

TEQIP Supported Short Term Training Programme  
on  
**Advanced Structural Analysis and Finite Element Method**  
(8-12 April 2019)



Organized by



**National Centre for Disaster Mitigation & Management**  
**Malaviya National Institute of Technology Jaipur**

**Patron**

**Prof. Udaykumar R Yaragatti**  
(Director, MNIT Jaipur)

**Program Coordinator**

**Prof. M. K. Shrimali**  
(Professor, Civil Department, MNIT Jaipur)

**Course Coordinators**

**Prof. S.D. Bharti, Ar. Ramniwas, Dr PV Ramana and Dr Dinesh Kumar**  
(Professor, Civil Engg. Department, MNIT Jaipur)

COORDINATOR FROM COLLABORATING INSTITUTION

**Prof B. P. Nandawan**  
(Professor of Mechanical Engg. College of Technology & Agriculture Engg. Udaipur)

**About the Institute**

Malaviya National Institute of Technology Jaipur is an institution of National Importance under National Institutes of Technology, Science Education and Research Act 2007, under the aegis of Ministry of Human Resources, Government of India.

The Institute was established as Regional Engineering College in 1963, as a joint venture of Government of Rajasthan and Government of India. The Institute runs programs leading to undergraduate (B. Tech.) Graduate (M. Tech.) and research degrees (Ph. D.), in all major disciplines engineering and technology.

The Institute operates from a well planned and developed, fully residential campus spread over 325 Acre of land. The campus has a premium location on the Jawahar Lal Nehru Marg in Jaipur, and it is well connected through Air, Rail and Road. The Air Port and Railway station (Gandhi Nagar, Jaipur) are within 10-15 minutes travel distance from the Institute campus.

### **About the department**

National Centre for Disaster Mitigation and Management is an Academic Center of the Institute, approved by the Board of Governors (27th Meeting of the Board of Governors held on 7 October 2013). The Center works for disaster mitigation and management in India in general, and earthquake safety in particular. The activities of the Center include experimental and analytical Research & Development and training of both academics and students of other universities and institutions in India as well as practitioners. Presently the Center has 10 Adjunct Faculty Members with Ph. D. degrees in relevant disciplines such as earthquake engineering, management and instrumentation.

### **Overview of the course**

It covers from wide range topics related to numerical methods and finite element methods, composite structures and structural engineering. It contains basic concept of finite element methods, composite structures and structural analysis and design concepts for both static and dynamic points of view. It has emphasis on basic concept of composite structures and different analysis tools. The course will also cover basics of dynamic analysis of liquid storage tanks.

### **Objectives of the course**

The objectives of this course are:

- ✚ To study the fundamentals of finite element methods and modelling; structural analysis and its wide application to design different type of structures.
- ✚ Various mathematical tools and their applications for different areas such as engineering, materials and mathematics.

### **Who can attend?**

The course material is designed for students, researchers, faculty member in engineering (Civil and Mechanical), mathematics and material engineering in general. The material in the course consists of core concepts of finite element method, composite structures, structural analysis hence should be of benefit to practitioners, students, and researchers in engineering (civil and mechanical engineering), mathematics, materials and architecture.

### **Benefits of attending the course**

Successful completion of the course should result in strengthening the core knowledge in

various mathematical tools and their applications.

### **Course contents**

The course contents would include:

- ✚ Basic concept of finite elements method, advanced finite element methods, Structural Analysis related to areas of both static and dynamics, over view of composite structures, FEM-new elements and mathematical modelling, Structural health monitoring, Basic concept of design, special structures and aseismic analysis of structures.

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### **Correspondence Address**

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Professor

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# REGISTRATION FORM

**TEQIP Supported Short Term Training Programme (STTP)**  
**Advanced Structural Analysis and finite Element Method**  
(8-12 April 2019)

*(To be sent through post/email along with DD or E-transfer details.)*

Name: .....

Designation: .....

Affiliation: .....

Correspondence: .....  
Address .....

Mobil No.: .....

E-mail: .....

Registration Category:

(Please Tick)

- Participants from Industry (Rs. 5000/-)
- Faculty Members (Rs. 3000/-)
- Students & Scholars (Rs. 1500/-)

Registration Fee Details:

**Demand Draft/E-Transfer Details:**

(through DD or E-transfer)\* Name of Bank....., Branch:.....

DD No./E-transfer No.: ....., Date:.....  
*(Note: The registration fee includes: attendance in all lectures, working lunches on course days and registration kit)*

Accommodation:

Required/Not Required (Tick)

*(Note: On campus accommodation, if available, would be arranged in the Institute Guest House on chargeable basis. Approximate guest house charges for a twin shared room is Rs 800.00)*

**Date:**

**Signature of Participant**

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\* **Payment Details:** Demand Draft to be drawn in favour of "Registrar, MNIT Jaipur" payable at Jaipur & E-transfer to be made in: A/c No. : 36875887782, IFSC: SBIN0015921, Bank: SBI, MNIT Campus Jaipur.