

Have you ever asked yourself, how to develop a robotic system under compliance of safety standards?

Have you ever wondered how to do a Hazard identification and risk assessment for robotic systems?

Are you uncertain which methods you should use for developing safe robotic systems?

Do you want to know the meaning of robotics in the context of safety standards like IEC 61508?

**Join our training** and learn more about functional safety in robotics

# DE0501 Functional Safety in Robotic Systems

This training will support to lay a **basis** for the development and assessment of robotic systems in terms of functional safety.

The learning success will be supported by examples and exercises.

The training will also include the **interpretation and application** of the safety standards IEC 61508, ISO 13949 and DIN EN ISO 10218-1, regarding robotic systems.

**Duration:**

1 day

**Language:**

Can be chosen between German or English, training material will be in English

**Location:**

3 options free of choice:

can be **in-house** at your location, or  
location can be **organised by exida**, or  
can be **exida trainings location** at:

*exida.com* GmbH office  
Prof.-Messerschmitt-Straße 1  
D-85579 Neubiberg / Germany

**Certificate:**

Each participant gets a letter of attendance.

# DE0501 Functional Safety in Robotic Systems

## Who should attend?

- ◆ Development Engineers (CAD, Software, System)
- ◆ Automation Engineers
- ◆ Mechanical Engineers
- ◆ Drive Engineers
- ◆ Application Engineers
- ◆ Safety Leaders, Project Leader
- ◆ Quality Manager, Product Manager

## Agenda

- ◆ Introduction to Functional Safety
- ◆ Types of Robots (Gantry, Rectangular Coordinate Robot, Cylindrical...)
- ◆ Reference to ISO 13949, IEC 61508 and IEC 62061
- ◆ Reference to DIN EN ISO 10218-1:2012-01  
(Robots and robotic devices - Safety requirements for industrial robots)
- ◆ Safety Functions
- ◆ Hazard identification and risk assessment
- ◆ Risk Reduction and estimation of Performance Level
- ◆ Hardware Requirements
- ◆ Verification and Validation

For more information, please contact:

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