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COURSE BROCHURE

Management Skills and Techniques for Engineers Training Course

21 – 25 November 2027
Sharm El-Sheikh

Management Skills and Techniques for Engineers Training Course

Ref: 1688_61866 **Date:** 21 – 25 November 2027 **Location:** Sharm El-Sheikh **Fees:** 4500 GBP

Management Skills and Techniques for Engineers is a 1-week training course for engineers and engineering supervisors who now plan resources and hold budgets, and who leave with an Engineering Section Management Toolkit. Engineering functions are asked to do more with fixed headcount and capital, so engineers who forecast workload, control cost and explain trade-offs earn trust and funding. Jupiter Prime Training runs this course on management skills and techniques for engineers.

Why Management Skills and Techniques for Engineers Matter Now

Three pressures shape engineering management today: capital and maintenance budgets scrutinised line by line, scarce specialist skills that must be scheduled across competing jobs, and non-technical executives who decide on engineering proposals they cannot fully assess. Sections that manage these well win approvals and keep work on time; sections that do not face overruns, idle crews and rejected business cases. The course draws on earned value management EVM, Pareto analysis, the MoSCoW prioritisation method Must, Should, Could, Won't and the weighted decision matrix.

Who Gains Most from Management Skills and Techniques for Engineers

- Engineers responsible for a section's workload, staffing and overtime
- Supervisors holding maintenance or project budgets for the first time
- Lead engineers preparing capital requests and justifications for approval
- Planning engineers balancing specialist skills across concurrent jobs
- Discipline leads who brief operations, finance or procurement on technical choices

Engineers and supervisors from one department gain most together, as they can agree shared estimating, reporting and approval habits.

Management Skills and Techniques for Engineers Capabilities

Each capability gives an engineer a numerate, defensible way to manage people, money and time.

- Calculate section capacity against forecast workload — staffing and overtime decisions
- Build a cost estimate and track budget variance — finance and budget holders
- Apply MoSCoW and Pareto analysis to rank competing jobs — operations managers
- Weigh options with a weighted decision matrix — capital approval committees
- Specify earned value measures for project progress — sponsors and project boards
- Communicate a technical proposal as a one-page business case — non-technical executives

Key Management Skills and Techniques for Engineers Terms

- Capacity plan — a comparison of available labour hours by skill against forecast work to reveal gaps and overloads.
- Budget variance — the difference between planned and actual cost, used to trigger investigation and corrective action.
- Earned value — the planned cost of work actually completed, used to measure schedule and cost performance together.
- MoSCoW method — a prioritisation approach sorting requirements into Must, Should, Could and Won't have.
- Weighted decision matrix — a table scoring options against criteria weighted by importance to support a transparent choice.
- Business case — a short document setting out the need, options, costs, benefits and risks of a proposed investment.

Management Skills and Techniques for Engineers Day by Day

Day 1: The Engineer as Manager of Resources

- Engineering Section Role Map — Technical, Financial and People Duties
- Stakeholder Needs From Engineering — Operations, Finance and Safety Views
- Workload Forecasting From Maintenance and Project Plans — Demand Picture
- Skills Inventory and Gaps — Specialist Coverage Across Shifts
- Capacity Plan Construction — Hours Available Versus Hours Required

Day 2: Budgets and Cost Control

- Cost Estimating Methods — Analogous, Parametric and Bottom-Up
- Operating and Capital Budget Basics — What Each Line Funds
- Budget Variance Tracking — Spotting Overruns Before Month End
- Life-Cycle Cost Comparison — Repair, Refurbish or Replace
- Contractor Cost Oversight — Reading Quotes and Change Orders

Day 3: Prioritising and Deciding

- MoSCoW Prioritisation of Engineering Requests — Saying No With Reasons
- Pareto Analysis of Failures and Delays — Focusing Scarce Effort
- Weighted Decision Matrix — Transparent Choice Between Technical Options
- Risk-Based Ranking of Work — Consequence and Likelihood Scores
- Decision Records — Capturing Assumptions for Later Review

Day 4: Project Controls and Stakeholder Communication

- Earned Value Measures — Schedule and Cost Performance Indices
- Progress Dashboards for Engineering Jobs — Few Measures, Clear Thresholds
- One-Page Business Case — Need, Options, Cost, Benefit and Risk
- Explaining Technical Trade-Offs to Executives — Plain Language and Visuals
- Negotiating Resources With Operations — Shutdown Windows and Access

Day 5: Practising the Engineering Section Management Toolkit

- Section Planning Simulation — Applying Capacity Plans and MoSCoW Ranking
- Budget Review Exercise — Using Variance Tracking and Life-Cycle Costs
- Capital Request Pitch to a Mock Committee — Weighted Matrix and Business Case
- Earned Value Status Report — Presenting Progress to a Project Board
- Engineering Section Management Toolkit — Final Version for the Home Department

Applying Management Skills and Techniques for Engineers After the Course

- Build a capacity plan for the section's next quarter and agree overtime limits with the line manager.
- Rewrite one pending engineering request as a one-page business case with a weighted decision matrix.

Management Skills and Techniques for Engineers Questions FAQ

What are management skills and techniques for engineers, and why do they matter now?

They are the planning, budgeting, prioritising and decision methods engineers use to run a section. They matter now because budgets and specialist skills are tight, and engineers must justify every request to non-technical decision-makers.

Which roles gain most from management skills and techniques for engineers?

Engineering supervisors, lead engineers and planning engineers gain most. You benefit if you hold a maintenance budget in a utility, plan crews in a manufacturing plant or prepare capital requests in a construction firm.

How do management skills and techniques for engineers differ from first-time manager training?

They focus on money, capacity and decisions rather than the personal shift into leading people. The course centres on estimates, budgets, earned value and business cases for engineering sections.

What do you bring back from management skills and techniques for engineers?

You bring back a ready toolkit. It holds a capacity plan template, a variance tracker, a prioritisation sheet, a decision matrix and a business case format, tested in a mock approval committee.

Management Skills and Techniques for Engineers: The Way Forward

The Engineering Section Management Toolkit gives an engineer consistent ways to plan capacity, control cost and argue for investment. It first informs the next quarter's staffing and overtime plan. The section lead owns it and shares it with planners, finance partners and the department head. After the first budget cycle, revisit which estimates proved weakest and why.