

Have you ever asked yourself how to develop a Cybersecure System in an Automotive context?

Have you wondered how to analyse

Cybersecurity Threats and Risks in your

Automotive context?

Have you ever thought about Cybersecurity

Principles and best practise?

Do you know about the situation and status of Automotive Cybersecurity Standards?

Do you understand the relationship between Functional Safety and Cybersecurity?

Join our training and learn more about Automotive Cybersecurity





# DE0601 Road Vehicle Cybersecurity in the context of ISO/SAE 21434

This training will support to lay a basis for the **understanding of Automotive Cybersecurity** which is one of the most important topics for the future of highly automated and connected vehicles.

It will provide **guidance and suggestions** for critical topics such as threat analysis and risk assessment, cybersecurity related requirements, architecture and design or verification & validation.

The learning success will be supported by practical examples and exercises.

The training will also include the **interpretation and application** of standards such as the released Automotive Cybersecurity standard ISO/SAE 21434, recommended practise like SAE J30161 or other like IEC 62443.

Also, the relationship between Automotive Functional Safety ISO262626 and Automotive Cybersecurity ISO/SAE 21434 will be discussed.

#### General approach:

- The exida approach is to explain how the requirements of various standards and regulations can be fulfilled, and not only to show and introduce their requirements.
- The standards and guidelines define a route, typical solutions are exemplified using e.g. tools delivered or recommended by exida.com (SafetyCaseDB, FMEDA-Tools, Enterprise Architect and other).





### DE0601 Road Vehicle Cybersecurity in the context of ISO/SAE 21434

#### Who should attend?

- Automotive Cybersecurity responsible persons
- Functional Safety Engineers who want to understand how they are impacted by Cybersecurity
- ◆ Development Engineers (System, Hardware and Software)
- Product Managers
- Project Leaders of cybersecurity related development projects
- Process Managers

Quality Managers

**Duration:** 2.5 days (or in-house, jointly agreed, please contact us for

more information)

Language: Depending on the participants the training will be given in

German or English. The training material will be in English

Location: exida.com GmbH office

Prof.-Messerschmitt-Str. 1 85579 Neubiberg / Germany

or online

**Certificate**: Each participant gets a letter of attendance.

For more information, please contact:

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## DE0601 Road Vehicle Cybersecurity in the context of ISO/SAE 21434

### **Agenda and Content**

- Awareness & Motivation
  - Why became Automotive Cybersecurity a critical discipline?
- Cybersecurity & Functional Safety
  - How they differ? What are the synergies? What are the conflicts?
- ♦ ISO/SAE 21434 and related Standards
  - THE road-vehicle cybersecurity standard is out: What does it address and not address?
  - How do other standards relate?
- Cybersecurity Management
  - Organizational cybersecurity management
  - Project dependant cybersecurity management
  - Vulnerability monitoring and incident response
- Concept Phase
  - Cybersecurity objectives
  - Item => TARA => security goals
  - TARA methodology
- Product Development
  - Cybersecurity Specification .... Needs
  - Measures/Mitigations and V&V
- Attacks
  - Why absolute security does not exist?

