

# Training for software professionals developing safety critical automotive software

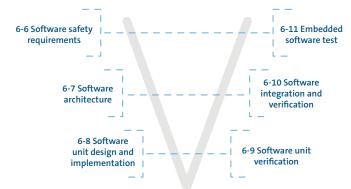
This one-day training session covers functional safety for the development of automotive embedded software, based on the ISO 26262 standard, Part 6.

The course begins with an introduction to the ISO 26262 functional safety standard. Several core concepts are introduced, including automotive safety integrity level (ASIL) ratings, safety requirements, the safety life cycle and safety management. The training focuses on ISO 26262, Part 6 and product development at the software level. The full software safety life cycle is described in detail with examples. Related topics, such as tool qualification, component qualification and freedom from interference, are also described.

## **Training topics**

- Introduction to ISO 26262: Risk, ASILs and safety concepts
- Software development life cycle
- Software safety analysis with failure mode and effects analysis (FMEA)
- Software advanced topics: tool qualification, component qualification and freedom from interference arguments
- Application of ISO 26262:2018 for model-based development

# The Software 'V-Model' from ISO 26262 – Part 6







Develop your software with engineering rigor

#### **Objectives**

Upon successful completion of this workshop, you will be able to:

- Develop complete and consistent software safety requirements
- Define and document a software architecture
- Implement and test software units for safety applications
- Plan and execute an integration test strategy for software and systems
- Develop confidence in software tools according to the ISO 26262 tool confidence level (TCL) framework
- Analyze software architectures for safety, including freedom from independence (FFI) analysis
- Build your organization to support the processes that use documentation tools to improve software quality

# Target audience

- Software developers
- Systems and safety engineers
- Computer and electrical engineers
- Safety managers
- Engineering managers

### Why choose kVA by UL?

Our team's expansive knowledge of the automotive product development life cycle sets us apart in the functional safety industry. From hazard analysis to functional design and validation target-setting, the engineers at kVA by UL understand safety for complex electronic systems.

Expert trainers – kVA by UL's trainings provide an in-depth overview of the methodologies used in the ISO 26262 and ISO/PAS 21448 standards. Our trainers are experienced automotive engineers who have designed and validated real-world automotive systems at major automotive companies worldwide.

Advisory support – Our services span across autonomous vehicles, connectivity of electronic modules and infotainment, semiconductors, cybersecurity, and robotics.

For more information, call 1.864.630.5373, email: kvasales@ul.com or visit kvausa.com.

