

# **Engineering Staff College of India**

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



## **CIVIL & TRANSPORTATION ENGINEERING DIVISION**

**Training and Development Programme on** 

## **Cyclone Resistant Building Construction**

21st - 25th April, 2025



**Centre for Promotion of Professional Excellence** 

## INTRODUCTION:

A cyclone is a weather condition in which the wind rotates around a strong centre of low atmospheric pressure and usually originates in warm tropical oceans. Cyclones are considered as one of the most natural hazards across the world considering the gravity of severity, destruction created, and frequency of occurrence. Cyclone Resistant Buildings are the perfect solution to overcome this natural disaster. Indian coastal areas are highly venerable to cyclones.

Certain guidelines and strategic planning during the design of buildings in cyclone prone areas is to be followed for the construction of a better cyclone resistant building, various factors should be considered such as the velocity of wind, building geometry, type of building material, characteristics of soil, and the aerodynamics of flow around the buildings, etc. This training program deals with cyclone, cyclone damages and its effect design considerations for Cyclone Resistant Buildings.

## **OBJECTIVES:**

- To familiarize participants with Cyclone Resistant Buildings Construction
- To impart knowledge on Natural Disasters and its Effect on buildings
- To know the Guidelines and Planning aspects in construction of Cyclone Resistant Buildings.
- To impart knowledge on SHM using sensors in Cyclone Resistant Buildings Construction

#### **COURSE COVERAGE:**

- Overview of Cyclone Resistant Buildings Construction
- Natural Disasters & Effect of the Disasters
- Fundamentals of Designing Cyclone Resistant Building Engineered and Non Engineered
- Guidelines and Planning aspects for Building Design in Cyclone prone areas
- Design Parameters of Cyclone Resistant Building Construction
- Geometric Consideration in Design & selection of Foundation, Roof & Wall Design for Cyclone Resistance Building.
- IS 15498 : 2004 Guidelines for improving the Cyclonic Resistance of Low rise Houses & other Buildings / Structures.
- Damages due to cyclones Case Study
- Implementation of AI in Cyclone Resistant Buildings Construction
- Use of SHM using sensors in Cyclone Resistant Buildings Construction
- Technical Visit
- Group discussions, Presentation of Case Studies by Participants

#### **BENEFITS TO THE PARTICIPANTS:**

- Participants Will know the Design Parameters & Geometric Consideration
- Participants are benefited through better understanding of Guidelines for improving the Cyclonic Resistance Buildings
- Participants will understand the importance of AI implementation

## **TARGET PARTICIPANTS:**

This course is suitable to all engineers and officers working at junior level to senior level from Government departments like R&B, PWD, MES, Municipal Corporations, Panchayat Raj, Housing Boards, GHMC, RITES, and Border Roads Development & Defense. Engineers from all State and Central Government Departments, & construction Companies.

#### **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 : 21<sup>st</sup> - 25<sup>th</sup> April, 2025

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.27,500/- (Rupees Twenty Seven Thousand Five hundred 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 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, 4115, 4107, 4134

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 12:00hrs) and one day after conclusion (Check-out 11:00hrs) of the program duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation).