

## Post Graduate Programme in Construction Management for Working Executives (PGP CMWE) Part Time Week-end Programme - offered from Mumbai

### INTRODUCTION

This Programme of Studies is designed for three types of construction Professionals. First, the diploma holders and engineers: by passing this programme, their qualification is upgraded to Post Graduate level and they become eligible to take on higher responsibilities. Two, construction site supervisors and engineers, who wish to improve their capabilities, win promotions and do their higher level jobs. And third, all hopefuls who wish to learn and understand various aspects of construction management and project execution to become project/construction managers.

### OBJECTIVE

- To develop competencies in Construction Management Tools, Techniques and skills.
- To acquire proficiency in controlling cost and quality and managing people.
- To gain knowledge on the dynamics of site organisation and operations.

On completion of the course, the graduates should be in a position to manage construction businesses efficiently.

### WHAT STUDENTS WILL LEARN

The programme is designed for students to gain proficiency in tools, techniques and practices required for supervising and managing construction business/project, independently. Graduates of this Programme will be able to efficiently and effectively perform the following functions:

- Planning, Scheduling and Controlling of project time, resources and costs to ensure that work is executed on time within the budget and to the owner's satisfaction.
- Plan and procure inputs/resources economically on time, and to ensure their optimum utilization.
- Acquire proficiency in supervision of construction quality at sites.
- Organise construction site, integrate activities, develop human resources and safe working environments.
- Receive and understand instructions for H.O., prepare and submit reports as required, and maintain site records.

### DURATION

Twelve months of Studies. Teaching days are Saturday (03:00 p.m. to 07:30 p.m.) and Sunday (09:30 a.m. to 01:30 p.m.).

**SEATS:** Twentyfive only.

### ELIGIBILITY

- Graduate in any branch of Engineering/ Architecture with 2 year work experience. OR
- Diploma in Engineering from State Board of Technical Education with 4 year work experience.

### ADMISSION PROCEDURE

Persons interested in admission may download the Prospectus and Application Form from NICMAR website, [www.nicmar.ac.in](http://www.nicmar.ac.in). It may also be obtained from NICMAR Pune campus by post on payment of Rs. 1000 (Rupees one thousand only). The payment of fee should be made by a Demand Draft drawn in favour of 'NICMAR - SODE' payable at Pune.

Fill in forms, attach Xerox copies of the required documents and return to NICMAR School of Executive Education at Pune along with a processing fee of Rs. 1000 by D/D. Send the application along with enclosures by Regd. A.D. to

The Dean  
NICMAR School of Distance Education  
25/1, Balewadi  
N.I.A Post Office  
Pune - 411 045.  
Tel.: 020-2729 2671 / 2729 2512 (Extn.: 202)

### TUITION FEE

The total amount of tuition fee payable for this course is Rs. 1,10,000.

### PAYMENT SCHEDULE

The Schedule of the payment of fees is given below:

1.	At the time of admission and on the date specified in the Admission Letter	Rs. 55,000.00
2.	On commencement of Module 3 & within 7 days of it	Rs. 55,000.00
	<b>Total</b>	<b>Rs. 1,10,000.00</b>

### FACULTY

The courses will be conducted by NICMAR faculty and experts drawn from industry.

### ASSESSMENT

Taught Courses are assessed by examination method. Presentations/Workshops are assessed by practical tests.

Examinations are held Module-wise for the courses offered. Each course of 100 marks consists of 70 marks of Term-end examination and 30 marks of Concurrence Internal Assessment (CIA).

### AWARD

In order to be eligible for the Award of a Diploma, the student must meet the following requirement.

- i. Pass in each Term-end Exam and obtain a minimum of:
  - 40 percent marks in each paper, and
  - 50 percent marks in aggregate.
- ii. Have paid full fees of the course.
- iii. 80% attendance.

## Courses

General Management	Organizational Behaviour	2	Construction Project Management - I	Project Management	4
	Marketing & Business Development	2		Contract Management	4
	Operations Management	2		Management of Site Work	2
Resource Management	Equipment and Materials Management	3	Construction Project Management - II	Construction Technology Management 2	2
	Finance & Accounting Management	4		International Project Management	2
	Human Resource Management & Management Skills	3		Real Estate & Facilities Management	3
Project Quality Management	Safety, Health & Environment	3		Infrastructure Development & BOT Projects	3
	Risk Management & Decision Making	3		Computerised Project Management	2
	Quality Management	3			

## Course Contents

### 1. ORGANIZATIONAL BEHAVIOUR

- Dynamics of People and Organizations
- Models of Organizational Behaviour
- Leadership Strategies for Organizational Transformation
- Leadership and Empowerment
- Motivation and Behaviour

### 2. MARKETING AND BUSINESS DEVELOPMENT

- Marketing Principles
- Marketing Research
- Strategies for Business Development
- Pricing Policies and Strategies
- Project Marketing

### 3. OPERATIONS MANAGEMENT

- Plant Layout & Material Handling on Mega Projects
- Outsourcing
- Productivity at Site
- Work Study Techniques
- Interdepartmental Co-ordination

### 4. EQUIPMENT AND MATERIALS MANAGEMENT

- Equipment Planning for Projects
- Hire/Purchase Decisions
- Monitoring Equipment Performance.
- Logistics in Materials Procurement.
- Inventory Control
- Managing Inventories in a Supply Chain
- Optimizing the Purchase Process

### 5. FINANCE & ACCOUNTING MANAGEMENT

- Cost Accounting Fundamentals and Methods
- Standard and Marginal Costing
- Budgetary Control Systems
- Project Cost Control
- Cost Accounting Techniques for Projects
- Cost Audit in Projects
- Risk Analysis of Cost Estimates
- Time Value of Money
- Working Capital Management
- Corporate Finance – Funding the Business
- Internal Rate of Return

## **6. HUMAN RESOURCE MANAGEMENT**

- The Strategic Role of HRM
- Recruitment and Placement
- Training and Development
- Appraising and Managing Performance
- Labour Relations and Collective Bargaining
- Communication Skills Development
- Personality Development
- Managing HR in Construction
- Skills in dealing with clients, construction workers, government inspectors, trade unionists.

## **7. SAFETY, HEALTH AND ENVIRONMENT**

- Policies on Occupational Health, Safety and Environment.
- Legislation & Enforcement of Safety and Health Policies.
- Environment & Large Projects – Issues of Concern.
- Occupational Health Surveillance.
- Preventive and Protective Safety & Health Measures.
- Health Promotion, Education and Training.

## **8. RISK MANAGEMENT AND DECISION MAKING**

- Risk and Return
- Diversification and Investment Risk
- Risk Management on Projects
- Risk Management in International Contracts
- Risk and Insurance.
- Statistical and OR models for Construction

## **9. QUALITY MANAGEMENT IN CONSTRUCTION**

- Recent History of Quality Management
- Quality Assurance in Construction
- The Human Factor
- Applying Quality & Productivity Techniques in Construction.

## **10. PROJECT MANAGEMENT**

- Project Management Concepts
- Project Planning and Scheduling
- Resource Planning
- Planning the Team and the System
- The Right Schedule
- The project Review Process – MIS
- Monitoring for Creating Focus
- Project Work Break Down Structures

## **11. CONSTRUCTION CONTRACT MANAGEMENT**

- Estimation of Different Types of Construction Works
- Analysis of Rates
- Tendering & Bidding
- Indian Contract Law

- FIDIC Contract Conditions Contracts/EPC Projects
- Claims Management- Negotiation, Arbitration, Alternate Dispute Resolution

## **12. CONSTRUCTION TECHNOLOGY MANAGEMENT**

- Trenchless Technology
- Modern Material Handling Techniques
- Alternative Building Materials
- Advances in Construction Techniques
- Approaches to Earthquake Resistance

## **13. MANAGEMENT OF SITE WORK**

- The Site (Layout and Organisation)
- Site Inputs Planning, Site Work Planning
- Site Cost Control Techniques
- Site Quality Control Operations, including Concreting & Improving Site Productivity
- Site Mobilization, Layout, Site Organisation
- Execution and Monitoring
- Closing the Site

## **14. INTERNATIONAL PROJECT MANAGEMENT**

- International Construction Markets - Opportunities for Business Development
- International Financial Institutions
- Procurement Guidelines of the World Bank & ADB
- Working Group, EXIM Bank, ECGC, OCCI
- Information Requirement at the PQ Stage-Site Survey
- Bidding International Projects

## **15. REAL ESTATE & FACILITIES MANAGEMENT**

- Real Estate Development-DC Regulations & Acts
- Estate Management
- Building Services Planning & Maintenance
- Land Acquisition-Procedures, Acts, Issues
- Property Management-Laws, Acts, Registration
- Facilities Management

## **16. INFRASTRUCTURE DEVELOPMENT & BOT PROJECTS**

- Infrastructure Development- Issues, Policies
- Regulatory Framework for Private Participation
- Foreign Investment in Infrastructure
- Types of BOT Models-BOT, BOO, BOLT
- Structuring BOT Projects

## **17. COMPUTERISED PROJECT MANAGEMENT (Hands-on)**

- Resource Planning
- Project Work Breakdown Structure, OBS & Multiple Project Planning
- Project Controls
- Information Reporting System
- Application of latest Project Management Software Packages in Construction