

## Workshop-Registration

The attendance fee for the **PROFIsafe Certified Designer Course** is 500 €. Soft drinks and lunch are free of charge. Minimum number of participants is 10.

The attendance fee for the **PROFIsafe Refresher Course** is 200 €. Soft drinks and lunch are free of charge. Minimum number of participants is 10. If there are not enough participants to organize the face-to-face-course, there will be an Online Meeting.

### Appointments:

February 6-8, 2018 in Karlsruhe (Designer)  
[www.profibus.com/PsafeDesignerFebruary](http://www.profibus.com/PsafeDesignerFebruary)

October 15, 2018 in Karlsruhe (Refresher)  
[www.profibus.com/PsafeRefresher](http://www.profibus.com/PsafeRefresher)

October 16-18, 2018 in Karlsruhe (Designer)  
[www.profibus.com/PsafeDesignerOctober](http://www.profibus.com/PsafeDesignerOctober)

### Registration:

Please register at the links above. You will receive your official confirmation a few weeks before the course. If you have any questions, please contact [events@profibus.com](mailto:events@profibus.com) or +49 721 96 58 590.

*Please note: The organizer will confirm the registrations separately. The organizer reserves the right to cancel the courses because of too low participation.*

You can find more information about PROFIsafe in our PROFIsafe System Description:



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## PROFIsafe Courses



### PROFIsafe Certified Designer and Refresher

February 6-8, 2018 in Karlsruhe (Designer)

October 15, 2018 in Karlsruhe (Refresher)

October 16-18, 2018 in Karlsruhe (Designer)

## Status of PROFIsafe

PROFIsafe has evolved to become the leading and most comprehensive safety communication technology in the world. PROFIsafe is an International Standard IEC 61784-3-3 since 2007. With the advent of PROFIsafe, a holistic and open solution is available for all kinds of PROFIBUS und PROFINET applications needing additional safety features.

PROFIsafe specifies how safety-related field devices are communicating with safety controllers across PROFIBUS or PROFINET in such a manner that they can be deployed in safety-related automation tasks up to SIL3 (IEC 61508), or PL „e“ (ISO 13849). PROFIsafe realizes this safety communication without changing the underlying transmission channels („Black Channel“) as a profile, i.e. via supplementary processing data formats and a plain and powerful protocol.

The specification has been jointly developed by renowned manufacturers, users, standardization and safety bodies (e.g. TÜV, IFA). It is based on relevant safety standards, mainly the IEC 61508 and the IEC 61784-3, which covers software and communication issues for safety. In the meantime PROFIsafe has proven itself to be an enabling technology for new safety functions in field devices and as a facilitator for new safety applications. Besides cost savings through easier wiring, PROFIsafe supports higher production flexibility and goes for more availability. Via the new „Life Cycle“ concept more risk areas can be covered with the result of increased safety. Numerous certified PROFIsafe products are available. PROFIsafe took over the worldwide market lead with more than 7 million PROFIsafe nodes.

## Objectives and benefits

This huge dissemination of PROFIsafe technology increases the need for correspondingly knowledgeable persons. One of the general safety principles is the systematic training and education of those persons. Thus, PI is offering trainings in conjunction with TÜV-Süd.

### The objectives are:

- › Deep insight in all the aspects of the design and usage of PROFIsafe PROFIsafe-Realisierung mit modularen Baugruppen
- › Learning about the PROFIsafe-Starterkit and its tools
- › Overview of the development process according IEC 61508 and the requirements of IEC 61784-3

### The benefits are:

- › To get the most actual information about PROFIsafe Learning about the PROFIsafe-Starterkit and its tools
- › To understand modern safety aspects
- › To get a TÜV certificate/to refresh the certificate
- › To become a member of the worldwide PROFIsafe knowledge network
- › To increase the person's market value

The **PROFIsafe Certified Designer Course** requires three days. A 90 minutes written test will take place at the end of each day. According to the **PROFIsafe policy** it is required for „PROFIsafe Certified Designers“ to get an update within 3 years after an official training class (TÜV/PNO certificate) in form of a **PROFIsafe Refresher Course**.

## Program of the PROFIsafe Certified Designer Course\*

### Day 1:

- › Functional safety for fieldbus
- › PROFIsafe protocol design
- › iPar-server, security, wireless
- › PROFIsafe policy

### Day 2:

- › Overview of IEC 61508
- › Functional Safety Management
- › Life Cycle and assessments
- › Safety Functions and architectures
- › Measures to avoid faults and failures
- › Safe Failure Fraction and FMEDA
- › Validation and verification

### Day 3:

- › Content of the PROFIsafe Starterkit
- › Driver Software
- › Architectures
- › Example development
- › How to develop a GSD
- › Test and certification

The **PROFIsafe Refresher Course** includes an excerpt from the program above and requires **three hours**. Participation at the Refresher Course is sufficient and **there will not be an exam**.

\* with reservation