



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

Construction of Bridge in Hill Area and Challenges

16th – 20th February, 2026

Venue : ESCI, Hyderabad



Centre for Promotion of Professional Excellence

INTRODUCTION:

A Bridge is a structure built to span a valley, road, river, body of water, or any other physical obstacle. Designs of Bridges will vary depending upon the function of the bridge and nature of the area where the bridge is to be constructed. Hilly region pose unique problem for bridge construction. In a restricted hilly area itself climatic conditions, geological features and hydrological parameters vary considerably.

Keeping in view the bridge site and various constraints, type of bridge and method of construction are to be selected carefully for safe, economical and successful completion of bridge construction. Various challenges that come across while constructing bridges in hilly area are like Construction of bridge across deep gorges, Construction of bridge on rivers with bouldary beds, Construction of bridges in extreme temperature zones, Construction of bridges on sharp turn on highway & Landslide. Deep gorges, rivers with bouldary beds, extremely low temperature condition, high winds, landslide etc. in hilly regions require special attention to complete the activities of bridge planning and construction in a systematic way and this training program deals with challenges in constructions of Bridges in Hill areas.

OBJECTIVES:

- To familiarize and improve the skills of the participants with the concepts Bridges construction in hilly ares
- To impart knowledge on Design Concepts of Bridges in Hilly area
- To update the knowledge, upgrading the skills in Implementations of **AI** (Artificial Intelligence) in Protective Measures and Maintenance
- To give the knowledge of Incremental Launching methods of Bridges in Hill areas

COURSE COVERAGE :

- Overview of Construction of Bridge in hill area and Challenges.
- Concepts & types of Hilly area Bridges
- Geological investigations and Geotechnical investigations for construction of Bridges in hill area
- Seismic Effects on design and performance of Hill area Bridges
- Design Concepts of Bridges in Hilly area and Design Data Collection - Guidelines
- Special considerations & Design issues in Hill Roads Construction & Construction challenges of Hilly area Bridges
- Design of Bridge on Landslides Areas - Landslide Disaster Engineering Measures
- Incremental Launching methods of Bridges in Hill areas.
- Failures of Bridges - Prediction, Prevention and Control of Landslides
- Management of Construction Activities
- Implementation of **AI** (Artificial Intelligence) in Protective Measures and Maintenance of Bridges in hill areas
- Technical Field visit
- Group discussions, Presentation of Case Studies by Participants

BENEFITS TO THE PARTICIPANTS:

- Participants will learn the advanced Launching methods of Bridges in Hill areas
- Participants will understand various Concepts & types of Hilly area Bridges
- Participants will know about Construction challenges of Hilly area Bridges
- Participants will learn about Management of Construction Activities

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 : 16th – 20th February, 2026

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 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
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).