

IEC61508 Software (DE0103)

Development of safety related Software, Analysis & Testing acc. to IEC61508

Who should attend

- Development Engineers (System, Software)
- Safety Managers
- Software Project Leaders
- Software Quality Responsibles

Duration: 1.5 Days

Language: German or English, training material will be in English.

Brochure



Course topics:

- From concept to system decomposition:
 - What software people have to know about system and hardware decisions
- Software Development (IEC 61508 - Part 3)
 - Content of the SW Safety Process
- SW Safety Requirements specification and allocation
- SW Architecture: How to do it, how to use it
- SW related methods, measures and techniques
 - How to deal with the tables in the IEC 61508
 - exemplification: Software planning using an UML tool (Enterprise Architect)
- Partitioning, protection of interference freeness
 - runtime measures for detecting residual errors in software
 - exemplification: typical solutions
- SW Safety Verification
 - Requirements on Verification
 - SW Analysis Techniques
 - SW Criticality Analysis
 - SW Dependent Failure Analysis
 - SW Testing Techniques
 - Requirements based (Equivalence Classes, Boundary Values, etc.)
 - Structure based (Statement Coverage, MCDC, Call Coverage, etc.)
 - Examples and Exercises with example solutions

Tool qualification

Scheduled courses