Functional Safety

Personal Certification • IEC 61508

Functional Safety Certified Engineer • Coordinator • Consultant • Manager

New technologies increasing number of functions products within mean that manufacturers have to develop more and more safety-relevant systems. This not only leads to an in-crease in the number of electronic components - the components and systems themselves are more complex and requirements as to their safety are becoming more stringent. Safety standard IEC 61508 stipulates that organizations must ensure that persons entrusted with tasks related to functional safety have a sufficient level of competence and also that they are suitably qualified. Since the publication of IEC 61508, therefore, employers have been urgently seeking trained qualified personnel who demonstrate their competence and professionalism.

Personal Certification:

As an accredited service provider, we offer you the opportunity to gain the necessary basic and specialist knowledge of IEC 61508 - completely up to date and incompact form. You get to know all the aspects which are fundamental in order to be able to apply the standard correctly. Theoretical standard contents are presented only to the extent as they are essential for carrying out practical tasks. The relation to practice, along with the concrete explanation of methods and approaches, are paramount.

With training certificates issued by TÜV NORD - which are both highly-respected and officially traceable - you as an individual can show that you possess special skills and knowledge that are not covered by traditional studies of engineering.









Qualification and competence - two essentials for Functional Safety

Program

We have developed a 3-stage program for you. You can achieve Stage 1 (FSCED), by attending a dedicated three-day workshop which concludes with a written examination. In order to achieve Stage 2 (FSCCD), you must submit a form to us demonstrating that you have at least 2 years practical experience as FSCED. A decision is made regarding FSCCD approval based on an evaluation scheme developed by TÜV NORD Systems. The third stage is FSCMD, which follows two years of practical experience as FSCCD.



FSCED

With your personal FSCED certificate, you demonstrate that you know and understand the basic principles, concepts and objectives of functional safety management. You are able to make effective use of your specialist knowledge and the methods required by IEC 61508 in order to solve problems. Your training and experience mean that you can employ a wide variety of methods and tools, including methods for product and process monitoring.

FSCCD

With your personal FSCCD certificate, you demonstrate your ability to plan, implement and document Assessments based on ISO 61508. Your main task is to evaluate the functional safety of products, and also safety management within projects, by means of such Assessments. You are able to make use of communication and questioning techniques in order to achieve the objective of the audit or assessment.

FSCMD

With your personal FSCMD certificate, you show that you can take on the role of process owner of functional safety management and that you can plan the necessary activities

within projects. Within your organization, you are responsible for providing safety proofs and you assess functional safety, in particular ensuring that the safety-orientated safety process is fully integrated and included in safety projects at every stage. You release the technical safety concept and report to the top level management if assessments do not result in release and/or if corrective actions become necessary. In addition, you assess if the qualification of the staff in your organization who are concerned with safety is sufficient.

Prerequisites

In order to receive a certificate for Stage 3, as FSCMD, you must have worked for two years as FSCCD with experience in the area of IEC 61508. In order to finally establish your suitability, TÜV NORD Systems performs a qualification audit in your organization. The auditor makes recommendations in the Audit Report and TÜV NORD Systems makes the final decision regarding approval as FSCMD. If all is found to be satisfactory, the certification body confirms your specialist skills and knowledge with issue of the FSCMD certificate. At all three stages you are entitled to display a TÜV NORD Mark on your visiting card, with a corresponding ID Number.

Validity of certification

FSCED and FSCCD certifications are valid for three years, renewable for a further three years through attendance at a one-day update workshop, followed by a successful written test. In the case of the FSCMD, a re-audit takes place every three years. This 3-year rhythm encourages certificate holders to undertake continuous professional development.

Our Training Team

Our team consists of experienced trainers with university degrees in engineering. They have many years of experience in the area of functional safety, which enables them to offer optimum theoretical and practical further training. The training courses are extremely well thought out as regards the content and the training methods used, and the material is communicated in an easily understandable and interesting way.

TÜV NORD Systems GmbH & Co. KG

Functional Safety Halderstraße 27 86150 Augsburg Tel.: +49 0821 450954 0

fusi@tuev-nord.de
www.tuev-nord.de

