

## IEC 61511 - Functional safety for the process industry (ST-WSFSP)

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### Ziele

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In various process applications, more and more components and systems have to fulfil safety related tasks. Safe functioning of control and instrumentation is often essential for the safety of operating personnel and the environment. Therefore it is essential to know the international standards for safe functioning of measurement and control technology and how to apply these correctly and intelligently.

The workshop offers an insight into the standards that relate to Functional safety and describes, by use of examples, the architectural possibilities for solutions to safety relevant tasks.

All aspects which need to be considered for the design of a hardware and software system in order to meet the requirements for Functional safety to a given safety integrity level will be discussed in this workshop. Furthermore references to practical applications are shown and reviewed.

### Zielgruppe

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Responsible people of design, erecting and operating companies etc. in the process industry  
Project managers and planners of safety-related systems in the process industry (hardware & software)

### Inhalte

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Introduction to Functional Safety  
Accident cause and product liability  
Overview IEC 61508 / 61511  
Functional safety management  
Safety lifecycle

- Risk analysis
- Allocation of safety functions to protection layers
- Safety requirement specifications
- Design and engineering of safety instrumented functions
- Installation and commissioning
- Operation and maintenance
- Modification (MOC) & Decommissioning

### Teilnahmevoraussetzung

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Knowledge of process measuring and control technology  
Experience in the process industry

### Hinweise

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There is an exam option at the end of the workshop (duration approx. two hours)  
To consolidate the knowledge you have acquired we recommend that you take the course ST-WSPUP.

### Typ

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Präsenztraining

### Dauer

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2 Tage

### Sprache

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