TRAINING

exida Can Show you the Way

Training Course: FMEDA

The Failure Modes and Effects Analysis technique has been in use for several decades and has proven to be one of the best methods of finding potential design flaws in a system. The Failure Modes, Effects, and Diagnostic Analysis technique is an extension used primarily in the analysis of safety critical electronic systems as part of the IEC61508 certification. The course teaches the basic techniques with several examples. Advanced techniques such as diagnostic circuits, protection circuits and multiple operating modes are covered.

Skills You Will Learn:

- How to do a FMEA to identify system design faults
- How to do a FMEDA to estimate diagnostic coverage of systems
- How to use a spreadsheet to implement a FMEA/FMEDA
- How to deal with complex issues in a FMEA/FMEDA

Course Topics:

- Failure Modes and Effects Analysis,
- FMEA Procedure,
- FMEA Standards,
- Spreadsheet Format Example, Example 2, Exercise,
- Failure Modes, Effects and Diagnostic Analysis, (FMEDA)
- Purpose, Procedure, Format Extensions, Example 3
- Failure Modes,
- Exercise System Analysis,
- Reliability Block Diagrams, Example 4, Exercise,
- Fault Tree Analysis – AND, OR
- Example 5, Exercise Additional Fault Tree Symbols, Diagnostic
- Failures, Protection Components, Operational Modes, Exercise.

Who Should Attend:

- Control Engineers
- Safety Engineers
- Engineering Management

Length: 2 Days **Cost:** TBD

COURSE MATERIALS PROVIDED

Learning from the Experts

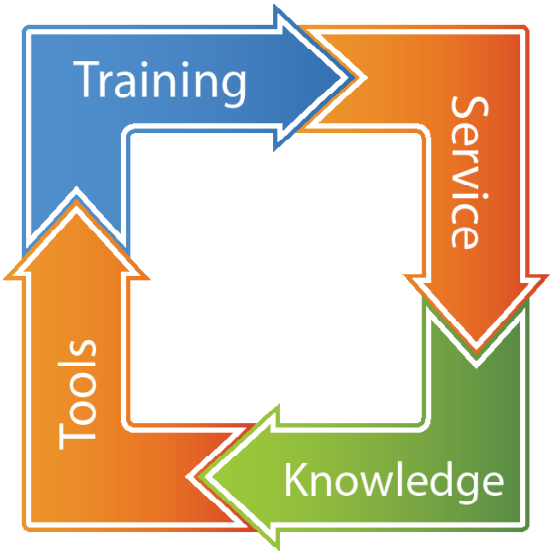
Experience has shown that most companies benefit from training as the first step in implementing a safety program. Having a solid up-front understanding of the Safety Life Cycle, the related standards and requirements for compliance, and the equipment selection and certification options ensures a focused and cost-effective safety initiative. And when you rely on exida for this knowledge, you gain access to some of the world's top experts in functional safety.

exida employees have written the books used for evaluating automation safety and reliability, they helped write the standards used for designing safe and secure systems, and they wrote many of the procedures used to certify the effectiveness of system hardware. They give the lectures and symposia that train industry's top professionals and present the latest developments. And since exida instructors are active safety professionals who participate in standards committees and provide professional safety services, the training reflects the most current and pressing issues.

exida delivers your training flexibly to accommodate your time and budget. Options include training courses delivered at your location, at an exida office, and through computer-based training modules. Example course topics include:

- The IEC 61508 and IEC 61511 Standards
- Hazard and Risk Analysis
- Safety Integrity Level (SIL) Selection
- Functional Safety Life Cycle Management
- CSFE (Certified Functional Safety Expert) preparation

exida also regularly publishes white papers and text books to facilitate learning on key topics, such as the best-selling book Safety Instrumented System Verification and the recently published book Final Elements and the IEC 61508 and 61511 Standards.



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