

Tel: (450) 672-2693 Fax: (450) 672-7922 E-Mail: ndv\_inc@videotron.ca

# Seminar's Title CONSTRUCTION PROJECT MANAGEMENT

#### **Purpose and Background**

Construction Project Management or Construction Management (CM) is the provision of professional management services to the Owner of a construction project with the objective of achieving high quality at minimum cost. CM is provided by a professional or firm trained in the management of construction processes. Services may cover only a defined portion of the construction project such as field construction, or they may include total responsibility for the project. Construction management objective is to treat project planning, design, and construction as integrated tasks in the project. With construction management approach used, a non-adversarial team is created consisting of the Owner, the construction manager, the architect-engineer, and the contractor. The project participants, by working together from project inception to project completion, attempt to serve the Owner's best interests in order to produce for the latter a project of maximum value within the most economical time frame. The CM team draws on each other's area of specialization to maintain a tighter control over the details of a project that affect the budget, schedule and quality.

This course gives participants a good knowledge of the Construction Management approach in which the construction manager, acting as an agent of the Owner, manages the overall construction process. It provides participants with the knowledge of construction management fundamentals and their benefits in effectively and efficiently managing projects that they can apply immediately in their project environment.

## **Learning Objectives**

To provide practical coverage of all basic aspects of Construction Management (CM) process where early cooperation between project team members helps reduce an Owner's risk and speed up an entire project and make it easier to stay on budget. It is the application of integrated systems and procedures by a project team whose key objective is to achieve the owner's project goals.

## **Benefits for Participants**

- To provide participants with the knowledge of Construction Management (CM) fundamentals and their benefits in effectively and efficiently managing construction projects.
- To provide participants with practical skills, concepts and principles of the construction management approach to be adapted to specific project environment.
- Understand the characteristics of a CM project.
- Identify and perform the key CM processes as well as their implementation to increase the probability of success of a project and meet Owner's requirements and expectation.





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#### **Who Should Attend**

This seminar is for those responsible for managing, leading, coordinating and working on construction projects of any size desirous to learn how to use knowledge of basic, practical and formal construction project management principles and methodologies in their day-to-day work. These include builders, architects, engineers and other professionals working in the construction industry.

#### **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 session.

#### DAY 1

#### **Construction Project Management Overview**

- The challenges of construction
- The nature of the construction industry
- Types of construction projects
- Professional Construction Management: a form of contract.

## **Construction Project Management**

- Construction project life cycle
- The construction project phase
- Basic project management activities
- Construction project life cycle and its phases
- The matrix organization and the project task force
- Contractual approaches in construction project management
- The construction management organization
- Typical types of contract and their financial implications

## Construction Management (CM) Requirements & Qualifications

- Professional construction manager relationships and responsibilities
- Requirements of the construction manager
- Major components in construction management
- Critical success factors for a construction management project
- Effective construction management firm attributes



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#### DAY 2

## Professional Construction Management (CM) in Practice through Project Phases

- Project Management
- Cost Management
- Time Management
- Quality Management
- Contract Administration
- Safety & Health Management
- Sustainability Management
- Value Engineering
- Integrated Project Controls
- Procurement Management
- Risk Management

#### DAY 3

## **Business Approaches in Construction Management**

- Change orders and liquidated damage
- Risk management, insurance and bonding
- Labor relations
- Claims, disputes, arbitration and mediation

## How to select a Professional Construction Manager?

- Basic qualifications
- Selection methods
- Contractor selection by competitive bidding
- Owner responsibilities
- Marketing construction management services and negotiated contracts

## **Current State of the Art of Construction Project Management**

- The Design-Build approach
- Building Information Model (BIM)
- Robotics
- Drones
- 3D Drawings
- Safety in Construction





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#### Seminar's Instructor: Dr. Nghi M. Nguyen, Ph.D., P.E., PMP, M.ASCE.

President and CEO of NDV Project Management Services, Inc (NDV) since 1995, Dr, Nghi Nguyen has had more than 30 years of progressive, domestic and international consultingand training experience in the field of project/program/portfolio management on major construction, aerospace, defence and high-technology projects with leading Canadian and U.S. corporation such as the SNC-Lavalin Group, Lockheed Martin, CAE and the Canadian Space Agency and NASA. Prior to founding NDV in 1995, he served as Program Control Manager for the multi-billion dollar Canadian Patrol Frigate (CPF) program, the largest and most complex shipbuilding program in Canadian history for Lockheed Martin Canada (formerly Unisys Systems Canada).

As an internationally recognized project management consultant and trainer, Dr. Nguyen has assisted clients with project management approaches to effectively and efficiently complete projects and attain their objectives. He is a specialist in project management training, consulting, definition, development, identification of project objectives, constraints and methodologies. Dr. Nguyen worked as a project management consultant for the Canadian Space Agency (CSA) on projects associated with the International Space Station (ISS) program, the 16-nation effort, lead by NASA, to build the permanently orbiting laboratory in space, the largest and most sophisticated international engineering project ever undertaken in the history of the world as well as for SNC-Lavalin International on China's Three Gorges hydro-electric development project, the largest construction project in the world to date, and was involved in a number of projects in the Information Technology (IT) and Oil and Gas (O&G) sectors, among them was the construction of the \$ 5 billion Hibernia Oil Production Platform in St John, Newfoundland, Canada. Dr. Nguyen has delivered project management seminars for the American Society of Civil Engineers (ASCE), International Institute for Learning, Inc (IIL) in the USA, EuroMatech and Britannia of the U.K., Glariden Global in Singapore and various organizations in Asia and Vietnam as well as those associated with the engineering organizations worldwide.

An internationally recognized speaker, author and presenter, Dr. Nguyen has written and presented numerous technical papers on project/program management related topics in international conventions and congresses in Canada, the U.S., Europe, Asia and the Caribbean, sponsored by professional associations such as the Project Management Institute (PMI), the American Consulting Engineering Council (ACEC), The Association for the Advancement of Cost Engineering (AACE) International, American/Canadian Society of Civil Engineers (ASCE/CSCE), the Pan-Pacific Business Association (PPBA), the American Institute of Aeronautics and Astronautics (AIAA), the Caribbean Council of Engineering Association (CCEA) and the Parisbased association Francais des Ingenieurs et Techniciens d'Estimation et de Planification de Projects (AFITEP). Since 1995, Dr. Nguyen has conducted numerous project management seminars for thousands of project managers practising in all industries in a variety of topics in many countries including Canada, the U.S.A., the U.K., France, Spain, Germany, the Netherlands, Austria, Norway, Switzeland, Cyprus, China, Hong Kong, Thailand, Singapore, Malaysia, Japan, Indonesia, Vietnam, Australia, New Zealand, the U.E.A. (Dubai and Abu Dhabi), Kuwait, Saudi Arabia, Colombia and Barbados.





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Educated at McGill and Concordia Universities in Montreal, Quebec, Canada, Dr. Nguyen holds B.S., M.S. and Ph.D. degrees in Civil Engineering and Construction & Project Management, is a Certified Project Management Professional (PMP) and has been a part-time professor at the Faculty of Engineering and Computer Science at Concordia University, teaching project management courses at both undergraduate and graduate levels since 1997. He has also lectured under the United Nations Development Programme (UNDP), McGill University Executive Institute, the Maastricht MBA programme (a joint programme between the Maastricht School of Management of the Netherlands and the School of Industrial Management of Ho Chi Minh City University of Technology, Vietnam) and is a registered civil engineer and project manager in both Canada and the USA. Dr. Nguyen was certified as a PMP (Project Management Professional) by the Project Management Institute (PMI) in 1995. He served as a member of the Canadian Advisory Council (CAC), set up by The Standards Council of Canada (SCC) to participate in the development of the International Organization for Standardization (ISO)'s project management standard released in September 2012 as ISO 21500 for project management as well as provided recommendations as Draft Reviewer and Contributor to the PMBOK Guide – Fifth Edition of the Project Management Institute (PMI) released in January 2013, both considered by project management professionals worldwide as globally and internationally accepted project management standards. Dr. Nghi Nguyen has also been serving the same role to the "soon-to-be-released" PMBOK® Sixth Edition to be published in 2017 by PMI.