€TRAINING

Project Scheduling and Planning

2 - 6 September 2024
Kuala Lumpur (Malaysia)

Project Scheduling and Planning

REF: P1200 DATE: 2 - 6 September 2024 Venue: Kuala Lumpur (Malaysia) - Fee: 5300 Euro

Introduction:

The Project Scheduling and Planning program is designed to equip participants with the skills and knowledge necessary to effectively plan, schedule, and manage projects. Through practical exercises and case studies, this program aims to enhance participants' abilities to execute projects successfully within specified timelines and budgets.

Program Objectives:

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

- Gain knowledge of techniques used in resource planning and control.

- Understand the time-cost trade-offs and administer project documentation and reporting.

- Identify risk sources, develop effective performance monitoring and control systems, and integrate scope, time, resources, and cost management.

- Develop project network diagrams for CPM and advanced PERT calculations to identify schedule and cost risks.

- Explore Time-Cost Trade-Offs and Risk Minimization Strategies.

- Administrate Project Documentation and Reporting for Momentum and develop Performance Monitoring and Control Systems.

- Integrate Scope, Time, Resources, and Cost Management.

- Implement Advanced Techniques for Project Performance and Delivery Control.

Targeted Audience:

- Project Managers.

- Cost Estimators.

- Project Schedulers, Designers, and Planner.

- Senior Managers who want to understand best practice in project management.

Program Outlines:

Unit 1:

Project Scope Planning and Definition Fundamentals:

- Scope Planning.

- Work Breakdown Structures WBS, and packages.

- Statement of Work SOW - Technical Baseline.

- Scope Execution Plan.

- Triple Constraints - Time Cost, Scope.

- Project Quality Issues, Risk Analysis, and Deliverables.

- Resource Requirements.

Unit 2:

Project Schedule Planning and Critical Path Method:

- Precedence Network Diagramming and Job Logic Relationship Chart.

- Critical Path Analysis and Project Float Analysis.

- Lead and Lag Scheduling and Activity Duration Estimation.

- Milestone Charts and Gantt Chart - Schedule Baseline.

- Project Estimating Processes and Resource and Cost Allocation.

- Production and Productivity Planning with Project Estimating Processes.

Unit 3:

Resource Allocation and Resource Levelling:

- Efficient Management of Resources and Resource Allocation.

- Planning and Scheduling Limited Resources with Resource Levelling Techniques.

- Prioritizing Resources with Allocation Algorithms and the Brooks Method.

- Addressing Resource Contention and Interruptions to the Schedule.

- Increasing Workforce and Scheduling Overtime to Meet Project Demands.

- Ensuring Resource Availability through Effective Planning and Contingency Measures.

Unit 4:

Accelerating The Project Schedule:

- Circumstances Requiring Project Acceleration and Time-Cost-Scope Trade-offs.

- Strategies for Project Time Reduction and Direct vs. Indirect Project Costs.

- Options for Accelerating the Schedule and Techniques for Crashing the Schedule.

- Preparing Pre-Accelerated Schedules and Developing Crash Cost Tables.

- Acceleration in Practice: Identifying the Optimal Acceleration Point.

- Utilizing Gantt Charts for Accelerated Schedules and Analyzing Network Activity Risk Profiles.

- Considering Multiple Critical Paths and Strategies for Project Cost Reduction.

Unit 5:

Project Contingency Planning:

- Program Evaluation and Review Technique PERT and Path Convergence Analysis.

- Strategies for Solving the Path Convergence Problem and Understanding Network Risk Profile Types.

- Exploring Normal Distribution and PERT Probability with Standard Deviation Formulae.

- Calculating Standard Deviation and its Application to Critical Paths.

- Utilizing Z-Values to Determine Probability of Project Completion.

- Identifying True Critical Paths and Analyzing Network Activity Risk Profiles.

- Application of PERT in Estimating Project Duration and Mitigating Risks.