

Personal Certification • IEC 61511

Functional Safety Certified Engineer • Coordinator • Consultant • Manager

New technologies and the increasing number of functions within the process industry mean that more and more safety relevant electronic systems are developed and have to be used to reduce the risk in technical plants.. 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 61511 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. In the process industry employers have been urgently seeking trained and qualified personnel who can 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 61511 - completely up to date and in compact 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 (FSCEA), by attending a dedicated four-day workshop which concludes with a written examination. In order to achieve Stage 2 (FSCCA), you must submit a form to us demonstrating that you have at least 2 years practical experience as FSCEA. A decision is made regarding FSCCA approval based on an evaluation scheme developed by TÜV NORD Systems. The third stage is FSCMA, which follows two years of practical experience as FSCCA.



FSCEA

With your personal FSCEA certificate, you demonstrate that you know and understand the basic principles, concepts and objectives of functional safety in the process industry. You are able to put into practice the IEC 61511 specific application of a Safety Instrumented System (SIS) and especially the necessary tasks in the safety life cycle to fulfil the minimum requirements of a SIS.

FSCCA

With your personal FSCCA certificate, you demonstrate your ability to plan, implement and document Assessments based on IEC 61511. 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.

FSCMA

With your personal FSCMA 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 FSCMA, you must have worked for two years as FSCCA with experience in the area of IEC 61511. 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 FSCMA. If all is found to be satisfactory, the certification body confirms your specialist skills and knowledge with issue of the FSCMA 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

FSCEA and FSCCA 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 FSCMA, 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.

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