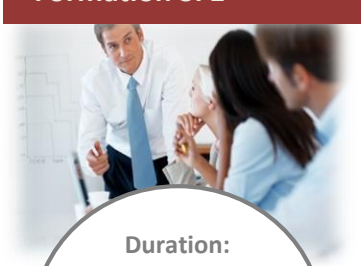
Formation SF1



RAMS (Reliability, Availability, Maintainability, Safety)

Concepts and Methods

Duration:

3 days
+2 days (option)

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

Objectives

The objectives of this training are to provide to the participants :

- Knowledge, reflexes and attitudes for considering RAMS activities at the appropriate level for an industrial project
- Specify the RAMS results and demonstration requirements to be met on projects
- Ability to analyze, evaluate, criticize and validate industrial supplies according to RAMS requirements

Program

Introduction

- Why do we need RAMS activities ?
- Concepts and definitions : RAMST - Reliability, Availability, Maintainability, Safety, Testability
- Notions of risk
- Main rules of reliability

RAMS activities in the life cycle of a product

- Allocation of objectives
- The approach and management of RAMS activities
- Links with project management

The methods used

- Qualitative methods (PHA, FMECA, HAZOP, Analysis of area)
- Quantitative methods (Reliability Bloc Diagram, Tree Fault Analysis , Tree of events, Markov graphic and Petri Network, …)
- Links with Functional analysis

RAMS document Proofreading Guide

Application on concrete cases

- Description of subsystems or products
- Qualitative and quantitative analysis (Failure rates, MTBF, Repair rates, ….)
- Tools to obtain data: databases, validity check
- Quantification methods
- Synthesis of the methods used and the results obtained
- Comments on current difficulties and limitations (considering the application of RAMS software and the human factor)

This training is illustrated by concrete and real examples with main RAMS methods (PHA, FMECA, Tree Fault Analysis, Markov chains , …).