



**Workshop
On**

**“Space and Remote Sensing Technologies for Climate Change
Mitigation, Water Resource Management, and Waste Management”**
November 11-15, 2024



Organized by

Department of Civil Engineering
National Institute of Technology Meghalaya, India
Bijni Complex, Laitumkrah, Shillong,
Meghalaya 793003

Coordinator/ Convenor

Dr. Ganesh Chandra Dhal
Assistant Professor,
Department of Civil Engineering,
NIT Meghalaya

About NIT Meghalaya

NIT Meghalaya, a premier institution among India's thirty NITs, is established under the NIT Act 2007 (Amended 2012), enjoying Institutes of National Importance status with full funding from the Ministry of Human Resource Development. Travelers to NIT Meghalaya can reach via Guwahati railway station, then a 3-hour journey to Shillong, followed by a local taxi ride to the campus at Bijni Complex, Laitumkhrah.

About The Department

NIT Meghalaya's Department of Civil Engineering commenced its session in July 2012. Offering B.Tech, M.Tech in Structural Engineering, and PhD programs with various specializations, the department boasts well-equipped laboratories and computational facilities featuring the latest numerical modeling software. Our students benefit from exposure to recent technological advancements. Additionally, the department boasts experienced and dedicated faculty members covering all specializations.

Attraction of Meghalaya

Meghalaya, dubbed the "abode of clouds," boasts captivating attractions. Its iconic living root bridges, like the double-decker bridge in Cherrapunji, are marvels of human-nature harmony. The breathtaking landscapes, from the pristine Mawlynnong village to the majestic Nohkalikai Falls, offer awe-inspiring views. Cultural diversity thrives with vibrant indigenous communities like the Khasis, Garos, and Jaintias, showcasing rich traditions and cuisine. Adventure seekers can delve into trekking, cave exploration, and water sports, making Meghalaya a must-visit for unforgettable experiences.

Registration Fee

Student Delegate (offline/Online): **Rs. 1000/ Rs. 500**

Industry Person/NGO- **Rs. 3000 /-**

Faculties/Scientists- **Rs. 5000 /-**

Broad Scope

The workshop on "Space and Remote Sensing Technologies for Climate Change Mitigation, Water Resource Management, and Waste Management" covers key areas where space technologies play a vital role. It focuses on using satellite imaging to monitor climate change indicators, predict future scenarios, and develop mitigation strategies. In water resource management, it emphasizes tracking watershed health, assessing water quality, and improving irrigation practices. For waste management, the workshop addresses waste tracking, recycling enhancement, and pollution control. It also integrates remote sensing data with GIS for comprehensive environmental solutions, supports policy formulation, and encourages collaboration among stakeholders. Additionally, the workshop offers training and knowledge sharing to advance skills in these technologies.

Target Audience

The course is suitable for Faculty Members, Research Scholars, Students and Industry Professionals.

Mode

The workshop will be organized through hybrid platform. The joining link will be shared with the participants, well in advance.

Certificate

Certificate & E-Certificate will be provided to all the participants satisfying the attendance criteria.

How to apply

Register: <https://forms.gle/EZFWYiTVHkaMHruf7>

More Info: <https://www.nitm.ac.in>

Last Date for Registration: 31st Oct 2024, 5 PM

Course Contents

- ❖ Introduction to Remote Sensing Technologies
- ❖ Satellite Imaging and Data Acquisition
- ❖ Climate Change Monitoring and Assessment
- ❖ Predictive Modeling for Climate Scenarios
- ❖ Water Resource Management and Monitoring
- ❖ Advanced GIS Applications for Environmental Management
- ❖ Waste Management Using Remote Sensing
- ❖ Policy Formulation and Decision Support Systems
- ❖ Hands-On Training with Remote Sensing Software Exercise
- ❖ Future Trends and Emerging Technologies
- ❖ Real-World Applications and Case Studies
- ❖ Collaborative Projects and Group Discussions

Speakers and Experts

Keynote Speakers:

Eminent Academicians and Scientists from NESAC, ISRO, Survey of India, Central and State Pollution Control Boards, Ministry of Jal Shakti, IITs, NITs, and Other Research Institutes & Industries

Patron

Prof. Pinakeswar Mahanta
Director, NIT Meghalaya

Coordinator/ Convenor

Dr. Ganesh Chandra Dhal,
Asst Professor, Civil Engineering

Co-Coordiators

Dr. Smrutirekha Sahoo, Asst Professor, CE
Dr. Debabrata Podder, Asst Professor, CE
Dr. Rubi Chakraborty, Asst Professor, CE