

# **Engineering Staff College of India**



An Autonomous Organ of The Institution of Engineers (India)
Old Bombay Road, Gachi Bowli, Hyderabad-500 032
(IMS [ISO 9001:2015, ISO 14001:2015, ISO 50001:2018, ISO 45001:2018],
ISO/IEC 17025:2017 Certified, AICTE & CEA Recognized Institution)

# **CIVIL & TRANSPORTATION ENGINEERING DIVISION**

**Training and Development Programme On** 

**Advanced Earthquake Resistant Techniques of Building** 

25<sup>th</sup> - 29<sup>th</sup> March, 2024

Venue: ESCI, Hyderabad



**Centre for Promotion of Professional Excellence** 

## **INTRODUCTION:**

Earthquakes are one of the most devastating forces on the planet. The seismic waves that travel through the ground can demolish buildings, kill people, and cost billions of dollars in damage and restoration. The damage was caused by the collapse of buildings with people inside, as in previous earthquakes, prompting the development of earthquake-resistant constructions. Constructions intended to withstand earthquakes are known as earthquake-resistant structures.

While no structure can be completely safe from earthquake damage, earthquake-resistant construction aims to build structures that perform better than their conventional equivalents during seismic activity. Building rules state that earthquake-resistant constructions must be able to withstand the greatest earthquake with a reasonable chance of occurring at their site. This training program deals with Advanced technologies used in Earthquake resistance in construction of Buildings and Design concepts and latest construction methodologies and implementation of AI and IoT.

# **OBJECTIVES:**

- To familiarize participants with Advanced Earthquake Resistant Technique in Building Construction
- To impart knowledge on Geo-technical aspects.
- To describe various Advanced Construction Methodology of Earthquake Resistance Buildings.
- To impart knowledge on Latest Technologies in Maintenance of Buildings

# **COURSE COVERAGE:**

- Overview of Advanced Earthquake Resistant Technique in Building Construction.
- Characterization of Ground & Overview of Foundations and Challenges Geotechnical aspects.
- Structural Analysis and Design Concepts of Seismic resistant Buildings.
- Advanced Construction Methodology of Earthquake Resistance Buildings
- Impact of Earthquakes on Buildings and reasons of Failure of Building in Earthquakes
- Implementation of AI and IoT in Earthquake Resistant Buildings.
- Latest Technologies in Maintenance of Buildings
- Technical Filed visit
- Case studies presented by the Participants

## **BENEFITS TO THE PARTICIPANTS:**

- Participants will know the Design Concepts of Seismic resistant Buildings
- Participants will understand the Impact on Earthquakes on Buildings and reasons of Failure of Building in Earthquakes
- Participants will know the application of AI and IoT.
- Case studies are discussed during the training period

# **TARGET PARTICPANTS:**

Officers and Engineers from Government departments like Transportation Departments, Roads and Buildings, PWD, Municipal Corporations, Panchayat Raj, Housing Boards, Border Roads organization, Public and Private sector like RITES, organizations involved in Traffic Engineering, Professionals and Consultants etc., working at junior level to senior level will all be benefited by attending this program.

## **RESOURCE PERSONS:**

Renowned personalities both from Industry / Educational Institutions like IIT's/ NIT's / Research Institutes, Reputed Universities, who are experts in this field, will be involved in providing the training.

# PROGRAMME VENUE, DATES &TIMINGS:

**VENUE**: Engineering Staff College of India (ESCI) Campus, Old Bombay Road,

Gachi Bowli, Hyderabad- 500 032.

**DATES**: 25<sup>th</sup> to 29<sup>th</sup> March, 2024

Registration : 09:45hrs.

Session timings : 09:45 – 17:15 hrs with 3 times breaks.

## **COURSE DIRECTOR:**

Dr. R Venkat Reddy, Ph.D (Osmania), FIE Head

## **COURSE COORDINATOR:**

Ch. Tilak - Faculty

## **COURSE FEES:**

Rs.25,000/- (Rupees Twenty Five Thousand Only) + GST 18% per participant. Fee includes, Soft copy of course material, course kit and Twin Sharing AC accommodation, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training programme.

# **DISCOUNTS**

- ❖ Non-Residential Fee- 10% discount on course fee is allowed for non-residential participants.
- ❖ **Group Discount:** Additional 10% discount for three or more participants, if sponsored by the same organization.

GST 18% is to be paid extra over and above the training fee, as training is also brought under the purview of Service Tax. PAN Card No AAATT3439Q; Service Tax registration No AAATT3439QST008 (under commercial training or coaching services – clause 65(105) (ZZC) of Finance act – 1994). GSTN Number – 36AAATT3439Q1ZV (HSN Number – 999293)

Programme fee is to be paid in favor of "IE (I) – Engineering Staff College of India" in the form of demand draft payable at Hyderabad.

Alternatively the payment may be made by **Electronic Fund Transfer (EFT) to ESCI - SB A/c No. 10007111201 with The SBI, PBB, Rajbhavan Road Branch, Khairatabad, Hyderabad-500004 by NEFT / RTGS / IFSC Code No. SBIN 0004159 – MICR No.500002075.** While using EFT method of payment, please ensure to communicate us your company name, our invoice reference and programme title.

# **REGISTRATION:**

Please send your nominations

To
The Head
Civil & Transportation Engineering Division

Engineering Staff College of India

Old Bombay Road, Gachi Bowli, Hyderabad - 500 032

Mobile: 9490011311 / 9492011311

Phone: 040-6630 4114, 66304134, 66304115, 66304107

Email: cte@escihyd.org

# **CERTIFICATE:**

A certificate of participation will be awarded to each participant.

# **GENERAL INSTRUCTIONS**

- > ESCI encourages participants to present case studies from their respective organizations.
- ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in 1200hrs) and one day after conclusion (Check-out 1100hrs) of the program duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation).