



ADVANCED SKILLS IN PROJECT MANAGEMENT

PIK245-0325 LON-2



Place: London (UK)

Venue:

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End Date: 11-04-2025

PPP: £5550



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**If you can't train them,
you can't blame them!**

Short Description:

This course is designed for project planning engineers, project cost estimators, project designers, project planners and schedulers, contracts professionals, project procurement and purchasing staff, and project control and business services professionals who have the responsibility for project proposals in client and contracting companies.

Course Overview:

The Process

Delegates will develop advanced project management planning, performance and control, and management skills and knowledge through formal and interactive learning methods. The program includes individual exercises, team projects, applicable case studies, group discussions and video material that bring to life the skills acquired throughout the course.

The material has been designed to enable delegates to apply all of the material with immediate effect at the office.

Additionally, the program does not assume prior knowledge of the topics covered in the course. New concepts and tools are introduced gradually to enable delegates to progress from the fundamental to the advanced concepts of project risk management.

The Benefits

- This Fundamental Program takes the practice of project planning, scheduling to a new level to ensure maximum results.
- The most recent developments in the field are included to provide fresh inputs to your project management efforts.
- The program takes a practical rather than a theoretical approach by introducing a case study so that new skills can be applied with immediate effect.



- Group activities and exercises will ensure mastery of the practical application of new skills learned.
- Related project management fields such as risk are continuously incorporated to provide an integrated view of the total project management process.
- Delegates will have excellent opportunities for interaction and discussion of best practices at their respective organisations.
- This program will equip delegates with the skills and knowledge to significantly improve all levels.

The Results

This intensive program will provide delegates with a proven set of critical skills and techniques for the development a systematic and dynamic project plan and schedule, as well as the ability and skills to develop accurate and reliable conceptual and detailed estimates used for project proposals and final estimates. This will enable delegates to:

- Maintain continuous project performance and delivery control.
- Accurately estimate and allocate project costs and resources.
- Measure, forecast and control project performance by employing earned value techniques.
- Compress or accelerate the schedule when required by adverse circumstances.
- Manage and mitigate schedule, cost, scope, and resource risks associated with the project.
- Develop line of balance schedules and velocity diagrams for repetitive or recurring work.
- Benefit from the financial effects of the learning curve on recurring work.
- Develop a project recovery plan for budget and schedule overruns.
- Produce clear and concise project progress reports.
- Prepare budget estimates that will enable the owner-organisation to make informed decisions as to the feasibility of a potential project.
- Compare the costs of alternative strategies or technical approaches to ensure the most economical project at the desired level of quality.
- Structure the contract compensation arrangement to provide the highest level of incentives to complete the project on schedule and within the determined budget.
- Keep accurate control of the progressive budgeting process based on the various stages of design.
- Prepare accurate budget estimates through the programming phase, the schematic design phase, and finally the design development phase.
- Understanding the most appropriate contracting structure to ensure the desired project results.
- Apply proper risk analysis to effectively mitigate risks at minimal costs, and to determine appropriate contingencies for residual risks.
- Obtain the skills required to prepare and manage the bidding process.

The Core Competencies

- Ability to deliver projects on time and within budget.
- Understanding of what it takes to be a successful project manager.
- Skill and confidence to plan and control projects successfully and ability to sidestep the most common project management pitfalls and problems.
- Appreciation of the philosophy, framework, standards and approaches to the delivery of the projects.
- Understanding and practicing effective project management techniques in successfully completing and handing over projects.
- Developing an initial project budget for the owner.
- Determining project feasibility.
- Designing the project within the owner's budget.
- Evaluating alternative design concepts and project components.



- Preparing bids.
- Establishing project budgets.
- Substantiating claims and resolving disputes.
- Preparing a Schedule of Values.

Program Outline:

Day 1: Project Scope Planning and Definition (Fundamentals)

1. Scope Planning.
2. Work Breakdown Structures (WBS).
3. Work Packages.
4. Statement of Work (SOW) - Technical Baseline.
5. Scope Execution Plan.

Day 2: Triple Constraints - Time, Cost, Scope.

1. Project Quality Issues.
2. Project Risk Analysis.
3. Project Deliverables.
4. Resource Requirements.
5. Budget Alignment.

Day 3: Project Schedule Planning and Critical Path Method

1. Critical Path Analysis.
2. Project Float Analysis.
3. Lead and Lag Scheduling.
4. Gantt Chart - Schedule Baseline.
5. Project Estimating Processes, Production and Productivity Planning.

Day 4: Resource Allocation and Resource Levelling

1. Management of Resources.
2. Planning and Scheduling Limited Resources.
3. The Brooks Method of Resource Allocation.
4. Increasing the Workforce.
5. Solving Interruptions to the Schedule and Scheduling Overtime.

Day 5: Accelerating the Project Schedule

1. Circumstances Requiring Project Acceleration.
2. Time-Cost-Scope Trade-off.
3. Project Time Reduction.
4. Direct and Indirect Project Costs.
5. Crashing the Schedule - How?

Day 6: The Optimal Acceleration Point.

1. Gantt chart for Accelerated Schedule.
2. Network Activity Risk Profiles.
3. Additional Considerations.
4. Multiple Critical Paths.
5. Project Cost Reduction.

Day 7: Project Contingency Planning

1. Program Evaluation and Review Technique (PERT).
2. Path Convergence Analysis.
3. Network Risk Profile Types.
4. PERT, Probability and Standard Deviation Formulae.
5. Calculating the Standard Deviation.

Day 8: Line of Balance Scheduling - The Planning of Recurring Activities

1. Preparing a Line of Balance Schedule



1. Velocity Diagrams and Linear Scheduling.
2. Velocity Diagram Production Rate Calculations.
3. Linear Sequence of Activities as a Series of Velocity Diagrams.
4. Balancing the Schedule.

Day 9: Project Execution Management, Control and Reporting

1. Progress Tracking and Monitoring.
2. Project Cost Management.
3. Earned Value Control Process.
4. Schedule Variances.
5. Cost Variances.

Day 10: Project Recovery Plan Development

1. Project Variance Analysis and Quantification.
2. Schedule Performance Index (SPI) and Cost Performance Index (CPI).
3. Setting Schedule and Cost Control Limits.
4. Schedule and Cost Recovery Analysis and Plan.
5. Project Recovery Baselines and Controls.