

# TWO YEAR POST GRADUATE PROGRAMME IN ADVANCED CONSTRUCTION MANAGEMENT

## Introduction

Two Year Post Graduate Programme in ACM is an interdisciplinary programme which builds upon the concepts and practices of management, engineering, architecture, planning, law, information technology, social and behavioural sciences and combines theory with practice.

The programme helps the technically qualified engineers, architects and planners to develop the requisite managerial skills and further sharpen the technical skills to manage and execute the complex and large construction engineering projects. The curriculum is a judicious blend of theoretical and applied courses both in general management and construction management accompanied with practical experience and project work. The theoretical courses aim to improve the students' understanding of fundamental concepts and relationships that characterise the changing world in which managers must operate. Applied courses, which occupy the bulk of the students' time, link the theoretical studies to practical problems in construction, infrastructure and real estate development projects. Research-oriented courses develop the ability of scientific analysis of a problem and report writing skills. Computer application skills and knowledge in managerial decision making are imparted through special courses and workshops/seminars.

This programme commenced in 1987 with United Nations Development Programme (UNDP) and International Labour Organisation (ILO) technical assistance procured for NICMAR by the Government of India. The syllabi were first developed in 1986 at an international workshop of experts of management in the construction industry and in association with the faculty members of the Massachusetts Institute of Technology and University of Michigan (USA), Loughborough University (UK), Indian Institute of Management (Ahmedabad), other leading management and technology institutes in India and several industry leaders.

The programme is designed to prepare NICMAR graduates for undertaking professional responsibilities demanding high proficiency in applications of the latest information technology, people management, project finance, international markets - all with a special reference to infrastructure and real estate construction projects. The curriculum is reviewed from time to time to incorporate the latest advances in Construction, Real Estate, Infrastructure and Project (CRIP) industry and to build a strong competence in diversified areas.

## Objectives

The aim of the programme is to develop dynamic and responsible IT savvy techno-managers equipped with the necessary skills for managing construction business/projects at domestic and global levels and have the following competencies:

- Sound knowledge of the theory and practice of advanced construction management.

- Skills and techniques of construction project management.
- Knowledge and application of the latest technologies.
- Proficiency in finance and people management skills.
- Understanding of construction and real estate development business, management of facilities, building services and infrastructure development projects.
- Competency to handle a construction project efficiently.
- Use advanced information technology tools to state-of-the-art.

## Programme Highlights

This programme builds upon the concepts and practices of advances in construction engineering and management. The first year curriculum apart from the specific domain related courses includes various general management courses to improve students' understanding of key aspects in construction business. This unfolds the basic phenomena and relationships that characterise the changing world in which a techno-manager operates. During the second year, the specialised areas of construction, technology and management are introduced to develop in-depth knowledge of the advances in construction through core and elective courses.

The programme also provides sector-specific knowledge in the form of elective courses offered in the second year. Students have a choice to opt for electives so that they can acquire the knowledge of these sector specific areas: (i) Infrastructure development and management, (ii) Real estate/ Facilities management.

Practical experience is also gained by the students through site visits and summer internship. Project work under the supervision of a guide develops skills in scientific analysis of problems and report writing. Computer application skills clubbed with knowledge of quantitative methods create an analytical edge for managerial decision making vital for managing complex construction projects. The students are trained on a suite of software required for project management and analysis.

## Duration and Organisation

The programme duration is of two years. It is organised into 4 semesters with suitable breaks. Semesters are devoted to classroom learning, acquiring hands-on experience in computer practice workshop, managerial skills workshop, construction practice workshop, estimation and tendering workshop, basic competency assessment and upgradation, site visits and learning research techniques and presentation skills. Summer internship is scheduled in between second and third semester and electives are introduced from the 3rd semester

## Eligibility

Regular bachelor's degree in Engineering in any discipline / Architecture / Planning with minimum 50% aggregate marks from a recognised Institution / University.