Engineering Project Management in the Public Sector

Course Overview

It is widely recognized that the field of Project Management is vital to the success of businesses especially during times of uncertainty and operational disruption. As projects become more complex and more organizations move to management by projects, there is an increasing demand for competent project managers. Surprisingly, many projects go wrong, and the question is: why do they go wrong? Most of the answer has little to do with project size or degree of complexity but a lot to do with competent project planning and control. The cause of project failures can often be traced back to poor project definition, planning, or control.

Among the three top desired project management skills, technical knowledge rates as a key component that employers require. While leadership is paramount, the success of a project requires making 'good' informed decisions based on solid data. Yet, few managers have had formal training in decision-making and project control. This course provides you with the training you need to estimate, plan, and control your project and show you how to translate data into action that ultimately saves the project

Course Objectives:

At the end of this course, the participants will be able to:

- Understand the project's economic evaluation and cash flow
- Understand the project estimating and budgeting
- Learn about project planning and scheduling using networks
- Explore the elements of Successful control systems and cost management
- Learn techniques for project control and Earned Value Management
- Learn about the project reporting

Course Content:

Unit 1: Overview of Project Management:

- Projects in contemporary organizations
- Project delivery systems
- The nature and context of project management

- Leadership, power and influence
- The project control cycle

Unit 2: Project Estimating:

- Developing a work breakdown structure
- Risk terminology
- Objective and subjective risk assessment
- Basic techniques for handling risk
- Cost fundamentals
- Cost Estimation: Approximate and detailed estimates
- Direct and indirect costs

Unit 3: Project Planning:

- Fundamentals of project planning
- Network analysis techniques
- Critical path scheduling
- Resource allocation
- Resource levelling
- Compressing schedules
- Monitoring and control using networks

Unit 4: Project Control:

- What is a control system?
- The concept of variance
- Time-cost trade-off
- Cash flow analysis
- Earned value management
- Unit 5: Project Reporting & Advanced Topics:
- An economic evaluation of projects
- Interest & bid unbalancing
- Integration of estimating, planning & control
- Lean project management: concept and applications

Targeted Groups:

- Project Management Professionals
- IT Professionals
- Business Professionals
- Individuals who want to sharpen their project management skills