sector

Duration:

1 day

Teaching methods

Presentations with illustrated practical cases
Lunch meeting with the speaker

Prerequisites

Equivalent profile as engineer, in technical or in scientific education

For whom

Project Managers, Design Offices, Methods, R & D, Quality

Lecturer/Trainer

Expert and / or specialist

Assessment methods

Assessment sheet and self-assessment given at the end of training

Sites

PARIS / LYON / MONTREAL

Intra-company sessions on request

Contact us

For more information
Phone : 438-558-1395
formation@sector-group.net

FMECA (Failure Modes, Effects, Criticity Analysis)

Concepts and methods

Objectives

The objectives of this training are to provide to the participants :
- General knowledges of the RAMST parameters (Reliability, Maintainability, Availability, Safety et Testability)
- The principles of the FMECA method and its limits
- The ability to implement a functional, organic or process FMECA study and to control its development.

Program

Introduction
- Why do we need RAMS activities ?
- Why do we need a PHA analysis ?
- Concepts and definitions, notions of risks

FMECA
- Origin of the method - Definitions – Acronyms
- Inputs / Outputs of a FMECA
- Process of implementation
- Application domains
- FMECA : Why ? When ?
  At which level ?
- Functional analysis: a mandatory step

Implementation of a FMECA
- Variants of the FMECA : AESE (Analysis of the Effects of Software Errors) and the FMECA Project
- Tools to obtain data: databases, validity control
- Comments on current difficulties and limitations (considering the application of RAMS in software and the human factors)

Synthesis of the FMECA
- Advantages and disadvantages
- Conclusion about the method
- Bibliographic references

Case study
- Choice of the subject
- Preparation of working group
- Construction by participatory approach
- Presentation of the results
- Case study synthesis

The case study will be used for:
- Understanding the problem to be solved
- Understanding how the concept and method of the FMECA can provide solutions
- Overviewing concrete examples

Concepts and methods will be presented by the trainer, who will complete the presentation with examples.

Risk management and dependability: methods and implementation