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COURSE BROCHURE

Strategic Maintenance Planning and Criticality Training Course

21 – 25 June 2027
Singapore

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Registered in the United Kingdom and Saudi Arabia

Strategic Maintenance Planning and Criticality Training Course

Ref: 1327_49744 **Date:** 21 – 25 June 2027 **Location:** Singapore **Fees:** 9300 GBP

Strategic Maintenance Planning and Criticality is a 1-week training course for maintenance managers, planning leads and reliability engineers who set maintenance direction several years ahead, and it ends with a multi-year maintenance plan tied to asset criticality and production targets. Tight capital budgets, ageing equipment and pressure for higher availability force sharper choices about where maintenance effort goes. The course is delivered by Jupiter Prime Training.

Why Strategic Maintenance Planning and Criticality Matters Now

Three forces shape long-range maintenance choices today. Finance directors want maintenance spend justified against output and risk. Production planners want shutdown windows fixed years in advance so sales commitments hold. Ageing fleets of pumps, compressors and furnaces need renewal decisions that a single annual cycle cannot frame. A plant that ranks its equipment by consequence and plans across several years spends where failures hurt most; one that does not spreads effort thinly and is surprised by outages. The course rests on ISO 55001 for asset management and EN 13306 for maintenance terminology.

Who Gains Most from Strategic Maintenance Planning and Criticality

- Leaders who own the maintenance strategy and its multi-year budget for a site or business unit
- Planning leads who forecast craft workload and size contractor support over several years
- Reliability engineers who rank equipment criticality and choose maintenance tactics
- Turnaround coordinators who set the timing and scope horizon of major shutdowns
- Asset owners who balance renewal, overhaul and run-to-failure decisions

A site leadership group combining maintenance, reliability and production gains most, because it leaves with one ranked view of equipment and one horizon for shutdowns.

Strategic Maintenance Planning and Criticality Capabilities

Participants turn a criticality register and production forecast into a costed, sequenced horizon of maintenance commitments.

- Rank equipment criticality by safety, production and cost consequence — tactic selection for each asset class
- Align maintenance objectives with production targets and asset strategy — the site leadership group
- Forecast craft workload and contractor demand over several years — resourcing and hiring decisions
- Build a multi-year maintenance budget split by operating and renewal spend — finance approval
- Set shutdown intervals and scope horizons from equipment condition and risk — production planners
- Test the plan against budget cuts and demand changes — senior sponsors weighing trade-offs

Key Strategic Maintenance Planning and Criticality Terms

- Criticality ranking — scoring each asset by the consequence and likelihood of its failure to decide where maintenance effort goes first.
- Maintenance strategy — the documented choice of tactics, resources and horizons that turns asset objectives into maintenance commitments.
- Planning horizon — the span of years a maintenance plan covers, from the annual budget to the long-range renewal outlook.
- Workload forecast — an estimate of craft hours by trade and period, built from preventive, corrective and shutdown demand.
- Shutdown interval — the planned time between major outages, set by equipment condition, regulatory inspection and production demand.
- Life-cycle cost — the total cost of owning an asset across acquisition, operation, maintenance and disposal, used to compare options.

Strategic Maintenance Planning and Criticality Day by Day

Day 1: Strategy Context and Asset Objectives

- ISO 55001 Asset Management Line of Sight — Linking Maintenance to Business Goals
- Production Targets and Availability Requirements — Setting Maintenance Objectives
- Maintenance Cost Benchmarks and Spend Profiles — Framing Budget Conversations
- Asset Register Quality and Hierarchy — Readiness for Long-Range Planning
- Stakeholder Map of Finance, Production and Safety — Plan Sponsorship

Day 2: Criticality Ranking

- Consequence Categories for Safety, Output and Cost — Criticality Scoring Rules
- Risk Matrix Calibration Across Asset Classes — Consistent Ranking Decisions
- Criticality Scoring Session Facilitation — Agreeing Scores with Operations
- Tactic Selection by Criticality Band — Preventive, Predictive or Run-to-Failure
- EN 13306 Terminology for Tactics — Shared Language Across Sites

Day 3: Workload and Shutdown Horizons

- Craft Hour Forecasting by Trade — Staffing and Contractor Levels
- Backlog Trend Projection — Sustainable Workload Decisions
- Shutdown Interval Setting from Condition and Risk — Outage Timing
- Long-Range Turnaround Scope Envelope — Production Loss Planning
- Spares and Long-Lead Item Horizon — Procurement Commitments

Day 4: Budgets, Renewal and Trade-Offs

- Multi-Year Maintenance Budget Structure — Operating Versus Renewal Spend
- Life-Cycle Cost Comparison — Overhaul, Replace or Run On
- Renewal Priority Ranking — Capital Request Sequencing
- Scenario Testing for Budget Cuts — Protecting Critical Assets
- Plan Performance Indicators — Availability, Cost and Backlog Targets

Day 5: Practising the Multi-Year Maintenance Plan

- Criticality Register for a Sample Plant — Applying Day 2 Scoring
- Workload and Shutdown Calendar Draft — Applying Day 3 Forecasts
- Budget and Renewal Schedule — Applying Day 4 Trade-Offs
- Sponsor Presentation of Plan Choices — Securing Leadership Approval
- Multi-Year Maintenance Plan Linked to Criticality — Completed Work Product

Applying Strategic Maintenance Planning and Criticality After the Course

- Run a criticality scoring session for one process unit and agree tactic bands with operations.
- Draft a three-period workload and shutdown forecast for the site and test it against a budget cut scenario.

Strategic Maintenance Planning and Criticality Questions FAQ

What is strategic maintenance planning and criticality, and why does it matter now?

It is the practice of setting maintenance tactics, budgets and shutdowns several years ahead, ranked by how much each asset's failure would cost. It matters now because budgets are tight and ageing equipment needs renewal choices that annual plans cannot frame.

Which roles gain most from strategic maintenance planning and criticality?

Maintenance managers, planning leads and reliability engineers gain most. Turnaround coordinators and asset owners who decide renewals and shutdown timing also apply the methods directly.

How does strategic maintenance planning and criticality differ from a maintenance scheduling course?

It works on a horizon of years rather than weeks. A scheduling course builds job packages and weekly schedules, while this course sets criticality, budgets, workload and shutdown intervals that those schedules later follow.

What do you bring back from strategic maintenance planning and criticality training?

You bring back a multi-year maintenance plan for a sample plant. It links criticality scores to tactics, workload forecasts, shutdown intervals and a budget split between operating and renewal spend.

Strategic Maintenance Planning and Criticality: The Way Forward

The multi-year maintenance plan first informs the next budget submission, showing which critical assets receive protected spend. Maintenance leaders present it, planners use its workload forecast to size crews, and production planners lock shutdown windows from it. After its first cycle, revisit the criticality scores.