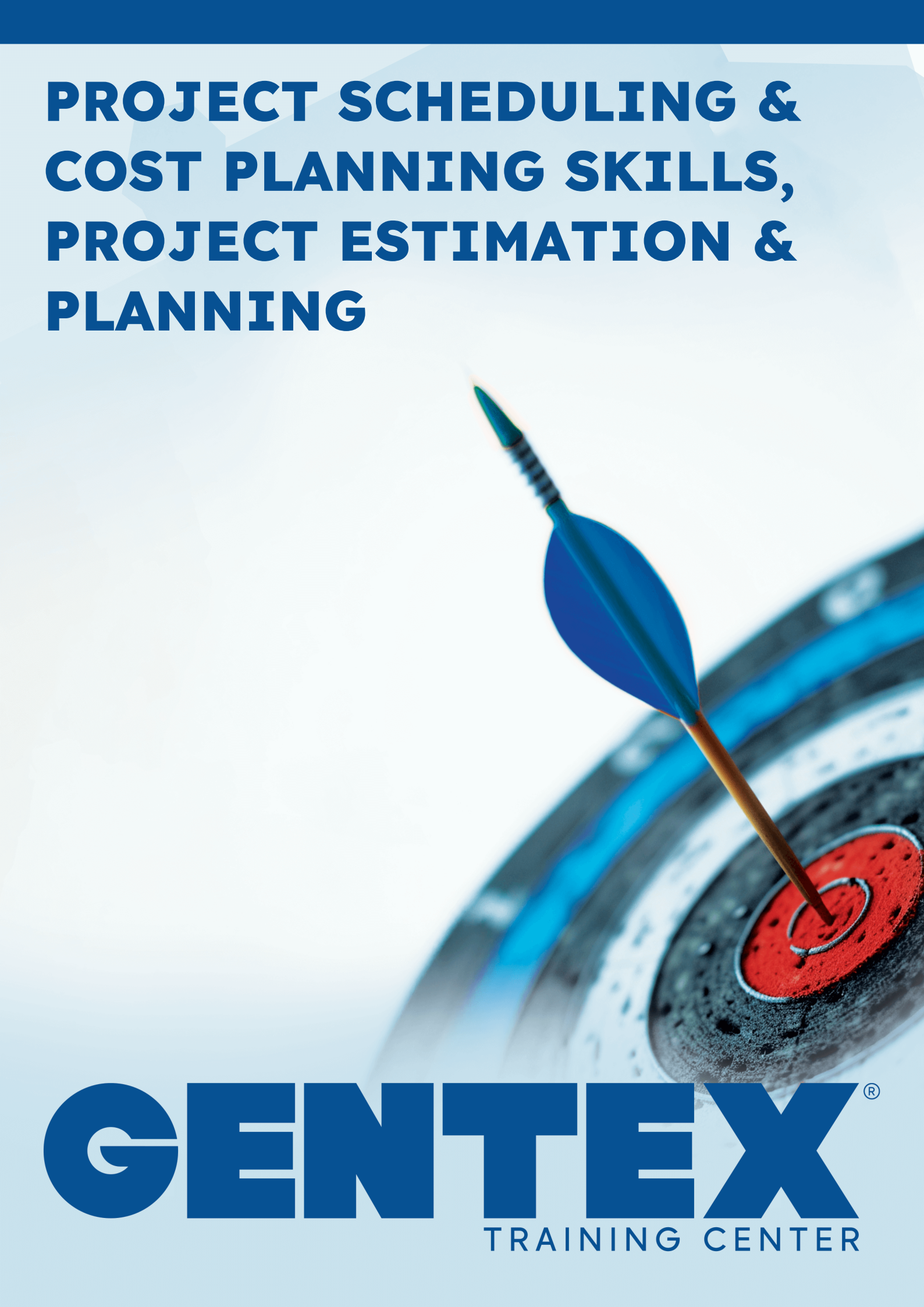
PROJECT SCHEDULING & COST PLANNING SKILLS, PROJECT ESTIMATION & PLANNING



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Introduction

Effective project delivery depends on accurate scheduling, realistic cost planning, and strong estimation practices. Every project requires clear timelines, reliable budgets, controlled resources, and practical planning methods. Therefore, professionals need the right skills to prepare schedules, estimate costs, track performance, and support informed project decisions.

The Project Scheduling & Cost Planning Skills, Project Estimation & Planning course by Gentex Training Center is designed to help participants strengthen their ability to plan projects with confidence. The course focuses on practical tools and structured methods used in project scheduling, cost estimation, budgeting, resource planning, and project control. It also explains how planning decisions affect project scope, time, cost, risk, and quality.

Throughout this five-day course, participants will learn how to build realistic project schedules, define project activities, estimate durations, allocate resources, and prepare cost plans. In addition, they will explore key estimation techniques, cost breakdown structures, baseline planning, progress tracking, variance analysis, and reporting methods. The course also highlights the importance of linking schedules with budgets to improve visibility and control.

Moreover, the course supports professionals who work in project environments where deadlines, budgets, and stakeholder expectations must be managed carefully. Participants will gain practical knowledge that can help them reduce delays, control cost overruns, improve planning accuracy, and support better project outcomes.

Project Scheduling & Cost Planning Skills, Project Estimation & Planning Course Objectives

- Understand the relationship between project scope, schedule, cost, resources, and risk.
- Develop structured project schedules using clear planning steps.
- Identify project activities, milestones, dependencies, and deliverables.

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- Apply work breakdown structures to organize project planning.
- Estimate activity durations using practical and reliable techniques.
- Prepare cost estimates based on project requirements and available information.
- Understand the difference between rough estimates, budget estimates, and detailed estimates.
- Build cost breakdown structures to improve cost visibility and control.
- Link cost planning with schedule planning for stronger project management.
- Allocate resources effectively across project activities.
- Identify cost drivers and schedule risks that may affect project performance.
- Create project baselines for time and cost control.
- Track progress against approved plans and budgets.
- Analyze schedule variance and cost variance using practical methods.
- Prepare clear project planning reports for stakeholders.
- Improve decision-making through accurate estimation and planning data.
- Apply practical planning techniques to reduce project delays and cost overruns.
- Strengthen project control by using structured monitoring and reporting methods.

Course Methodology

The course uses an interactive and practical learning approach. It combines short lectures, group discussions, planning exercises, case studies, and real project examples. Participants will work on scheduling and cost planning activities to apply the concepts directly. In addition, the course encourages active participation, problem-solving, and practical decision-making.

Who Should Take This Course

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This course is suitable for professionals involved in project planning, scheduling, budgeting, estimation, and control, including:

- Project managers and project coordinators.
- Planning engineers and scheduling professionals.
- Cost engineers and cost controllers.
- Project control specialists.
- Engineers working on technical or operational projects.
- Construction, infrastructure, oil and gas, and industrial project teams.
- Operations managers involved in project delivery.
- Finance and procurement professionals supporting project budgets.
- Team leaders responsible for project timelines and resources.
- Professionals who need to improve project estimation and planning skills.

Project Scheduling & Cost Planning Skills, Project Estimation & Planning Course Outlines

Day 1: Fundamentals of Project Planning, Scheduling, and Cost Control

- Understanding the project life cycle and planning process.
- The role of scheduling and cost planning in project success.
- Key project constraints: scope, time, cost, quality, risk, and resources.
- How poor planning causes delays and cost overruns.
- Defining project objectives and deliverables.
- Understanding stakeholder expectations during planning.
- Introduction to project control systems.

- The importance of accurate data in planning and estimation.
- Common challenges in project scheduling and cost planning.
- Best practices for building a reliable project plan.

Day 2: Work Breakdown Structure and Project Scheduling Techniques

- Creating a work breakdown structure.
- Defining project activities and work packages.
- Identifying project milestones and key deliverables.
- Sequencing project activities.
- Understanding activity dependencies.
- Finish-to-start, start-to-start, finish-to-finish, and start-to-finish relationships.
- Estimating activity durations.
- Building network diagrams.
- Understanding the critical path method.
- Identifying float and schedule flexibility.
- Developing project timelines and milestone plans.
- Common scheduling mistakes and how to avoid them.

Day 3: Project Estimation and Cost Planning Methods

- The purpose of project estimation.
- Types of project estimates.
- Rough order of magnitude estimates.
- Budget estimates and detailed estimates.
- Direct costs and indirect costs.

- Fixed costs and variable costs.
- Labor, material, equipment, subcontractor, and overhead costs.
- Cost breakdown structures.
- Estimation methods and practical applications.
- Analogous estimation.
- Parametric estimation.
- Bottom-up estimation.
- Three-point estimation.
- Contingency planning in project budgets.
- Identifying cost drivers and cost risks.
- Preparing realistic project budgets.

Day 4: Resource Planning, Baselines, and Integrated Cost-Schedule Control

- Resource planning and resource allocation.
- Understanding resource availability and constraints.
- Resource loading and resource leveling.
- Linking resources with activity durations.
- Connecting cost estimates to scheduled activities.
- Developing time and cost baselines.
- Understanding planned value and budgeted cost.
- Monitoring project progress against the baseline.
- Identifying early warning signs of delay or cost overrun.
- Managing changes in schedule and budget.
- Introduction to earned value concepts.

- Schedule performance and cost performance indicators.
- Practical reporting for project control.

Participants will work on practical examples that show how schedule changes affect project costs. In addition, they will learn how integrated planning helps project teams make better decisions.

Day 5: Progress Tracking, Variance Analysis, Reporting, and Practical Application

- Tracking project progress.
- Collecting schedule and cost data.
- Comparing planned progress with actual progress.
- Schedule variance and cost variance.
- Forecasting project completion.
- Updating project schedules and budgets.
- Managing corrective actions.
- Reporting project performance to stakeholders.
- Preparing clear planning dashboards and status reports.
- Communicating delays, risks, and budget issues.
- Lessons learned from project planning and estimation.
- Practical case study on scheduling and cost planning.
- Final group discussion and action planning.

Conclusion

By successfully completing the Project Scheduling & Cost Planning Skills, Project Estimation & Planning course with Gentex Training Center, participants will gain practical knowledge in project scheduling, cost estimation, resource planning, budget control, and project performance tracking. They will understand how to build realistic project plans, prepare reliable estimates, monitor progress, and respond to schedule or cost changes effectively.

FAQs

Q1 What is the "Project Scheduling & Cost Planning Skills, Project Estimation & Planning" course about?

The course focuses on practical methods for planning, scheduling, estimating, and controlling project time and costs. It covers work breakdown structures, activity sequencing, duration estimation, cost planning, resource allocation, baselines, progress tracking, variance analysis, forecasting, and project performance reporting.

Q2 What are the key benefits of the "Project Scheduling & Cost Planning Skills, Project Estimation & Planning" course?

The course helps participants create realistic schedules and reliable cost estimates, allocate resources effectively, and establish time and cost baselines. It also develops capabilities in progress tracking, variance analysis, forecasting, and reporting, helping project teams reduce delays, control cost overruns, and improve planning decisions.

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Q3 What skills will I gain from the "Project Scheduling & Cost Planning Skills, Project Estimation & Planning" course?

Participants will develop four core skills: Project Scheduling, Cost Estimation and Budgeting, Resource Planning and Allocation, and Project Control and Variance Analysis. These skills support structured scheduling, accurate budgeting, efficient resource use, baseline monitoring, performance measurement, and informed project control.

Q4 What tools, methods, or standards are covered in the "Project Scheduling & Cost Planning Skills, Project Estimation & Planning" course?

The course covers Work Breakdown Structures (WBS), network diagrams, Critical Path Method (CPM), activity dependency relationships, float analysis, analogous estimation, parametric estimation, bottom-up estimation, three-point estimation, resource leveling, time and cost baselines, and earned value concepts.

Q5 How is the "Project Scheduling & Cost Planning Skills, Project Estimation & Planning" course applied in real-world practice?

The course applies planning techniques through practical scheduling and cost-planning exercises, case studies, and real project examples. Participants practice defining activities, estimating durations and costs, allocating resources, tracking actual progress, analyzing schedule and cost variances, updating plans, and communicating performance issues to stakeholders.