

# Functional Safety Automotive Training

with FSCAE Qualification Exam



**Lhpu**

is the exclusive FSCAE  
training delivery partner of

**TÜV NORD**

## DAY 1 Functional Safety Management Workshop

Introductory topics of Functional Safety Management and risk analysis, using ISO 26262 concepts, are discussed in detail, including worked examples.

- Introduction to Functional Safety Process
- Overview of documentation requirements
- Overview of management and technical activities throughout the safety life-cycle phases
- Practical exercises demonstrating risk analysis
- FSM and concept development

## DAYS 2 & 3 System-Level and Hardware-Level Implementation of ISO 26262

System development, technical safety concepts, system and hardware development. Evaluation of safety goals and hardware architecture using Failure Mode Effect and Diagnostic Analysis (FMEDA).

- Technical concept design of a system and its elements
- Topic addressed in relation to interface definition and second-tier suppliers
- In-depth interaction of safety-oriented hardware development processes

Under FMEDA methodology, the following are presented:

- Required safety demonstration methods
- Calculation of single-point fault metric & latent fault metric

## DAY 4 Software-Level Implementation of ISO 26262

ISO 26262 establishes further software-related requirements focused on Functional Safety. The workshop presents the additional demands including the relevant techniques and measures corresponding to the relevant ASIL made on software development and their practical implementation in an illustrative manner.

- Briefing for all software-oriented personnel
- Validation tools and applying COTS
- Examples of architecture related to project and compiler considerations
- Software development phases
- Specific requirements for Implementation and testing
- Validation and documentation features per ISO 26262

## DAY 5 Qualification Exam for Functional Safety Certified Automotive Engineer (FSCAE)

Interested participants can sign up for the FSCAE qualification test. Attendance of all four workshops is a prerequisite.

- FSCAE Certification
- Qualification is valid for three years
- Can be extended for three years by attending a follow-up workshop & passing repeated test

Further FSCAC/FSCAM certification can be achieved by individuals demonstrating work on relevant safety projects for at least the past four years, and successfully passing the safety audit by TÜV-NORD.

**Lhpu**  
training  
solutions

*This training is held at multiple sites in the U.S. throughout the year.*

To register for one of our ISO 26262 training events:  
**LHPUtraining@LHPES.com**

*Onsite training is available upon request.*