

HDTC Training Center

Provide

Technical proposal of the Training program

Project Planning, Scheduling and Cost Control Professional



Introduction

Effective project management requires more than just technical expertise — it demands strong planning, accurate scheduling, and rigorous cost control. The **Project Planning, Scheduling, and Cost Control Professional** training program is designed to equip professionals with practical tools and methodologies to manage projects efficiently from initiation to closeout. Over the course of this training, participants will gain a deep understanding of project life cycles, resource allocation, time management techniques, and cost control strategies to ensure successful project delivery within scope, time, and budget constraints.

Program Objectives:

By the end of this training course, the participant will be able to:

- Understand the principles and lifecycle of project management.
- Develop comprehensive project plans aligned with organizational goals.
- Apply effective scheduling techniques using tools such as Gantt charts and Critical Path Method (CPM).
- Monitor and control project costs using Earned Value Management (EVM) and budgeting techniques.
- Identify and mitigate project risks that may impact schedule and budget.
- Use project management software to track progress and improve decision-making.

Program Outlines:

Day 1: Introduction to Project Management and Planning

- Overview of Project Management Processes (PMBOK®-aligned)
- Project lifecycle: Initiation, Planning, Execution, Monitoring & Closing
- Defining project scope, objectives, and deliverables
- Work Breakdown Structure (WBS)
- Creating a Project Charter and Project Plan

Day 2: Project Scheduling Techniques

- Introduction to project scheduling
- Gantt Charts, Network Diagrams, and Milestone Charts
- Critical Path Method (CPM)
- Precedence Diagramming Method (PDM)
- Resource allocation and levelling

Day 3: Time Management and Schedule Control

- Time estimation techniques (PERT, 3-point estimates)
- Schedule baselines and performance measurement
- Monitoring schedule performance
- Handling delays and change management

- **Schedule compression: Crashing vs. Fast-tracking**

Day 4: Cost Estimation and Budgeting

- **Cost planning and estimating techniques**
- **Creating a cost baseline**
- **Cost breakdown structures (CBS)**
- **Budgeting, contingency reserves, and forecasting**
- **Capital vs. operational expenses**

Day 5: Cost Control and Project Performance

- **Earned Value Management (EVM) fundamentals**
- **Performance indices: CPI, SPI, EAC, VAC**
- **Variance analysis and corrective actions**
- **Risk management integration with cost/schedule control**
- **Using software tools (e.g., MS Project / Primavera P6)**

Target Audience:

- Project Managers and Coordinators
- Planning and Scheduling Engineers
- Cost Control Engineers and Analysts
- Construction Managers and Site Engineers
- Operations and Program Managers
- Team Leaders and Supervisors involved in projects
- Professionals preparing for PMP® or PMI-SP® certification

Training methods:

- Technology-Based Learning.
- Simulation in Training.
- On-the-job guidance.
- Trainer-Led Training.
- Work Teams and Roles.
- Films and Videos.
- Case Studies and Workshops.