

Seminar's Title : PROJECT MANAGEMENT FUNDAMENTALS

Purpose and Background : Project Management is one of the most important aspects of the entire construction process. It is the application of concepts, knowledge, skills, tools and techniques to meet the project objectives and increase the probability of project success. Without effective project management, projects are often running into troubles and risking failures.

This practical course gives participants a performance edge by teaching you how to initiate, plan, control and complete your projects more effectively as projects are critical to the success of any organization. It provides participants with the knowledge of project management fundamentals and their benefits in effectively and efficiently managing projects.

Learning Objectives : To provide practical coverage of all basic aspects of managing projects to meet their objectives within the specific cost and time constraints, with minimum risks and obtain customer's satisfaction.

Benefits for Participants :

- To provide participants with the knowledge of project management fundamentals and their benefits in effectively and efficiently managing projects
- To provide participants with practical skills, concepts and principles of project management to be adapted to specific project environment
- Familiarization and use of project management vocabulary and terminology
- Understand the characteristics of a successful projects
- Identify and perform the key project management processes and phases as well as their implementation to increase the probability of success of a project and meet customer's requirements and expectation.

Outline : The seminar is scheduled for three (3) days; each day starting from 8 :00 AM to 4 :30 PM with a half hour coffee break during each morning and afternoon section.

DAY 1

Foundation Concepts

- Common project characteristics
- Value and outcome of project management
- Definition of project management
- Project management basics
- Project management integrated processes
- Project management processes and project boundaries

- Project roles and responsibilities
- Organizational project management
- Project organization structure
- Project/Functional interface
- Project Organizational chart in a matrix environment
- Critical project management knowledge and skills
- Project Manager (PM)'s characteristics
- Reasons of project success
- Causes of project failures
- The project life cycle
- Project management maturity model
- Project Manager (PM) maturity level
- Basic contract types in project management

Project Initiation

- Develop the project charter
- Develop the preliminary project scope statement

Project Planning

- Overview
- The absolute imperative of planning
- Planning definition
- The project plan
- Project Plan characteristics
- Change control
- Planning steps
- Project deliverables and the Project Plan

Developing a Mission, Vision, Goals and Objectives for the Project

- Defining the problem
- The customer vision
- The real mission of every project
- Developing the project objectives
- Identifying success criteria

Using the Work Breakdown Structure (WBS) to plan a project

- Characteristics of a WBS
- Project scope and the WBS
- Guidelines for developing the WBS
- The WBS concept in project management
- The Responsibility Assignment Matrix (RAM)
- Use of the WBS and the RAM
- RACI Chart
- WBS and the Organization Breakdown Structure (OBS)

DAY 2

Estimating Time, Cost & Resources (T,C & R)

- Cost estimate definition
- Types of estimating
- Estimating development
- Inputs to cost estimating & budgeting
- Validating an estimate
- Schedule control

Scheduling the Project Work

- Planning and scheduling the project work
- History of scheduling
- Network Logic Diagrams
- Project schedule network diagram
- Developing the project network
- Definition of network terms
- The project schedule
- The Critical Path
- Using the Critical Path Method (CPM) to manage the project

Risk Management & Project Control

- Definition
- Risk Management Top Level process summary
- Risk Identification
- Risk Breakdown Structure (RBS)
- Risk identification data sources & applications
- Risk Assessment
- Risk matrix
- Risk probability determination
- Risk impacts determination
- Risk filtering
- Risk Avoidance approach
- Risk Contingency approach
- Risk Tracking and Reporting
- Risk Management Organization/Responsibilities
- Risk Management implementation and control
- Risk report and review
- Critical Success Factor for Risk Management
- Project Control
- Team Member self-control
- Characteristics of a project control system
- Project Evaluation
- Project Review

- Earned Value Management (EVM)

DAY 3

Managing the Project Team

- Project team performance
- Leadership versus Management skills in team environment
- Team building
- Team work through planning
- Leading a team through the stages
- Developing team commitment

Project Closure

- Effective project closure
- Project closure objectives
- Project closure plan
- Contract closure
- Administrative closure
- Project closure & contract closure interaction
- Lessons learned
- Post project evaluation
- Celebrate success

How to Make Project Management Work in Your Company

- Working with company executives and senior managers
- Top management involvement
- Project management training
- Project management applications
- Benchmarking
- Professional involvement

Closing Comments

- Thoughts on major pitfalls of project management
- Understanding & Leverage the Triple Constraints in project management

Instructor : **Nghi M. Nguyen, Ph.D., M.Eng, P.Eng, PMP**, is President of NDV Project Management Services Inc. He has had over 25 years of progressive experience in the field of project management on major construction and high-technology projects with leading Canadian and American corporations such as the SNC-Lavalin Group, Lockheed Martin and the Canadian Space Agency (CSA). As a consultant to engineering and construction firms, he has assisted clients with project management approaches to effectively complete projects and attain their objectives. He is a specialist in project management training, definition, development, identification of project objectives, constraints and methodologies, having provided project management trainings to engineers worldwide. He has been working as a project management consultant for the

CSA on projects associated with the 16-nation International Space Station (ISS) project, the construction of the largest and most sophisticated engineering facility ever undertaken as well as for SNC-Lavalin International on China's Three Gorges Dam project, the largest on-going construction project on earth. Dr. Nghi Nguyen has written and presented numerous technical papers on project management related topics in international conventions and seminars in Canada, the U.S., Europe and Asia sponsored by professional associations such as the Project Management Institute (PMI), the American Consulting Engineering Council (ACEC), ASCE, Canadian Society of Civil Engineers (CSCE), the Performance Management Association (PMA) and the Paris-based AFITEP. He is a part-time faculty member at Montreal's Concordia University, teaching Construction & Project Management courses at both undergraduate and graduate levels and hold B.S., M.S., and Ph.D. degrees in Civil Engineering and Construction & Project Management.

Who Should Attend : This seminar is for those responsible for managing, leading, coordinating and working on projects who have limited experience or knowledge of basic, practical and formal project management principles and methodologies. These include general managers responsible for projects and programs, technical professionals and engineers moving into project management related positions, marketing staff, team leaders, project coordinators, project managers, project directors, quality assurance managers, R & D managers, business analysts, system analysts, requirement analysts, process managers, product design and development managers, among others.