2: Evaluate Flow Down of Requirements
- Chapter 4: Achieving Safety Goals, FSR, FSC, TSR, TSC, HW and SW SRs
- Safety Strategies, Measures and Mechanisms (Diagnostics)
- Breakout Exercise 3: Evaluate Functional Safety Implementation
- Chapter 5: Decomposition and Dependent Failure Analysis
- Breakout Exercise 4: Evaluate Validity of a Decomposition

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- Chapter 6: Safety Analysis including Safety Evaluations and Metrics
- Breakout Exercise 5: Evaluate HW DFMEA, SW DFMEA, FMEDA and HW Metrics, SW Metrics, FTA
- Chapter 7: Verifying FSR, FSC, TSR, TSC, HW and SW SRs to Specifications (Test Plans)
- Breakout Exercise 6: Evaluate Test Plan for HW Part, Unit SW, Item Integration
- Chapter 8: Safety Case and Release to Serial Production
- Breakout Exercise 7: Evaluate Safety Case
- Chapter 9: Control Measures in Manufacturing and in the Field
- Breakout Exercise 8: Evaluate Process Flow and Control Plan Link to ASILs
- : Chapter 10: Distributed Interface Agreement
- Breakout Exercise 9: Evaluating a Distributed Interface Agreement
- Chapter 11: Management of Safety Reviews, Audits and Assessments
- Breakout Exercise 10: Confirmation Review
- Chapter 12: ISO 26262 Confirmation Measures and Supplier Audits/Assessments
- Breakout Exercise 11: Process Map Review and Interrelationships
- Chapter 13: Audit Guidance, Definitions and Principles
- Chapter 14: The Audit Program
- Chapter 15: Audit Planning and Preparation
- Breakout Exercise 12: Writing an Objective and Scope Statement

- Breakout Exercise 13: Creating an Audit and Assessment Plan
- Chapter 16: Performing the Audit
- Breakout Exercise 14: Conducting the Audit
- Chapter 17: Writing Nonconformity Statements
- Breakout Exercise 15: Writing Nonconformity Statements
- Chapter 18: Closing Meeting
- Chapter 19: Completing the Audit Report
- Chapter 20: Corrective Action and Close-Out

### Who Should Attend

Internal assessors and auditors involved in Functional Safetv assessments. confirmation review, and including Functional Managers, Product Development Safety Managers, Functional Safety implementation leaders and team including Senior Management interested in getting an in-depth understanding of ISO 26262 and Functional Safety Management System.

### **Seminar Materials**

Each participant will receive a seminar manual including case studies.

### **Pre-Requisite**

Participants should be involved in or aware of software and hardware development as it relates to the motor vehicle industry.

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