

Placement Brochure

Environmental
Geotechnology
Batch of 2022-2024



17

YEARS OF EXCELLENCE



Vision

International standing of the highest calibre.



Mission

To equip, train and mould students into globally competent personnel with sound footing on basic managerial principles, skills, research capabilities, along with exemplary professional conduct to analyze, evaluate and execute effective decisions for the progress of enterprises and society, adapting to a dynamic economic environment towards robust governance with the highest ethical values.

About NITC

National Institute of Technology Calicut (NITC) is one of the 31 institutions of national importance set up by an Act of Parliament namely the 'National Institute of technology Act 2007', and is fully funded by the Government of India. The mandate of the Institute is to provide higher technical education and conduct research in the various branches of Engineering, Science, Technology and Management. Originally established in 1961 as a Regional Engineering College (REC), it was transformed into a National Institute of Technology in 2002. The Institute offers bachelors, masters and doctoral degree programs in Engineering, Science, Technology and Management. With its proactive collaborations with a multitude of research organizations, academic institutions and industries, the institute has set a new style for its functioning under the NIT regime.

About CIVIL DEPARTMENT

The Department of Civil Engineering holds the distinction of being one of the earliest departments at the National Institute of Technology Calicut (NITC). Its establishment dates back to the inception of the Calicut Regional Engineering College (CREC) in 1961, which served as the precursor to the present-day NITC.

In addition, the department sees numerous students dedicated to Ph.D. research in diverse civil engineering domains. Recognized as a Quality Improvement Programme (QIP) centre by AICTE for both M. Tech. and Ph.D. programs, it regularly hosts short-term training programs, benefiting faculty members and professionals in the technical sector. The department is provident in research, development, testing, and consultancy endeavours. It has successfully executed several R&D projects sponsored by various entities, such as MHRD, DST, AICTE, ADRB, NPOL, Coir Board, Central Water Commission, and the Kerala State Council for Science Technology and Environment (KSCSTE), with numerous projects currently in progress.

About ENVIRONMENTAL GEOTECHNOLOGY

The M. Tech. Programme in Environmental Geotechnology is an interdisciplinary course covering environmental aspects of geotechnical engineering. The program is designed to equip engineers with the skills to devise environmentally sustainable solutions for geotechnical challenges and address environmental issues specific to soil and subsurface conditions. Core courses focus on geotechnical engineering, environmental protection, and pollution control. Additionally, students can choose from a range of elective courses, including foundation engineering in challenging soils, waste management, wastewater engineering, earthquake engineering, and landslide mitigation techniques. Project work spans the third and fourth semesters, providing practical experience in these areas. This comprehensive curriculum prepares graduates to tackle complex environmental and geotechnical problems effectively.



Why Offer Placements ?

At NITC Calicut, we pride ourselves in nurturing a cadre of visionary M.Tech students, specializing in the cutting-edge domain of Environmental Geotechnology. Our students graduate with an insatiable thirst for knowledge, a profound appreciation for innovative solutions, and a strong commitment to applying their skills in addressing pressing environmental and geotechnical challenges.

The Environmental Geotechnology program at NIT offers a unique and comprehensive curriculum that encompasses advanced coursework, hands-on research experiences, and collaborative projects. Our students receive holistic guidance and mentorship through seminars, fieldwork, research initiatives, and participation in national and international conferences and workshops.

Our esteemed placement cell recognizes the immense potential of our final-year M.Tech students to make significant contributions to environmental sustainability and geotechnical engineering. We extend an open invitation to organizations and institutions in the environmental and geotechnical sectors to provide placement opportunities to our graduates.

The expertise of our students in geotechnical analysis, environmental impact assessment, and sustainable development makes them highly sought-after in the industry. By offering placements, you gain access to a pool of exceptionally skilled and motivated individuals and play a crucial role in shaping the future of the environmental geotechnology stream. Our alumni have consistently assumed leadership positions and led transformative projects in various industries, leaving an enduring legacy of success.

We firmly believe that your engagement with our students will bring fresh perspectives, innovative approaches, and a dedication to sustainable practices to your organization. Collaborating with NITC's Environmental Geotechnology program will enhance our student's professional growth and contribute to our institution's continued success and reputation. We invite you to join us in fostering excellence, innovation, and environmental stewardship as we work together to address our world's urgent challenges.

What we study ?

CORE



Pavement Materials and Design

Pavement Materials, Types and Component parts of Pavements, Analysis & Design of Flexible and Rigid pavements



Theory of Elasticity and Plasticity

Mathematical theory of elasticity, Energy Theorems and Variational Principles of Elasticity, Stress and strain problems in three dimensions, Torsion of straight bars, Introduction to plasticity

Landslide Mitigation Methods

Landslides types and classification, Geotechnical and geophysical investigation of landslides, slope stability analysis and methods of slope stabilization

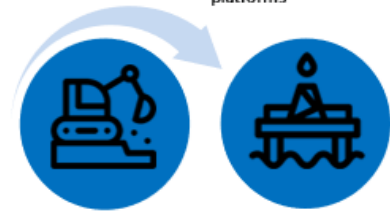


Geographic Information System and its Applications

Geographic Data Representation, GIS Data Processing, Analysis and Modelling, GIS Applications

Marine Foundations

Engineering behaviour of marine soils, Offshore Soil Investigation, Foundations for Gravity Structures, jacket type structures and jack up platforms



Design of Engineered Landfills

landfill liners and their design aspects, slope stability analysis, remediation techniques, contaminant transport

SOFTWARES



PLAXIS



MIDAS



GEOSTUDIO



GEO5



PROSHAKE

LABORATORIES

GEOTECHNICAL ENGINEERING

- 1 Automated Cyclic triaxial testing machine
- 2 Digital consolidation test apparatus and consolidometer
- 3 Digital computer controlled static triaxial test facility.
- 4 SPT test device with split spoon Samplers and core cutters
- 5 Vane shear test apparatus
- 6 Loading frame with motorized hydraulic jack
- 7 Large scale direct shear test

ENVIRONMENTAL ENGINEERING

- 1 Atomic Absorption Spectrophotometer (Flame)
- 2 Gas Chromatograph with ECD and FID detectors
- 3 UV- Visible spectrophotometer
- 4 High Performance Liquid Chromatography (HPLC) System
- 5 Fourier Transform Infrared Spectroscopy (FTIR)
- 6 Stereomicroscope
- 7 Microprocessor controlled incubation chambers and muffle furnace

Faculty at Department

Dr. S Chandrakaran

Professor, Department of Civil Engineering

Ground Improvement, Soil Behaviour, Environmental Geotechniques, Machine Foundations

PhD from IISC Bangalore

Dr. N Sankar

Professor, Department of Civil Engineering

Soil-structure Interaction, Computer Applications in Geotechnical Engineering

PhD from Indian Institute of Technology Madras

Dr. K Ranga Swamy

Associate Professor, Department of Civil Engineering

Soil liquefaction, Ground Improvement, Dynamic Soil Behaviour

PhD from Indian Institute of Technology Madras

Dr. George K Varghese

Associate Professor, Department of Civil Engineering

Environmental Forensics, Environmental Risk Assessment

PhD from IIT Delhi

Dr. Renjitha Mary Varghese

Assistant Professor, Department of Civil Engineering

Earthquake Engineering, Ground Improvement Techniques

PhD from Indian Institute of Science, Bangalore

Dr. Aswathy E V

Assistant Professor, Department of Civil Engineering

Environmental Engineering, Bioaerosols

PhD from Indian Institute of Technology Madras

Dr. Anjana Bhasi

Assistant Professor, Department of Civil Engineering

Finite Element Modelling and Simulation of Geotechnical Engineering Structures, Ground Improvement Methods

PhD from Indian Institute of Technology Madras

Dr. Anantha Singh T S

Assistant Professor, Department of Civil Engineering

Waste water treatment, Solid waste management, Phytoremediation

PhD from National Institute of Technology Trichy

Dr. Seethalakshmi P

Assistant Professor, Department of Civil Engineering
Liquefaction susceptibility and cyclic instability of soils,
Performance of Twin Tunneling in Soft Soils
PhD from Indian Institute of Technology Gandhinagar

Dr. Madhavan K

Assistant Professor, Department of Civil Engineering
Landslide Mitigation Methods, Engineering Geology
PhD from Indian Institute of Technology Bombay

Dr. Prateek Negi

Assistant Professor, Department of Civil Engineering
Rock Mechanics, Geotechnical Monitoring, Structural Engineering
PhD from Indian Institute of Technology Delhi

Dr. Bhaskar S

Assistant Professor, Department of Civil Engineering
Advanced oxidation process, Bioleaching, Environmental
Microbiology
PhD from National Institute of Technology Karnataka

Dr. Anil Kumar

Assistant Professor, Department of Civil Engineering
Dynamic Behaviour of Soils, Ground Improvement, Pavement
Evaluation
PhD from National Institute of Technology Karnataka

Dr. Ganaraj K

Assistant Professor, D Department of Civil Engineering
Industrial and Municipal Solid Waste, Soil Decontamination and
Soil Stabilization, Utilization of Industrial Waste and
Sustainability Management
PhD from Indian Institute of Technology Bombay

Dr. Sanjay Singh

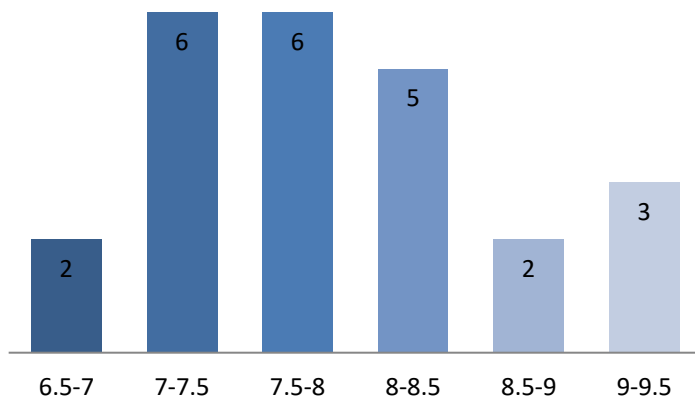
Assistant Professor, Department of Civil Engineering
Environmental Science and Engineering
PhD from IIT Bombay

Invitation for Placements

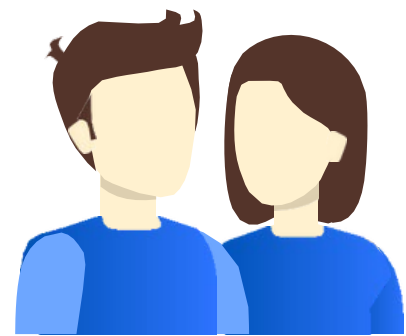
BATCH OF 2022-24

Faculty to Student Ratio **3:5**

CGPA DISTRIBUTION

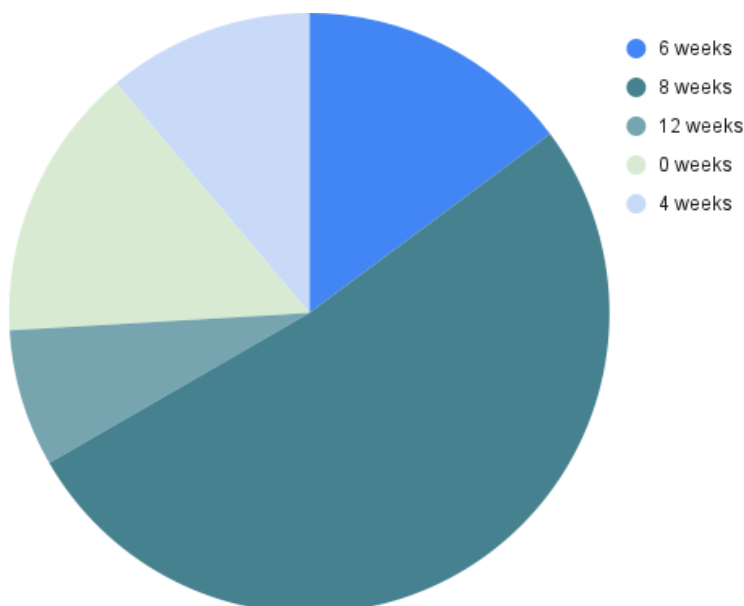


Gender Diversity



MALE
58%

FEMALE
42%



Internship Experience



॥ त्वं ज्ञानमयो विज्ञानमयोऽसि ॥



Our Work At

Student Profile

BATCH OF 2022-24



ABHIJITH MURALIDHARAN

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : KSCSTE-NATPAC Thiruvananthapuram

Project Area : Rubber Sand Mixture Backfill in Retaining Structures



ANAGHA K P

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : Indian Institute Of Technology Jodhpur

Project Area : Strength Improvement of Fly Ash Using Nano Silica



AROMAL M S

Under Graduation : Btech-Civil Engineering

Work Experience : 16 months at Prayaga Engineering Constructors

Internship : Indian Institute Of Technology, Roorkee

Project Area : Thermal Behaviour of Charnockite Rock



ARSHA SANTHOSH

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : Public Works Department, Buildings Sub Division

Project Area : Feasibility of Bottom Ash as a Pavement Material



CHOPPARA AVINASH

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Project Area : Reclaimed Earth Materials



DANIEL MOHAN

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : Indian Institute Of Technology, Roorkee

Project Area : Microplastics in Sewage Sludge



FAHAD HABIB

Under Graduation : Btech-Civil Engineering

Work Experience : 4 years in Industry

Internship : Office of Executive Engg (P.M.G.S.Y) RED (PIU) Aligarh

Project Area : Exp And Numerical Analysis of Rock Fall Impact on Reinforced Soil Wall



GADDAM HARSHITHA

Under Graduation : Btech-Civil Engineering Work Experience : Fresher

Internship : CSIR-Centra Road Research Institute

Project Area : Numerical Analysis of Soil Nail Stabilized Slopes



GOPIKA T P

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : LSGD, Perambra

Project Area : Soils With Oil Contamination and It's Remediation



KARRE GUNASEKHAR

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Project Area : Micaceous Sand for Road Construction



KEERTHANA ANEESH

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : Engineers Diagnostics Center-
Geostructurals

Project Area : Numerical Study on Tunnel Widening



M VAIRAMUTHU

Under Graduation : B.E -Civil Engineering

Work Experience : Fresher

Internship : Indian Institute of Technology Ropar

Project Area : Microplastics on Opendumping



NAZRIN MARIYAM N B

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : MSSRF (M S Swaminathan Research Foundation)

Project Area : Strength and Sustainability of Soft Clay Treated With
Nano Mgo



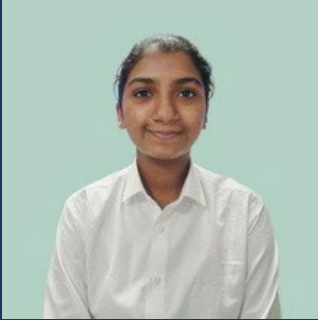
NIVEDHITHA R

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : Engineers Diagnostics Center-Geostructurals

Project Area : Prediction of Bearing Capacity of Ordinary and Encased Stone Columns



PRAJITHRA .P

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : KNR Constructions Limited

Project Area : Landslide Vulnerability and its Mitigation



PRAASHANT KUMAR

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : Mahalaxmi Enterprises

Project Area : Numerical Analysis of Reinforced Sand



RICKDEV HAZRA

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : Maha Laxmi Enterprises

Project Area : Undrained Behaviour and Durability of Soft Clay Soil Treated With Glass Fibre



S A KRISHNENDU

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : KSCSTE-NATPAC Thiruvananthapuram

Project Area : Microplastic Pollution in Geomembrane Liners



S GANESH

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : MSSRF (M S Swaminathan Research Foundation)

Project Area : Role of Lineaments in Groundwater Flow and Ground Water Quality Analysis.



SAM SEBASTIAN

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Accountant in Central Civil Accounts Service in Ministry of Skill development and Entrepreneurship



SANGEETHA RAJ P

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : Thrissur Builders Private Limited

Project Area : Geopolymerization of Expansive Soil Using Fly Ash



SANTHANARAJ S

Under Graduation : B.E -Civil Engineering

Work Experience : Fresher

Internship : Indian Institute Of Technology, Roorkee

Project Area : Polymer Nanocomposite GCL As Leachate Barrier



SHAZIN MUHAMMED

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : KSCSTE-NATPAC Thiruvananthapuram

Project Area : Numerical Analysis of Tunnels



SHREE RAM VAISHNAV

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : Hindustan Zinc Limited

Project Area : Expansive Soil Stabilization With Xanthan Gum Biopolymer



VINOD K V

Under Graduation : Btech-Civil Engineering

Work Experience : Fresher

Internship : Alcon Consulting Engineers(India) pvt ltd

Project Area : Bangalore Landfills Leachate Treatment and It's Disposal Problems



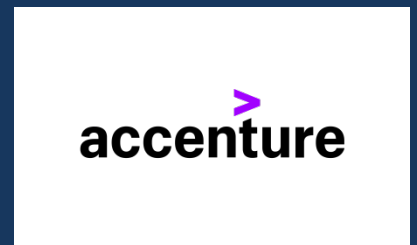
AAISHA JABEEN M

Under Graduation : Btech-Civil Engineering

Work Experience : 4 years of teaching

Project Area : Textile Waste Water Treatment Using ZnO Nanoparticles

Our Alumni Work at



BATCH 2021-2023



Contact us:

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Technology, Calicut

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