LEADERS TRAINING

DIXONTECH

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ADVANCED SKILLS IN PROJECT SCHEDULING, COST PLANNING & VALUE ENGINEERING

CODE	PM07
DAYS	5 DAYS
DURATION	25 HOUR
FORMAT	ON-SITE
CERTIFICATE	ACHIVEMENT

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DIXONTECH
LEADERS ACADEMY

ADVANCED SKILLS IN PROJECT SCHEDULING, COST PLANNING & VALUE ENGINEERING

TRAINING OVERVIEW

This course is structured into two modules. In the initial week, participants will learn the techniques for providing accurate cost and schedule estimates during the early stages of project conceptualization and planning.
The second week delves into the concept of Value Engineering (VE), a methodical and creative approach aimed at empowering project stakeholders to optimize project value, reduce life-cycle costs, address financial considerations, and eliminate unnecessary expenses.
The Project Scheduling, Cost Planning & Value Engineering Skills training course employs a systematic, step-by-step methodology covering the entire project lifecycle, from initiation and planning to execution, monitoring, control, and closure. It addresses crucial aspects such as roles and responsibilities, planning techniques, team formation and management, stakeholder requirements, conceptual cost estimation, life-cycle costing analysis, and high-level project planning. The course emphasizes practical applications, integrating detailed case studies to ensure a comprehensive understanding of the materials.

TRAINING TOPICS

- Acquiring proficiency in project estimating techniques, spanning from the initial conceptualization to the comprehensive detailed estimate.
- Grasping the nuances of various estimate types to confidently and progressively gauge project costs and schedules.
- Recognizing potential risk sources and implementing strategies to mitigate their impact, both with and without contingency.
- Cultivating skills in team management, and establishing efficient performance monitoring and control systems.
- Integrating a comprehensive approach that harmonizes scope, time, resources, and cost management into a dynamic and manageable model.

MODULES

- **Module 1** - Project Scheduling & Cost Planning Skills
- **Module 2** - Value Engineering Skills: Improving Performance & Profitability

BY THE END OF THE COURSE, PARTICIPANTS WILL BE ABLE TO:

- Manage and mitigate schedule, cost, scope, and resource risks associated with the project
- Develop a project recovery plan for budget and schedule overruns
- Identify value mismatches through the ratio of whole life costing
- Capture & incorporate stakeholders' input in the development of the project charter & plan
- Know the fundamental concepts of Value Engineering and Analysis

> **Invest in training, cultivate greatness**

TRAINING IS TAILORED TO

- Individuals with roles in diverse projects, including cost estimators, project schedulers, project designers, project planners, contracts professionals, project procurement and purchasing staff, and project control and business services professionals engaged in preparing cost/schedule estimates and project proposals for client and contracting companies.
- Those keen on gaining insights into estimation and control within a project environment.
- Participants involved in project initiation, engineering design, and critical project assessments.
- Decision-makers responsible for significant plans and budgets in large and complex projects.
- Project or Program Sponsors, Project Managers, Cost Estimators, Cost Controllers, Engineers, Designers, and Project Staff.
- Aspirants looking to enhance value delivery across various sectors, including construction, manufacturing, petrochemicals, healthcare, education, legal, and public services.

ADVANCED SKILLS IN PROJECT SCHEDULING, COST PLANNING & VALUE ENGINEERING

TRAINING METHODOLOGY

Our training methodology for this course is designed to be interactive and immersive. We prioritize hands-on learning experiences, allowing participants to apply theoretical concepts in practical scenarios. The course includes group discussions, case studies, and real-world simulations to enhance understanding and retention. Our expert instructors bring a wealth of industry experience, providing valuable insights and facilitating dynamic discussions. Continuous assessments and feedback ensure participants grasp key concepts, fostering a conducive learning environment. Additionally, we incorporate the latest tools and technologies relevant to the subject matter, offering a contemporary and effective learning experience. Our goal is to equip participants with practical skills and knowledge that can be directly applied to their professional roles.

MODULE 1 - PROJECT SCHEDULING & COST PLANNING SKILLS

DAY 1

PROJECT ESTIMATING BASICS

- Basic Project Management definitions
- Triple Constraints – Time, Cost, Scope
- Project Selection Methods
- Defining the Project Scope
- Cost & Schedule Estimation, Cost Budgeting & Control
- Project Schedule Planning and Critical Path Method

DEVELOPING PROJECT BUDGET & SCHEDULE CONTROL

- Project management inputs to cost budgeting
- Resource Requirements
- Direct & Indirect Project Costs
- Planning and Scheduling Limited Resources
- Options for Accelerating the Schedule
- Crashing the Schedule - How?

DAY 2

MANAGING THE RISK

- Risk Identification, Analysis & Management
- Contingency Reserve
- PERT, Probability and Standard Deviation Formulae
- Network Activity Risk Profiles
- Application: Estimating Project Duration
- Project Risk Strategies

MEASURING PROJECT PERFORMANCE

- Balanced Project Schedule without Buffers (Finish-Start) and Inserting Buffers
- Comparison of Unbalanced with Balanced Schedules
- Measuring Planned Progress on Schedule
- Risk distribution in contracting
- Actual Progress and Work Conditions
- Managing Variable Conditions

DAY 3

MANAGING AND RECOVERING PROJECT ESTIMATES

- Schedule Variances & Cost Variances
- Progress Control Charts - Trend Analysis
- Schedule and Cost Variance Forecasting
- Schedule and Cost Recovery Analysis
- Schedule and Cost Recovery Plan
- Project Recovery Baselines and Controls

MODULE 2 - VALUE ENGINEERING SKILLS: IMPROVING PERFORMANCE & PROFITABILITY

FRAMEWORK FOR APPLYING VALUE ENGINEERING IN PROJECTS

- What is Value?
- What is Value Engineering? Why is it important?
- Defining Value Engineering concepts and principles
- How and when is Value Engineering applied?
- Project stakeholders analysis and management
- Understanding teamwork and cross-functional Project Teams and team player styles

DAY 4

THE FUNCTION ANALYSIS PHASE EXPRESSING PROJECT FUNCTIONAL NEEDS AND CONSTRAINTS

- Overview of Different Value Engineering Phases / Job Plan
- The Information Phase – steps and procedures
- The need for Function Analysis in projects
- Developing FAST Diagrams to identify critical project components and perform project value analysis
- Defining project constraints – relationships and trade offs
- Aspects of Cost Estimating

THE CREATIVE PHASE
INSPIRING CREATIVITY IN YOUR PROJECT TEAM

- Risk Management
- Relationships between Value, Cost and Worth
- Facilitation skills
- Creativity and Creative thinking within the project environment
- Creativity techniques as applied to optimize project value
- Blocks to creativity within the project team

DAY 5

THE EVALUATION PHASE -MAKING INFORMED PROJECT DECISIONS

- Reaching consensus and leveraging the power of project team collaboration
- Idea selection
- Evaluation methods and value criteria
- Development phase
- Techniques in problem solving
- Life-cycle costing analysis

THE PLANNING AND REPORTING PHASES -GETTING RESULTS THROUGH EFFECTIVE COMMUNICATION

- Effective Decision-making in project environment
- Develop action plans and assign project roles and responsibilities
- Reporting VE findings to Senior Management and project stakeholders
- Integrating VE into the project process and Continuous Improvement and application at project initiation
- Case studies
- Assessment and Wrap-up

For more information about DIXONTECH Leaders training visit us at: www.dixontech.uk