
Fundamentals of Reliability Engineering

Course Overview

This course is your introduction to the world of Reliability Engineering and Reliability Management as practiced within the industrial world.

The course will provide an overview of Reliability methods and how they can be used to assist maintenance professionals and Asset managers to make smart business decisions. It will enable the participants to increase their awareness in Reliability Engineering methods, and when to apply this methodology.

It provides an ideal starting point for graduate engineers, maintenance engineers, reliability engineers and those who strive to practice reliability in their organisations. In the course, you will use instructor-led scenarios and examples that refer to everyday reliability issues in a plant or organisation. The course is designed to improving the maintenance function in an asset intensive organisation.

Course Key Learnings

- The history and purpose of Reliability Engineering and how it is applied today in the industry
- The science and mathematics behind the Reliability Engineering concept
- Increased awareness of Reliability Engineering methods
- How reliability prediction can be useful
- Practical use of the Reliability Engineering in asset intensive organisations
- Improving maintenance function
- Taking your organisation into the Reliability domain

Course Modules

1. Introduction to Reliability Engineering
2. Reliability Mathematics
3. Life Data Analysis and Probability plotting
4. Monte Carlo Simulation
5. Reliability Prediction and Modelling
6. Reliability of Mechanical Components & Systems
7. Reliability of Electrical Systems
8. Analysing Reliability Data
9. Maintenance Organisations
10. Reliability Management



Information

What is the duration of the course?

The course duration is 40 hours total (8-hour blocks over 4 days). The course material is covered over 4 days and is delivered online or in a classroom.

Who should attend?

- Reliability engineers
 - Maintenance engineers
 - Plant Performance engineers
 - Graduate engineers
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Industries that will benefit

- Mining
- Manufacturing Plants
- Oil and Gas
- Power & Utilities
- Food and Beverage