

Experiential Learning in Geotechnical Engineering

06th Dec 2021(Mon) - 10th Dec 2021(Fri)



Organized by

Department of Civil Engineering,
Visvesvaraya National Institute of Technology,
Nagpur

Sponsored by

AICTE Training and Learning Academy

Advisory Board

Chief Patron

Dr. Pramod M. Padole, Director, VNIT Nagpur

Chairman

Dr. Y. B. Katpatal, Head, Civil Engg., VNIT Nagpur

Principal Convener

Dr. Anirban Mandal, Associate Professor, Civil Engg.,
VNIT Nagpur

Convener

Dr. Anjan Patel, Assistant Professor, Civil Engg.,
VNIT Nagpur

About the Institute



Visvesvaraya National Institute of Technology, Nagpur is one of the thirty National Institutes of Technology in the country. It is an Institute of National Importance, named after Bharat Ratna Sir M. Visvesvaraya. Earlier, the Institute was known as Visvesvaraya Regional College of Engineering (VRCE). It was established in the year 1960 under the scheme sponsored by Govt. of India and Govt. of Maharashtra. The vision of institute is to contribute effectively to the national endeavor of producing quality human resource of world class standard by developing a sustainable technical education system to meet the changing technological needs of the country incorporating relevant social concerns and to build an environment to create and propagate innovative technologies for the economic development of the nation.

About the Department

The Department of Civil Engineering is one of the finest and oldest engineering department of the Institute and stands with an immortal reputation. The department was formed along with the institute itself and therefore is as old. The Department has highly educated and well experienced faculty members who endeavor to produce finest engineers, contributing incredibly to the nation. The alumni of the department are widespread in India and abroad, occupying high positions in their respective fields. The Department has an intake of 120 students per year under UG Course and 100 students per year under PG Courses.

About the Course

As we know, National Educational Policy (NEP) is at our doorstep for implementation. Across the country, several academicians, innovators, researchers & technocrats are mulling over it. It is also been addressed at several fora by the industry, that most job-seeking graduates do not have the required skillset & hence do not find a niche in the competitive market, in short, the employability rate is nose-diving. As an educationalist, one of the possibilities to enhance their skills is to incorporate "Experiential learning" or "Learning by doing" through project-based or product-based wherein the student is involved in real-time problems and case studies. Secondly, it is also important to imbibe the thought process to connect the dots of basic fundamentals learned in various subjects for a feasible scientific solution. Thirdly, to adopt elements of multi-disciplinary subjects like Agricultural Engineering, Chemical Technology, Artificial Intelligence, Machine Learning, Data Science, 3D Printing, etc. The program will cover all the aspects of experiential learning in Geotechnical Engineering through a series of sessions conducted by reputed subject experts from various parts of the country.

FDP Coordinators

Dr. A. H. Padade

Assistant Professor,
Department of Civil Engineering,
Visvesvaraya National Institute of Technology,
Nagpur- 440 010
Mobile: +91-7387674170
Email: amit_padade@civ.vnit.ac.in

Dr. Srinivasan V

Assistant Professor,
Department of Civil Engineering,
Visvesvaraya National Institute of Technology,
Nagpur - 440 010
Mobile : +91-7296917407
Email: srinivasanv@civ.vnit.ac.in

Target Participants

Master's and Doctoral Students, Faculties, Academic and Research Staff, Practicing/Design Engineers and Consultants from public and private sector.

Objective of the Course

- ✓ This course shall be the first of its kind to pave way and pitch-in the concept of experiential learning and project based learning.
- ✓ The course shall also provide platform to discuss about the various modalities and modus operandi to induct the concept.
- ✓ The course shall envisage the possibilities of including geotechnical related problems faced confronted by allied disciplines like mining geotechnics, agricultural soil science, geo-environmental engineering, geological & geophysical, textiles & geo-fabrics, underground geo-technology etc.
- ✓ The course shall embark academicians to incorporate and develop industry ready multi-disciplinary curriculum in the field of geotechnical engineering and soil mechanics
- ✓ The course shall abreast the participants to adapt suitable teaching pedagogy to imbibe real-time field problems, case studies and failure analysis.

Support Team

Mr. Anupam Pande

Doctoral Research Scholar, VNIT Nagpur

Mobile: +91-9765873354

Email: imanupam91@gmail.com

Mr. Rahul Shende

Doctoral Research Scholar, VNIT Nagpur

Mobile: +91-9766459937

Email: rahul.shende1996@gmail.com

Programme Schedule

Tentative Topics	Speaker
Geosynthetics in Transportation Infrastructure Facilities	Dr. B. Umashankar, IIT Hyderabad
Mechanics of Unsaturated Soils for Geotechnical Engineers	Dr. S. Rajesh, IIT Kanpur
Emerging Trends in Geoenvironmental Engineering for the Waste Containment	Dr. T. V. Bharat, IIT Guwahati
Emerging Trends in Offshore Geotechnical Engineering	Dr. Sumanta Halder, IIT Bhubaneswar
Constitutive Modeling of Geomaterials: Importance and its Dissemination	Dr. Gyan Vikash, SNU Delhi-NCR
Application of Industrial and Agricultural Waste Materials in Stabilization of Soft Soil	Dr. Anasua Guharay, BITS Pilani, Hyderabad
Introduction to Soil Science	Dr. Somsubhra Chakraborty, IIT Kharagpur
Cellular Confinement Systems in Soils for Disaster Resilience	Dr. Sreevals Kolathayar, NIT Karnataka
Application of AI & ML in Geotechnical Engineering	Dr. Saurav Rukhaiyar, CSIR-CIMFR Nagpur
Performance behaviour of Reinforced Earth Wall	Dr. Mainak Majumder, L & T Construction
Fire Dynamics in Underground Structure	Dr. Dhananjay K. Singh, National Fire Service College, Nagpur
Improvement of soft and compressible foundation soil using cemented stone column technology	Dr. A. H. Padade, VNIT Nagpur
Characterization of Geomaterials for Pavement Subgrade	Dr. Srinivasan V., VNIT Nagpur
Session on "Art of Living" as a part of FIT INDIA MOVEMENT	Dr. Karthik B., VNIT Nagpur

Registration & Guidelines

For registration, please visit the AICTE-ATL website

<https://atalacademy.aicte-india.org/signup>

Registration Process

1. Register as a participant → Fill in your details
2. Select workshop → Select State "MAHARASHTRA" → Select Month "December" → Select Thrust Area "Engineering" → Select Mode "Online Mode".
3. Select Institute "Visvesvaraya National Institute of Technology Nagpur".
4. Select the course "Experiential Learning in Geotechnical Engineering" from "Dec. 06-10, 2021".
5. Click on plus "+" sign and then see at the applied course it will reflect on your login.

For more details regarding registration

<https://atalacademy.aicte-india.org/assets/data/portalFlowParticipant.pdf>

Course Assessment & Feedback

- ✓ Online test shall be conducted at the end of the program.
- ✓ The certificates will be issued to those who are registered on ATAL portal with attendance of minimum 80% and score of minimum 60% marks in the online test.
- ✓ Feedback must be shared by participants through portal available on their login.

Important Dates

Starting date for registration : 05/09/2021

Last date for registration : 27/11/2021