

About CSIR NEIST

CSIR-North East Institute of Science and Technology (CSIR-NEIST), Jorhat, Assam, is a premier multidisciplinary R&D institution under the Council of Scientific and Industrial Research (CSIR), New Delhi, established in 1961 as the Regional Research Laboratory (RRL).

About Engineering Sciences and Technology Division (ESTD)

The Engineering Sciences and Technology Division (ESTD) of CSIR-NEIST is at the forefront of multidisciplinary research and innovation in civil and mechanical engineering domains. The Division houses two core research groups: the Applied Civil Engineering Group and the Mechanical Engineering Group, each engaged in high-impact research, technical consultancy, and infrastructure solutions.

About Applied Civil Engineering Group (ACEG)

The Applied Civil Engineering Group of Engineering Sciences and Technology Division (ESTD) is dedicated to research and development, technical consultancy, testing and evaluation of building and road construction materials. The group's core areas of expertise lie in structural, construction technology, building materials, structural health monitoring, geotechnical and transportation engineering.

About General Engineering Group (GEG)

The General Engineering Group is engaged in research, technology development, testing, and consultancy in the areas of advanced machine design, thermal systems, renewable energy, materials processing, and industrial engineering.



About the Programme

Engineers and construction professionals require continuous upskilling to meet these challenges while ensuring safety, durability, sustainability, and cost-effectiveness. This five-day intensive training programme is designed to provide comprehensive theoretical knowledge and practical exposure on quality assessment, quality control, structural design principles, concrete mix design, construction materials testing, and modern project management practices. Participants will gain hands-on experience through laboratory demonstrations, case studies, and software applications.

Programme Objectives

The programme aims to

- Enhance understanding of modern construction technologies.
- Develop competency in quality assurance and quality control.
- Train participants in concrete mix proportioning and performance evaluation.
- Introduce structural design concepts based on Indian Standards.
- Demonstrate Non-Destructive Testing (NDT) techniques.
- Improve project planning, execution, monitoring and contract management skills.
- Promote sustainable construction practices.

5-DAY TRAINING PROGRAMME

ADVANCED CONSTRUCTION TECHNOLOGY (ACT-26)

Sep 11-15, 2026

Quality Assessment • Quality Control • Structural Design • Concrete Mix Design • Modern Construction Practices

Organized by



Applied Civil Engineering Group (ACEG) & General Engineering (GEG)

Engineering Sciences and Technology Division (ESTD)

CSIR-North East Institute of Science and Technology (CSIR-NEIST)

Jorhat, Assam, 785 006

**Under Ministry of Science and Technology,
Government of India**



Course Modules

Day 1

Construction Technology and Construction Management

- Modern Construction Materials
- Sustainable Construction Practices
- Construction Planning
- Site Safety and Risk Management
- Construction Contracts
- Quality Audits

Day 2

Quality Assessment & Quality Control

- Quality Management Systems
- IS Specifications and Codes
- Inspection Procedures
- Material Testing
- Concrete Quality Assessment, Field Quality Control, Acceptance Criteria

Day 3

Structural Design & Analysis

- Limit State Design, RCC Design Concepts, Steel Structures, Foundation Design, Structural Health Monitoring, Seismic Design Concepts
- Design using IS Codes
- Software Demonstration

Day 4

Concrete Technology & Mix Design

- Concrete Constituents
- Mix Design (IS 10262)
- High Performance Concrete
- Self-Compacting Concrete
- Pervious Concrete
- Durability Design
- Special Concretes
- Mix Design Calculations
- Trial Mix Preparation
- Cube Casting
- Workability Tests

Day 5

Local Site Visit & Hands on training

- Concrete Mix Design
- Cube and Core Concrete Compressive Strength Testing
- Rebound Hammer Test
- Ultrasonic Pulse Velocity (UPV)
- Material Characterization Demonstration

Who Should Attend?

- Civil/Structural Engineers
- Quality/Site Engineers
- Architects/ Consultants
- Faculty Members
- Research Scholars
- M.Tech./B.Tech./Diploma Students
- Government Engineers
- Contractors & Builders

Highlights

- ★ Expert Lectures
- ★ Hands-on Laboratory Sessions
- ★ Live Demonstrations
- ★ Industry Case Studies
- ★ Software Demonstrations
- ★ Interactive Discussions
- ★ Training Manual
- ★ Certificate of Participation

Organizers

- **Dr. V. M. Tiwari**, Director, CSIR-NEIST
- **Er. J J Bora**, Scientist G, Head of ESTD
- **Dr. Sanjay Deori**, Scientist G & Group Leader of ACEG
- **Er. Tapas Das**, Scientist E
- **Er. Dipak Basumatari**, Scientist E
- **Dr. Leon Raj**, Scientist E
- **Dr. Dipankar Neog**, Scientist G & Group Leader of GE
- **Er. Dhanjit Das**, Scientist D
- **Dr. Jyoti Kumar Doley**, Scientist D
- **Dr. Biswajit Gogoi**, Scientist E
- **Dr. Kalyani Medhi**, Scientist F
- **Mrs. I Ilika Zhimo**, Scientist E
- **Mr. Debabarata Das**, Scientist F
- **Mr. Rajib Deka**, Scientist E

Contact Details

- **Er. Dipak Basumatari (9435357480)**, dipakbasumatari.neist@csir.res.in
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Registration Form—Required Information

- Full Name :
- Designation :
- Organization/Institute/Department :
- Qualification :
- Years of Experience :
- Postal Address :
- City :
- State :
- PIN Code:
- Mobile Number:
- Email ID :
- Category
 - ◊ Government
 - ◊ Industry
 - ◊ Academia
 - ◊ Student
 - ◊ Others
- Sponsoring Organization (if applicable):
- Accommodation Required: Yes/No
- Arrival Date:
- Departure Date :
- Food Preference: Veg/Non-Veg
- Registration fee: No Charge

Declaration: I certify that the information provided above is accurate and complete.

Date: _____ Participant Signature

Place: _____



***Limited Seats. The duly filled and signed registration form must be submitted at least two (2) days before the commencement of the training programme to leonraj.neist@csir.res.in**

5-DAY TRAINING PROGRAMME

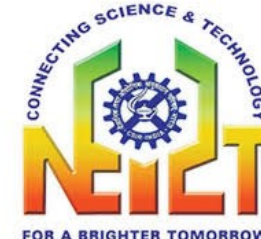
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Under the Ministry of Science and Technology, Government of India



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CSIR,CBRI



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