



ICSSR-ERC Sponsored  
**Week Long National Level Workshop**  
On  
**Advanced Remote Sensing and  
Statistical Methods in  
Geographical Research**



Organized by  
**Department of Geography and Applied Geography**  
**University of North Bengal**  
**Siliguri 734013, Darjeeling, West Bengal**  
**India**

**Chief Patron**  
**Dr. Nupur Das**  
**Registrar (Addl. Charge), NBU**

**Patron**  
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**Dean, Faculty of Science and Faculty of Arts,**  
**Commerce and Law, NBU**

**Convener**  
**Dr. Arindam Basak**  
**Head & Associate Professor**  
**Department of Geography and Applied**  
**Geography, NBU**

**Organizing Secretary**  
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**and Applied Geography, NBU**

**Members, Organizing Committee**  
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**Department of Geography and Applied Geography,**  
**NBU**

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**Dr. Rupak Kr. Paul**  
**Assistant Professor, Department of Geography and**  
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### **University of North Bengal**

The University of North Bengal was established by an Act of the Legislature of West Bengal in 1962 with the mission "to encourage and provide for instruction for teaching, training and research in various branches of learning and course of study; to promote advancement and dissemination of knowledge and learning and to extend higher education to meet the growing needs of society." The University of North Bengal campus covers an area of nearly 315.99 acres of land at the foothills of the Himalayas in close proximity to vast plains around it with a fascinating glimpses of the Kanchenjunga peak, tea gardens and forest cover. The University of North Bengal has established its 2<sup>nd</sup> campus at Jalpaiguri to widen the scope of higher education and research in this area. For further information please visit:

<https://www.nbu.ac.in>

### **Department of Geography and Applied Geography**

The Department of Geography and Applied Geography, North Bengal University was established in 1962 along with the establishment of the University. The Department offers teaching at the Post Graduate level (both at the NBU Campus & Jalpaiguri Campus) and offers Ph. D programme. The department has completed the UGC SAP DRS I and II programme. The department offers specialization in Agricultural Geography, Applied Hydrology, Applied Pedology, Cartography, Fluvial Geomorphology, Population Geography, Tourism Geography and Urban Geography at the PG level. At present the Department has two Professors, two Associate Professors and four Assistant Professors as permanent faculty members. The Department has a state-of-the-art GIS laboratory with 40 terminals equipped with various RS and GIS software used by the students and research scholars. At present more than 100 research scholars are pursuing their Ph.D programme from the Department, with fifty percent of them drawing JRF/SRF fellowships from various organizations like UGC, ICSSR and NBU.

### **ICSSR-ERC**

The Indian Council of Social Science Research (ICSSR), was established as an autonomous organisation in 1969, by the Ministry of Education, Government of India. The primary objective of the ICSSR is to promote and fund research in the social sciences. The Eastern Regional Centre (ERC), established in Calcutta (at 10, Lake Terrace, Calcutta - 700029) with the Centre for Studies in Social Sciences, Calcutta (CSSSC) as its host institution, started functioning in 1973. In May 2012 the office of the ERC was shifted from 10, Lake Terrace, Kolkata 700029 to its new building at 1/R1, Baishnabhghata Patuli Township, Kolkata 700094. The ERC covers the states of Bihar, Jharkhand, Odisha and West Bengal along with the Andaman and Nicobar Islands.

### Discussion about of the Workshop

A workshop on Advanced Remote Sensing and Statistical Methods in Geographical Research focuses on integrating Remote Sensing technologies with statistical analysis to enhance geographic research and applications. This workshop is typically aimed at scholars, researchers, and professionals in the fields of Geography, Environmental Science, and related disciplines.

#### KEY COMPONENTS OF THIS WORKSHOP

##### Remote Sensing in Geography

Remote sensing refers to the acquisition of information about Earth's surface without physical contact, typically using space-borne satellite, aerial camera, mobile mapping, drones, etc. It plays a significant role in mapping land use and land cover, monitoring environmental changes, disaster management, and resource management. *This workshop will cover high resolution satellite imagery, drone application to study topography, vegetation, water bodies, and urban sprawl.*

##### Statistical Research in Geography

Geospatial data generated from Remote Sensing requires sophisticated statistical methods for analysis. This includes spatial statistics, geostatistics, and time-series analysis. Workshops usually deals with tools like Geographic Information Systems (GIS), R, Python, and specialised software for spatial data analysis. These tools help in pattern recognition, trend analysis, and predictive modelling. *This workshop will cover statistical methods such as regression analysis, clustering, classification, and spatial autocorrelation which are used to draw insights from geographic data, helping researchers make informed decisions about spatial phenomena.*

##### Integration of Remote Sensing and Statistics

The fusion of Remote Sensing and statistical methods enhances the understanding of geographic patterns and processes. *For example, researchers may use Remote Sensing data to monitor deforestation and apply statistical models to predict future trends or assess the impact of environmental changes.*

#### WORKSHOP GOALS

**Skill Development:** Participants will be trained in both Remote Sensing techniques and statistical methods for better analyse of geographic data.

**Real-World Applications:** The workshop will focus on current challenges such as climate change, urbanization, land use change, and biodiversity loss; using Remote Sensing and statistical methods to provide solutions. The workshop on Advanced Remote Sensing and Statistical Methods in Geographical Research provides participants with the necessary skills to analyse and interpret geographic data effectively using Remote Sensing techniques and advanced statistical methods, thus bridging the gap between data acquisition and decision making.

Resource Persons	
<b>PROF. SUBIR SARKAR</b> <i>Formerly University of North Bengal</i>	
<b>PROF. SUNANDO BANDYOPADHYAY</b> <i>University of Calcutta</i>	
<b>PROF. BINDHY WASINI PANDEY</b> <i>University of Delhi</i>	
<b>PROF. RABINDRA JAYBHAYE</b> <i>Savitribai Phule Pune University</i>	
<b>DR. ARIJIT DAS</b> <i>University of Gour Banga</i>	
<b>DR. DEBAJIT DATTA</b> <i>Jadavpur University</i>	
<b>DR. BASUDEB BHATTA</b> <i>Spatem Geo Teck Pvt. Ltd.</i>	
<b>DR. BAIDYANATH PAL</b> <i>Formerly Indian Statistical Institute</i>	
<b>DR. TAMAL BASU ROY</b> <i>Raiganj University</i>	

### Registration fee, Accommodation, & Travel Allowances

- The registration fee is **Rs. 1200 (Twelve hundred only)** for faculty members and **Rs. 1000 (One thousand only)** for research scholars/students.
- Registration fees include workshop kit, working lunch and tea.
- There is no provision for providing travel allowances to the participants.
- Outstation participants are required to arrange their accommodation at their own.
- The registration process will automatically close once the seats are filled up.
- Maximum Seat Capacity: 40
- Own laptop is compulsory for participants.

#### Google Forms for Registration

<https://forms.gle/mcyfbTzwAPURiXip6>

#### NOC & declaration for participants

[Click this Link to download the format](#)

**Hard copy of NOC and declaration to be submitted on 17<sup>th</sup> March, 2025**

#### Important Dates

**Duration of the course: 17<sup>th</sup> to 21<sup>st</sup> March, 2025**

**Registration starts: 6<sup>th</sup> March, 2025 at 12:00 noon**

**Registration closes: 12<sup>th</sup> March, 2025 at 12:00 noon**

#### Bank Account Details

**Bank Account Name: ICSSR ERC SEMINAR**

**Account No: 41912044266**

**IFSC Code: SBIN0002096**

**Name of the Bank: State Bank of India**

**Branch: NBU Campus Branch (02096)**

**Contact for Correspondence**

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**Mobile: 9836549171**

**Google Map Location**

<https://maps.app.goo.gl/akBiJcwoMd6BGNFu8>