A Self-Financed Short Term Internship Programme on

# Evolving Concepts in Design of Reinforced Concrete Buildings [Design -2019]

June 03 – 28, 2019



Patron
Prof. Rajeev Tripathi
Director

Chairman Prof. R.D. Gupta Head, CED

Convenor Dr. L. K. Mishra, Professor

Coordinators

Dr. Goutam Ghosh, Associate Professor

Dr. Rama Shanker, Associate Professor



Department of Civil Engineering

Motilal Nehru National Institute of Technology Allahabad

Prayagraj-211004, India

### **Background**

Reinforced concrete is widely used as structural material in various civil engineering structures. Structural design of concrete & reinforced concrete is an important course for civil engineering and architecture professionals and students. Sound understanding in this course makes students confident in their professional career. This is also substantially included in various competitive examinations including GATE, IES etc. Modern age reinforced concrete is designed for large number of attributes such as durability, earthquake resistant and sustainability apart from strength and stability. Design of civil engineering structures is conceptually well coordinated theme. An engineer equipped with fundamentals in design will find multiple career opportunities in various government/ PSU/ PMC and Design Consultancy organizations. The deliberation will also include discussions on codal provisions as along with their background information.

In view of above, a four week Internship programme for civil and architecture students is planned during June 03-28, 2019. This internship programme is designed to suite the requirements of practising application engineers and students for updating their technical know-how on the design concepts of RC Structures. The internship programme consist of presentations by experts [from IITs & NITs & other reputed Institutions], tutorial assignments, laboratory engagements on software applications & material investigations and field visits.

#### **Course Content**

- Structural Materials & their Engineering characterization
- Fundamentals of Structural Analysis :- A review
- Design Philosophy of Reinforced Concrete Structures
- Fundamentals of Limit State Method of Design for RC Elements
- Design for Flexural, Compression and Torsion in Reinforced Concrete

- Design for Serviceability in Reinforced Concrete including Cracking
- Design of RC Foundations
- •Earthquake Resistant Design of Buildings
- Modelling, Analysis and Design of a Multi-storeyed Building using STAAD Pro
- •Reinforcement Detailing of RCC Structural Elements including Ductile Detailing
- Over View of Building Information Management
   [BIM] Software.
- Site Visits to RCC Building Construction Project Sites.

## **Registration Details**

All the interested are required to register online through the MNNIT website. The maximum number of seats are presently limited to 60 for students and 15 for professionals. All the participants will be issued a certificate of participation.

# **Important dates**

Last date of online registration: 20-05-2019

Confirmation to participants (by email): 25-05-2019.

# **About Civil Engineering Department**

The Department of Civil Engineering was established in 1961. The Department offers M.Tech. Programme in the streams of (1) Structural Engineering, (2) Geotechnical Engineering, (3) Environmental Engineering and (4) Transportation Engineering in addition to the B. Tech. Programme in Civil Engineering. The Department is also recognized as QIP centre for M.Tech. and Ph.D. The Department has well equipped laboratories and computational facilities and offers regular consultancy with various disciplines of Civil Engineering.

# **Organizing Committee**

#### **Patron**

Prof. Rajeev Tripathi Director, MNNIT Allahabad

#### Chairman

Prof. R.D. Gupta Head, Civil Engg Dept., MNNIT Allahabad

#### Convenor

Dr. L. K. Mishra Professor, Civil Engg Dept., MNNIT Allahabad

#### **Coordinators**

Dr. Goutam Ghosh Associate Professor, Civil Engg Dept., MNNIT Allahabad

Dr. Rama Shanker Associate Professor, Civil Engg Dept., MNNIT Allahabad

## **Registration Fees**

Professionals: Rs. 12,000/-

Students of AICTE Approved Institute: Rs.9,000/-Registration Fee caters for all the academic expenses including certificate, instructional material, registration kit.

# **Payments**

All the payments should be made through DD/Multicity cheque drawn in favor of "DESIGN -2019" payable at Prayagraj. The payment can also be made through NEFT/RTGS/Internet Banking "DESIGN-2019", State Bank of India, MLNREC, TeliarGanj, Prayagraj branch, Account No. 3838733429-3, Branch Code: 2580 and IFSC code: SBIN0002580. The details of fee payments must be provided in the registration form.

#### **Accommodation**

Participants are required to make their own lodging and boarding arrangement during the internship. Limited accommodation may be provided in the hostels as per the availability on extra payment basis.

#### Venue

The course will be conducted in the Conference Room of the Civil Engineering Department, MNNIT Allahabad. The inaugural is scheduled at 09:00 AM on June 03, 2019.

#### About MNNIT Allahabad

Motilal Nehru National Institute of Technology Allahabad, Prayagraj (MNNIT) is an established academic Institution of national and international repute established as one of the seventeen Regional Engineering Colleges of India in the year 1961 as a joint enterprise of Government of India and Government of Uttar Pradesh. In 2002, MNREC was transformed into National Institute of Technology and Deemed University fully funded by Government of India. With the enactment of National Institutes of Technology Act 2007, the Institute has been granted the status of Institution of National Importance w.e.f. 15.08.2007. Presently the Institute has 13 fully functional departments viz. Departments of Applied Mechanics, Biotechnology, Chemical Engineering, Chemistry, Civil Engineering, Computer Science & Engineering, Electrical Engineering, Electronics & Communication Engineering, Humanities & Social Sciences, Mathematics, Mechanical Engineering, Physics and School of Management Studies in addition to GIS cell.

The Institute offers 9 UG, 23 PG, and various Doctoral Research programmes in the fields of science & technology, management and social sciences Further, all the departments offer doctoral programs. Teachers from other institutions also come here to do their M.Tech. and Ph.D. in various Department, under QIP scheme.

The M.Tech. courses in the evenings on part time basis for the duration of five semesters are also offered by the Institute.

In addition to regular academic programs, the Institute organizes seminars, conferences, symposia and also extends expert consultancy to industries and Institutions.

The Institute was selected as a lead Institution in the Design theme under Indo-UK REC Project (1994-99). Under this scheme a Design Centre was established. The Institute has been selected as a Lead Institution under World Bank funded Government of India Project on Technical Education Quality Improvement Programme (TEQIP I, TEQIP II&TEQIP III).

## **Registration Form**

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[Design -2019]
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Student/ Professional:	
Designation/Academic Year	
Organization /Institute (in ca	se of student):
	(M)
Registration Fee:	
Details of Registration Fee Deposited: Mode: NEFT/RTGS/Internet Banking:	
Accommodation Required:	YES/NO
Date:	Signature

The registration can also be done online through Institute website <a href="www.mnnit.ac.in">www.mnnit.ac.in</a>, but duly signed hard copy of the registration form must be submitted.

## Correspondence

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