



## Project Planning with Scheduling and Cost Estimating Skills

PIK-0925 PRS-F-2



<b>Place:</b>	Paris	<b>Venue:</b>	TBC		
<b>Start Date:</b>	01-09-2025	<b>End Date:</b>	12-09-2025	<b>PPP:</b>	£5950



## **Project Planning with Scheduling and Cost Estimating Skills**

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

### Short Description:

**PROGRAM OVERVIEW** The training program on Project Planning with Scheduling and Cost Estimating Skills aims to significantly enhance the competencies and knowledge of participants. By focusing on effective project planning and scheduling techniques, this program equips delegates with the necessary tools to manage their projects more efficiently. Participants will learn to perform both conceptual and detailed cost estimates, which will enable them to assess the financial aspects of their projects comprehensively. This foundational knowledge is crucial for ensuring that projects are not only completed on time but also within budget. Moreover, the program emphasises the importance of evaluating feasible alternatives quickly and efficiently. This skill is vital in today's fast-paced project environments, where timely decision-making can impact the overall success of a project. By developing their ability to compare various options, delegates will become adept at identifying the most effective strategies for project execution. Ultimately, this training program will empower participants to enhance their project management skills, leading to improved outcomes in their respective fields.

### Course Overview:

#### **PROGRAM OBJECTIVES**

At the end of the program, participants will be able to:

- Integrate key elements of project management.
- Advance project network diagrams to identify risks.
- Maintain ongoing control over project performance and delivery.
- Estimate, allocate, and manage project costs and resources effectively.
- Accelerate project schedules while mitigating risks.
- Develop effective recovery plans and detailed progress reports.
- Understand comprehensive structures for budgeting and contracting.

## **TARGET AUDIENCE**

- Project Managers.
- Project Cost Estimators.
- Cost Controllers.
- Project Planners.
- Contract Professionals.
- Project Procurement Staff.
- Stakeholders involved in project management.

## **Program Outline:**

### **DAY 1: Planning & Defining Project Scope (Fundamentals)**

1. Scope Planning.
2. Developing Work Breakdown Structures (WBS).
3. Statement of Work (SOW) - Establishing Technical Baseline.
4. Creating a Scope Execution Plan.
5. Understanding Triple Constraints (Time, Cost, Scope) & Project Deliverables.

### **DAY 2: Scheduling Project & Critical Path Method**

1. Creating Precedence Network Diagrams.
2. Conducting Critical Path Analysis.
3. Managing Lead and Lag in Scheduling.
4. Estimating Activity Durations.
5. Developing Milestone Charts and Gantt Chart - Establishing Schedule Baseline.

### **DAY 3: Allocating Resources & Resource Levelling**

1. Resource Management Strategies.
2. Addressing Resource Contention Issues.
3. Performing Resource Levelling with Fixed Project Duration.
4. Implementing the Brooks Method for Resource Allocation.
5. Strategies for Workforce Expansion & Scheduling Overtime.

## **DAY 4: Speeding Up the Project Schedule**

1. Identifying Situations Necessitating Project Acceleration.
2. Analysing Time-Cost-Scope Trade-offs.
3. Understanding Direct Project Costs.
4. Exploring Options for Schedule Acceleration & Pre-Accelerated Schedules.
5. Creating a Gantt Chart for Accelerated Scheduling.

## **DAY 5: Developing Project Contingency Plans**

1. Utilising Program Evaluation and Review Technique (PERT).
2. Identifying Types of Network Risk Profiles.
3. Understanding Normal Distribution.
4. Calculating Z-Values: Probability of Completing the Project by a Certain Date.
5. Application: Estimating Project Duration.

## **DAY 6: Line of Balance Scheduling for Recurring Activities**

1. Constructing a Line of Balance Schedule.
2. Performing Calculations for a Line of Balance Schedule.
3. Utilising Velocity Diagrams and Linear Scheduling Techniques.
4. Balancing the Project Schedule.
5. Incorporating Buffers, Actual Progress, and Work Conditions.

## **DAY 7: Managing Project Execution, Control, and Reporting**

1. Tracking and Monitoring Project Progress.
2. Conducting Earned Value Analysis & Reporting.
3. Managing Project Costs Effectively.
4. Analysing Schedule Variances.
5. Overseeing Materials Management and Cost Control.

## **DAY 8: Developing Project Recovery Plans**

1. Conducting Project Variance Analysis and Quantification.
2. Understanding Schedule Performance Index (SPI) & Cost Performance Index (CPI).
3. Establishing Schedule and Cost Control Limits.
4. Analysing Schedule and Cost Recovery Plans.
5. Setting Project Recovery Baselines and Controls.

## **DAY 9: Fundamentals of Cost Estimation**

1. Understanding the Estimating Life Cycle & Programming Phase.
2. Exploring Lump-Sum Contracts.
3. Generating Rough Order of Magnitude Estimates (Broad Scope Estimates).
4. Conducting Risk Analysis and Planning for Contingencies.
5. Performing Quantity Take-Off.

## **DAY 10: Techniques for Broad Scope Cost Estimation**

1. Adjusting Project Costs for Broad Scope Estimates & Time Adjustments.
2. Estimating Costs Utilising Learning Curve Effects.
3. Calculating Project Unit Costs Using Standard Deviation.
4. Performing PERT Project Cost Analysis and Economic Price Adjustments.
5. Estimating Costs During the Design Phase & Programming Budget Estimates.