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COURSE BROCHURE

FMEA Implementation in Asset Performance Management Software Training Course

9 – 13 August 2027
Singapore

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Registered in the United Kingdom and Saudi Arabia

FMEA Implementation in Asset Performance Management Software Training Course

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FMEA Implementation in Asset Performance Management Software is a 1-week training course for reliability engineers, maintenance strategists and asset performance analysts who move failure mode and effects analysis out of spreadsheets and into an asset performance management APM platform, and who leave with an FMEA build and strategy deployment plan for one asset class. Many organisations now own APM licences but hold little structured failure knowledge inside them. Jupiter Prime Training delivers this subject from the analyst's seat.

Why FMEA Implementation Matters Now

Three forces push FMEA into software. Organisations have bought APM platforms to link condition data, work history and risk, yet the tools stay empty without failure mode libraries behind them. Spreadsheet FMEAs held by individual engineers are lost when those engineers move on. Auditors and asset owners increasingly ask to see how each maintenance task traces back to a failure mode and a risk. Sites that build structured FMEA content gain a living strategy that updates with evidence; those that do not end up with expensive software and unchanged task lists. The course draws on the asset management system requirements of ISO 55001 and the maintenance terminology of EN 13306.

Who Gains Most from FMEA Implementation

- Engineers who lead failure mode review sessions and own equipment strategies
- Strategists who convert analysis results into task lists and intervals
- Analysts who configure asset hierarchies, risk matrices and dashboards in APM tools
- Planners who load approved tasks into the maintenance management system
- Data specialists who clean equipment registers and failure codes

A reliability group gains most when its engineers and system analysts attend together and agree one data model.

FMEA Implementation Capabilities

Participants practise turning engineering judgement about how equipment fails into structured, reusable records inside an APM platform.

- Build an asset hierarchy and equipment taxonomy fit for FMEA — data owners and analysts
- Specify failure mode, cause and effect records using consistent codes — reliability engineers
- Apply a risk matrix to rank failure modes by consequence and likelihood — asset owners
- Design mitigating tasks and intervals linked to each failure mode — maintenance strategists
- Test the strategy package against cost and risk before release — budget holders
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Track recommendation actions and strategy revisions through to closure — planners and auditors

Key FMEA Implementation Terms

- FMEA — failure mode and effects analysis, a structured review of how equipment can fail, why, and with what consequence.
- Asset performance management APM — software that combines asset data, condition, risk and strategy to guide maintenance decisions.
- Asset hierarchy — the parent-child structure of sites, systems, equipment and components used to organise records.
- Failure mode library — a reusable set of failure modes, causes and tasks for a given equipment class.
- Risk priority — a ranking of failure modes from consequence and likelihood scores used to focus effort.
- Strategy package — the approved set of tasks, intervals and spares derived from an FMEA for an asset.

FMEA Implementation Day by Day

Day 1: Foundations and Data Structure

- FMEA Purpose and Scope Boundaries — Choosing Analysis Depth per Asset
- Asset Hierarchy and Equipment Taxonomy — Structuring Records for Reuse
- Equipment Register Cleansing — Fixing Duplicates and Missing Attributes
- Failure Codes and Damage Mechanisms — Consistent Language Across Sites
- APM Data Model Overview — Linking Assets, Risks and Tasks

Day 2: Building Failure Mode Records

- Function and Functional Failure Statements — Anchoring Each Analysis
- Failure Mode, Cause and Effect Entry — Writing Records Others Can Use
- Failure Mode Libraries per Equipment Class — Speeding Later Analyses
- Facilitated FMEA Sessions — Capturing Operator and Technician Knowledge
- Work History Mining — Validating Modes Against Real Failures

Day 3: Criticality and Risk Ranking

- Corporate Risk Matrix Configuration — Consequence Categories and Likelihood Scales
- Equipment Criticality Assessment — Screening Before Detailed Analysis
- Risk Priority Ranking of Failure Modes — Focusing Engineering Effort
- Unmitigated Versus Mitigated Risk — Showing the Value of Tasks
- Risk Dashboards and Heat Maps — Communicating to Asset Owners

Day 4: From Analysis to Maintenance Strategy

- Task Selection Logic per Failure Pattern — Condition, Time or Redesign
- Interval Setting From Warning Periods and Cost — Defensible Frequencies
- Strategy Package Review and Approval Workflow — Engineering Sign-Off
- Transfer to the Maintenance Management System — Job Plans and Routes
- Recommendation and Action Tracking — Closing Out Findings

Day 5: Practising an FMEA Deployment

- Centrifugal Pump Class FMEA Build — Applying Days 1 and 2
- Electrical Switchgear Risk Ranking at a Water Utility — Applying Day 3
- Strategy Package for a Compressor Train — Applying Day 4
- Living Strategy Review Triggers — Updating After Failures and Audits
- FMEA Build and Strategy Deployment Plan — Completing the Asset Class Plan

Applying FMEA Implementation After the Course

- Cleanse the hierarchy and failure codes for one equipment class in the APM platform.
- Run a facilitated FMEA session for that class and load the results as a reusable library.

FMEA Implementation Questions FAQ

What is FMEA implementation in asset performance management software and why does it matter now?

It is the work of building failure mode analyses inside APM software so they drive maintenance strategy. It matters now because many organisations own APM tools but lack the structured failure knowledge that makes them useful.

Which roles gain most from FMEA implementation in asset performance management software?

Reliability engineers, maintenance strategists and asset performance analysts gain most. You share ownership of failure records, risk rankings and the tasks they justify.

How does FMEA implementation in asset performance management software differ from a reliability-centred maintenance course?

It concentrates on structuring and deploying analysis inside software. A reliability-centred maintenance course teaches the decision logic in general, while this one builds hierarchies, libraries, risk matrices and strategy workflows in an APM platform.

What do you bring back from FMEA implementation in asset performance management software training?

You bring back a build and deployment plan for one asset class. It sets data cleansing steps, library content, risk settings and the strategy release sequence.

FMEA Implementation: The Way Forward

The FMEA build and strategy deployment plan first informs which equipment class is analysed and loaded into the APM platform first. Reliability engineers lead it, analysts configure the software and planners receive the approved tasks. After the first strategy release, the risk matrix settings and library content deserve a second look against the failures that still occur.