



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

**Recent Innovations in Road Constructions and QA &
QC Practices**

19th – 21st January, 2027

Venue : Trivandrum, Kerala / ESCI, Hyderabad



Centre for Promotion of Professional Excellence

INTRODUCTION:

Road infrastructure is a critical component of economic growth, connectivity, and social development. With increasing traffic volumes, heavier axle loads, rapid urbanization, and the need for sustainable development, conventional road construction practices are evolving rapidly. The road construction industry is undergoing a major technological transformation, moving rapidly away from traditional asphalt laying toward sustainable materials, automated machinery, and digitized infrastructure intelligence. Driven by climate change pressures, labor shortages, and rising material costs, modern road building focuses heavily on reducing carbon footprints while extending pavement lifespans and also intelligent road networks that can meet future transportation demands.

Recent advancements in materials, equipment, digital technologies, automation, and quality management systems have transformed the way roads are designed, constructed, monitored, and maintained. These innovations not only improve pavement performance and service life but also enhance construction efficiency, safety, and sustainability.

OBJECTIVES:

- To impart knowledge on modern QA/QC procedures in Road Constructions
- To Understand emerging technologies in road construction.
- Utilize digital tools for quality monitoring and reporting.
- Identify common pavement failures and preventive measures using Sensors and advanced Technologies

COURSE COVERAGE :

- Overview and Innovative Pavement Technologies and the Role of Technology in Road Construction
- Next-Generation Sustainable Materials in Road Construction like Bio-Bitumen, Recycled Plastic, Rubber Pavements, Self-Healing Concrete and Asphalt and other Industrial By-products etc.,
- Use of Geospatial Technology for Accurate Mapping, Drones for Site Surveying and Monitoring
- Modern Equipment, Automation / Robotic Equipment for Safer Construction Sites
- Smart and Active Pavement Infrastructure and Smart Sensors for Road Monitoring - Real-Time Data Collection and Early Detection of Damage
- QA & QC Practices in Road Construction - Quality Management Framework & Material Quality Control
- Sustainable Road Design Through Green Technologies
- Group Discussion & Case study presentations by participants

BENEFITS TO THE PARTICIPANTS:

- Participants will gain knowledge & skills in understanding the QA & QC for construction projects to improve work processes.
- Understand the advanced Technologies and use of Modern Equipment's in Road Constructions
- Gain exposure to sustainable safe construction practices and preventing hazards.
- Understand the use of Smart Sensors for Road Monitoring

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 : Trivandrum, Kerala / ESCI, Hyderabad

DATES : 19th – 21st January, 2027

Registration : 10:00hrs.

Session timings : 10:30hrs – 16:30hrs with lunch break.

COURSE DIRECTOR:

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

COURSE COORDINATOR:

Ch. Tilak – Faculty

COURSE FEES:

Trivandrum, Kerala: Rs.36,000/- (Rupees Thirty Six Thousand Only) + GST 18% per participant. Fee includes, Soft copy of course material, course kit and Twin Sharing AC accommodation at Hotel, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training programme.

(or)

ESCI, HYDERABAD: Rs.18,000/- (Rupees Eighteen Thousand Only) + GST 18% per participant. Fee includes, Soft copy of course material, course kit and Twin Sharing AC accommodation at ESCI Executive Hostel, breakfast, lunch, dinner, tea / coffee and snacks.

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**
Email : cte@escihyd.org

CERTIFICATE:

A certificate of participation will be awarded to each participant.

GENERAL INSTRUCTIONS

- The maximum number of participants is 15 from all over India to conduct training programme at **Trivandrum, Kerala.**
- Kindly communicate the list of nominated participants with their details like Name, Designation, mobile numbers & E-mail Ids, for making necessary arrangements by ESCI at **Trivandrum, Kerala .**
- Twin Sharing AC accommodation will be provided 19th, 20th & 21st January 2027.
- **If we received less than 15 nominations of various departments from all over India programme will be conducted at ESCI, Hyderabad only.**