

Reliability Academy

Reliability Engineering Training Courses

Design for Testability - How to achieve good Testability

Goal: The aim of the course is to describe the basic process of Testability. We will show general Testability requirements, explaining functional interfaces, the context of Testability Preliminary and Detailed design analyses, verification / validation of Failure Catalogues. We will teach how to demonstrate Testability.

1. Overview: Testability Analysis

- Background, objectives, FMECA stages, benefits.
- Testability Requirements, Process, Demonstration steps.

2. Testability Process

- Step by step explained.

3. Testability Activities

- Failure Catalogue explained.
- Fault Detection philosophy, Traceability.
- Failure Catalogue exercise.

4. Testability Plan

- Plan Testing and Demonstration explained.

5. Development to Qualification Stages

- Review of tasks for qualification.
- Assess effectiveness of production / in-service stages.

6. Maintenance Philosophy

- Dispatch philosophy.
- Maintenance shop Testability.

7. Documentation Activities

- Reports preparation and issue.
- Description of Maintenance Manuals, Maintenance Handbooks.

8. Summary

- Discussion and advice how to perform a Testability analysis for an actual case.