

Course No. 2004

Advanced Project Management Planning & Execution Training Course

PROJECT MANAGEMENT
PROJECT MANAGEMENT & PMO

DURATION

5 Days

DELIVERY

Classroom



Course Overview

The Advanced Project Management Planning & Execution Training Course provides an advanced and practical framework for professionals responsible for planning, coordinating, executing, and controlling complex projects. The program builds beyond fundamental project management concepts to address the challenges of managing large-scale, high-value, cross-functional, technically complex, and strategically important projects.

Participants will explore advanced approaches to project planning, including integrated scope definition, requirements management, work breakdown structures, activity sequencing, resource optimization, schedule development, cost planning, risk integration, procurement planning, quality management, and project baselines. The course emphasizes the alignment of project plans with organizational strategy, contractual commitments, resource constraints, stakeholder expectations, and measurable business outcomes.

The program places strong emphasis on execution excellence and project control. Participants will learn how to coordinate multidisciplinary teams, manage interfaces and dependencies, monitor progress, control scope and changes, manage cost and schedule performance, address emerging risks, resolve complex issues, and maintain effective communication across project stakeholders. Advanced performance monitoring and corrective action techniques are incorporated to support timely intervention when projects deviate from approved plans.

Through advanced case studies, planning workshops, schedule analysis, risk simulations, performance-control exercises, and an integrated project execution scenario, participants will develop the capability to build robust project plans, manage complex execution environments, and implement effective controls that improve project predictability, accountability, and delivery performance.

Objectives

- By the end of the course, participants will be able to:
- Analyze the characteristics and management requirements of complex projects.
- Develop integrated project management plans aligned with strategic and business objectives.
- Define and control complex project scope, requirements, deliverables, and interfaces.

- Develop detailed work breakdown structures and integrated planning frameworks.
- Construct realistic and resource-loaded project schedules.
- Analyze schedule dependencies, constraints, critical activities, and potential delays.
- Develop advanced resource allocation and resource optimization strategies.
- Establish project cost estimates, budgets, and cost-control mechanisms.
- Integrate risk management into project planning and execution.
- Develop advanced project risk response and contingency strategies.
- Establish effective project governance, decision-making, and escalation structures.
- Manage project execution across multidisciplinary teams and organizational interfaces.
- Apply structured change control and impact assessment techniques.
- Monitor project performance using schedule, cost, scope, quality, and risk indicators.
- Develop corrective and recovery strategies for projects experiencing performance deviations.
- Strengthen project execution through continuous improvement and lessons learned.

Who Should Attend

This course is designed for experienced project managers, senior project managers, project directors, project controls professionals, project planners, project coordinators, project engineers, project management office professionals, and project team leaders responsible for complex project planning and execution.

It is also suitable for professionals working in engineering, construction, oil and gas, energy, infrastructure, manufacturing, technology, telecommunications, finance, government, procurement, contracts, risk management, quality, operations, and business transformation who contribute to major project delivery.

The program is particularly relevant to project sponsors, program managers, department heads, functional managers, senior engineers, project controllers, planning specialists, cost controllers, risk professionals, contract managers, and executives responsible for project governance, oversight, performance, and strategic delivery.

Learning Outcomes

- Upon successful completion of the course, participants will be able to:
- Develop an integrated plan for a complex project.
- Translate strategic objectives into measurable project deliverables and performance requirements.
- Structure complex projects using detailed work breakdown and planning techniques.
- Develop integrated schedules with logical relationships, constraints, milestones, and critical activities.
- Analyze schedule performance and identify emerging delays and bottlenecks.
- Optimize project resources across competing activities and priorities.
- Establish project cost baselines and effective cost-control mechanisms.
- Integrate project risks, assumptions, dependencies, and contingencies into execution planning.
- Develop governance structures for complex project decision-making and escalation.
- Coordinate multidisciplinary teams and manage cross-functional interfaces.
- Evaluate the impact of project changes on scope, cost, schedule, resources, quality, and risk.
- Apply advanced project performance monitoring and control techniques.
- Diagnose the causes of project performance deviations.
- Develop practical project recovery and corrective action plans.
- Strengthen stakeholder communication and project reporting.
- Establish continuous improvement mechanisms for project planning and execution.

Course Outline

DAY 01

Advanced Project Planning & Integrated Project Management

- Characteristics and challenges of complex projects
- Advanced project management planning principles
- Strategic alignment and project business objectives
- Integrated project management planning
- Project governance and management structures

DAY 01 — CONTINUED

- Complex requirements and deliverable definition
- Scope architecture and interface management
- Work breakdown structure development
- Planning assumptions, constraints, dependencies, and exclusions
- Project baselines and planning controls
- Integration of scope, schedule, cost, resources, risk, and quality
- Project planning documentation and management standards

PRACTICAL APPLICATION:

- Participants develop an integrated planning framework for a complex project, linking strategic objectives, deliverables, scope, dependencies, governance, and project controls.

DAY 02

Advanced Scheduling, Resource Planning & Cost Control

- Advanced activity definition and sequencing
- Schedule logic and dependency management
- Critical path and critical activities
- Schedule constraints and resource limitations
- Milestone planning and schedule baselines
- Resource-loaded scheduling
- Resource allocation and optimization
- Managing competing resource requirements
- Cost estimation and budget development
- Cost baselines and control accounts
- Cost and schedule integration
- Managing schedule and cost risks
- Forecasting project completion and resource requirements

PRACTICAL APPLICATION:

DAY 02 — CONTINUED

- Participants build and analyze an integrated project schedule, identify critical activities and resource constraints, and develop corrective actions for potential delays.

DAY 03

Advanced Risk, Quality, Procurement & Execution Readiness

- Advanced project risk identification and analysis
- Risk interdependencies and cumulative exposure
- Quantitative and qualitative risk assessment
- Contingency and response planning
- Risk ownership and escalation
- Project quality planning and assurance
- Quality control during execution
- Procurement and contract planning
- Supplier and contractor coordination
- Project readiness assessment
- Execution requirements and mobilization planning
- Managing interfaces between contractors, suppliers, and internal teams

PRACTICAL APPLICATION:

- Participants conduct an advanced project risk assessment and develop integrated risk responses, contingencies, quality controls, and execution-readiness actions.

DAY 04

Project Execution, Performance Control & Change Management

- Transitioning from planning to project execution
- Execution governance and coordination
- Managing multidisciplinary project teams
- Project communication and coordination mechanisms
- Monitoring scope, schedule, cost, quality, and risk

DAY 04 — CONTINUED

- Performance indicators and project control dashboards
- Earned value concepts and performance analysis
- Managing issues, constraints, and emerging risks
- Change requests and formal change control
- Change impact assessment
- Corrective and preventive actions
- Project recovery strategies
- Escalation and executive decision-making

PRACTICAL APPLICATION:

- Participants analyze a complex project experiencing cost overruns, schedule delays, scope changes, and resource constraints, then develop a structured recovery and corrective action plan.

DAY 05

Project Optimization, Governance & Execution Excellence

- Advanced project governance and accountability
- Integrated project reporting
- Executive project dashboards
- Forecasting and predictive project control
- Managing project performance trends
- Project recovery and turnaround strategies
- Stakeholder alignment and executive communication
- Decision-making under project uncertainty
- Lessons learned and knowledge management
- Project performance reviews
- Project management maturity and capability improvement
- Continuous improvement in project planning and execution
- Building repeatable project delivery practices

DAY 05 — CONTINUED

FINAL WORKSHOP:

- Participants develop an integrated Advanced Project Planning & Execution Framework covering project objectives, scope, work breakdown structure, schedule, resources, cost, risk, quality, procurement, governance, performance controls, change management, recovery strategies, stakeholder communication, and continuous improvement.

Register or Request More Information

Course page: <https://quest-training.com/courses/advanced-project-management-planning-execution-training-course>

Website: <https://quest-training.com>

Email: info@quest-training.com

Phone: +905016771440