



Functional Safety for Marketing and Sale Two-days Workshop with optional Qualification as Functional Safety Certified Product Manager (FSCPM)

New Workshop-Modules in TÜV NORD: We are pleased to announce, a two-day workshop session on the topic of Functional Safety for Marketing and Sale including the option of examination to become a certified Functional Safety Certified Product Manager (FSCPM). Complex safety functions and scalable safety systems are not only a challenge for developers. Also sales people are faced with enormous challenges. It is necessary to have an overview of the current legal framework. Intensely discussed topics around SIL and PL and competent customer advisory on Functional Safety will become more and more important.

Be Ready for your future ! Our speakers are dealing with the topics, which are relevant to you on a daily basis - you will benefit from their knowledge and experience!

This training is targeted at

- sales representative of the company whose products deals with IEC 61508/ ISO 13849/ IEC 62061 and other relevant standards
- managers who deal with functional safety and IEC 61508/ IEC 62061 and other standards
- sales engineers, who are responsible for the preparation of safety requirement specifications and safety manuals
- sales engineers responsible for the evaluation and planning of safety-related functions

The workshop will take place in 86150 Augsburg, Germany. Space is limited to a total of 20 participants. Registration is open until sessions are filled. To register, please fill in the attached form and return to Fax: 0821-450954-4269 or register online on <http://www.tuev-nord.de> by the registration deadline. If you have questions, call 0821-450-954-0 or email bpfuff@tuev-nord.de.





Workshop-Content

Day 1: Key information about Functional Safety Legal framework and organizational requirements

The trend towards globalization is increasingly important - therefore functional safety plays an increasing role. In some countries the safety requirements for human and environment of the prior art are required by law. To reduce the risk - electrical, electronic or programmable electronic safety-related systems are used in most applications. Misconduct of individual sub-systems, or incorrectly designed safety circuits can have a massive impact on the safety of persons or the environment. The aim of the first day of the seminar is to provide an overview of the legal principles, standards and guidelines that must be applied to various industries. In addition, a number of steps and measures that are to be considered in terms of the safety life cycle of the technical system, which must be implemented will be discussed.

Day 2: Basic Knowledge Concepts, Terms and Definitions of Functional Safety

The objective of the second day of the seminar is to provide an overview of the basic principles and methods of the various safety standards. The participants will learn the key terms and definitions in the field of functional safety and interpret them. Important parameters and criteria in the Safety User Manual as: Safety Integrity Level - SIL, performance level - PL, diagnostic coverage - DC, Safe failure fraction - SFF hardware fault tolerance - probability of default / failure rates HFT PFD-/PFH, life and / reliability are explained. In addition, the procedures for designing appropriate security features of sensors, logic processing (systematic error) and error control discussed (random error) to the actuator with respect to error prevention. The acquired knowledge will be practiced and discussed using case studies. The focus of the second day are practical applications.

Day 3: Qualification Exam for Functional Safety Certified Product Manager (FSCPM)

Interested participants can apply for the FSCPM qualification test. Attendance of the workshop is a prerequisite. After successful completion of the test, TÜV NORD will provide FSCPM certification. The qualification is valid for 3 years and can be extended another three years after attending a follow-up workshop and successfully passing a repeated test.