

INSTITUTE OF INFRASTRUCTURE, TECHNOLOGY, RESEARCH AND MANAGEMENT

(An Autonomous University established by Government of Gujarat)

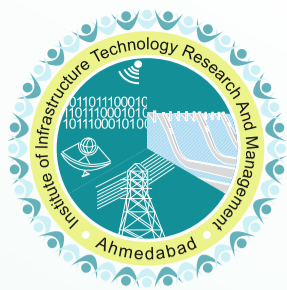
Department of Civil Engineering

OUR INDUSTRY PARTNERS: GUJARAT URBAN DEVELOPMENT INSTITUTE (GUDI), L&T, GWSSB, DTE, AMC

Proposed Titles of STTPs for Engineers, Students and Academicians

Topics	Sub-topics to be covered during training
Urban Water Supply and Sewerage System	<ul style="list-style-type: none"> Assessing urban water demand for urban and rural areas Layout planning and design of water distribution and sewer networks Hands on training on Open flows WaterGEMS and SewerGEMS Non-Revenue Water Case studies on reuse, recycling, and smart water systems
Dos and Don'ts for Good Construction Practices	<ul style="list-style-type: none"> Site safety, checklists, and statutory compliance Quality control tests at site (concrete, steel, masonry) Common site mistakes and how to avoid them Coordination between drawings, BOQs, and execution Ethical construction practices and site documentation
Roads and Bridges	<ul style="list-style-type: none"> Field quality control tests for roads and bridges Construction sequencing and site challenges Inspection, maintenance, and defect identification Safety management during construction and operation
Sustainable Building Construction and Materials	<ul style="list-style-type: none"> Selecting sustainable materials for projects Energy-efficient construction practices at site Compliance with green building codes and ratings
Environment and Ecology in Urban Areas	<ul style="list-style-type: none"> Pollution monitoring techniques and tools Urban ecology integration in infrastructure projects Mitigation measures during construction activities Regulatory compliance and reporting procedures
Storm Water and Sponge City Development	<ul style="list-style-type: none"> Urban flood risk assessment and mapping Design of storm water drains and retention systems Sponge city elements: permeable pavements, bioswales Rainwater harvesting system design and maintenance
Work Organization Management – CPM & PERT	<ul style="list-style-type: none"> Preparing construction schedules using CPM Hands-on network diagram development Time–cost trade-off and resource levelling Tracking project progress and delays Practical use of project management software
Creating Resilient Cities	<ul style="list-style-type: none"> Identifying vulnerabilities in urban systems Disaster-resilient infrastructure planning Integrating climate adaptation in city projects Community participation and governance tools
Solid Waste Management	<ul style="list-style-type: none"> Waste quantification and characterization Planning collection, segregation, and transport systems Hands-on exposure to processing technologies Landfill operations and environmental safeguards PPP models and community engagement strategies

***We tailor-make training programs to match your requirements**



INSTITUTE OF INFRASTRUCTURE, TECHNOLOGY, RESEARCH AND MANAGEMENT

(An Autonomous University established by Government of Gujarat)

Department of Civil Engineering

OUR INDUSTRY PARTNERS: GUJARAT URBAN DEVELOPMENT INSTITUTE (GUDI), L&T, GWSSB, DTE, AMC

Proposed Titles of STTPs for Engineers, Students and Academicians

Topics	Sub-topics to be covered during training
Design of Building and Bridge Structures	Understanding structural drawings and detailing Load path identification and structural behaviour Design checks as per relevant codes Construction-stage structural safety Inspection, maintenance, and retrofitting basics
Creating Clean Air in Cities	Identifying local air pollution sources Use of air quality monitoring instruments Designing mitigation measures for urban areas Traffic, construction, and dust control strategies Air quality action plans and compliance
Geotechnical Investigation for Infrastructure Projects	Planning subsurface investigations for projects Field testing: SPT, CPT, plate load test, MASW, Crosshole/Downhole test, Pressure meter test, Pile load tests Interpreting bore logs and lab results Foundation recommendations and reporting Geotechnical hazard assessment and solutions for Projects (Liquefaction & seismic hazard assessment, flood, tide and avalanche protection structures) Forensic Geotechnical Engineering for Infrastructure Projects: Learning from Failures
Pavement Geotechnics	Subgrade evaluation and CBR testing Soil stabilization methods at field level Drainage design and construction practices Forensic Pavement Geotechnics: Learning from Failures Maintenance and rehabilitation techniques
Structural Designs for Resilience and Sustainability	Performance-based design concepts Designing for seismic, wind, and climate loads Use of resilient and sustainable materials Retrofitting and strengthening techniques Life-cycle costing and durability assessment

Achievements : Trained 800+ practicing engineers/ technicians (L & T and affiliated organizations for high speed rail project, AMC Engineers, GWSSB Engineers etc.)

Provide regular consultancy services to both Government and Private agencies related to Civil Engineering projects like

- Project Implementation Unit, GoG
- Sports Authority of Gujarat
- National Highways Infrastructure Development Cor. Ltd.
- Ahmedabad Municipal Corporation
- Gujarat Pollution Control Board
- Kansaikeiko Co. Ltd, Osaka, Japan
- Larsen and Toubro
- Fairmate Chemicals Pvt. Ltd.
- Unique Engineering Services, Gandhidham
- Gujarat Urban Development Institute
- CPWD, Bhuj
- Gujarat Biotechnology University
- Narmada, Water Resources, Water Supply and Kalpsar Department and many more....

***We tailor-make training programs to match your requirements**