

About NESAC

North Eastern Space Applications Centre (NESAC) is an autonomous organization under the Department of Space (DOS), Government of India, located at Umiam, Ri Bhoi, Meghalaya along the Guwahati-Shillong National Highway-6.



The Centre helps in augmenting the developmental process in North Eastern Region (NER) by providing the advanced space technology inputs. The centre is well equipped with state of the art facilities for providing operational services and carrying out research in the areas of Remote Sensing (RS) and Geographical Information System (GIS), Satellite Communication and Space & Atmospheric Science. The centre also provides inputs for Disaster Management and carry out capacity building and outreach programmes in the NER.

NESAC Outreach Programme



Smart Classroom

NESAC has established a state of the art outreach facility to undertake wide range of capacity building programs in the region. NESAC has been conducting two weeks courses on Basic of RS & GIS and Advanced

course in UAV Remote Sensing for the last 6 years. Many tailor-made courses specific to the user departments such as NDMA, SDMA, ONGC, DMR, Planning, Agriculture, Forestry etc., have also been conducted. The outreach facility is equipped with smart classrooms with audio visual recordings and labs with 150 thin clients backed by high-performing servers with necessary software.



Outreach Block



Outreach Conference Hall

A number of students from different parts of the country have been carrying out their Ph.D./M.Tech./B.Tech./M.Sc. dissertation work at NESAC. So far more than 5000 participants have been trained at NESAC in various aspects of Geospatial Applications.

NESAC's Activities in Agriculture

NESAC has been conducting fascinating research on utilization of geospatial technology in a wide range of agricultural applications viz., estimating crop acreage and production, analyzing cropping systems, assessing crop conditions and damages. Furthermore, NESAC is dedicated to mapping of soil resources & fertility, investigating the suitability of sites for expansion of agriculture, horticulture and sericulture. The centre also pioneered in UAV remote sensing in the region and has been extending its support to other allied sectors like animal husbandry & veterinary services, fisheries etc. By utilizing space technology, NESAC empowers these fields with innovative solutions and tools that improve productivity and sustainability.

The previous courses conducted by NESAC gave an excellent exposure of RS & GIS applications in agriculture and allied areas to the participants and provided them necessary boost to delve into the geospatial domain.



Group photo with the participants



Classroom lecture

For further information, please contact:

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Dr. Pradesh Jena

Course Coordinator

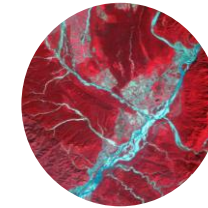
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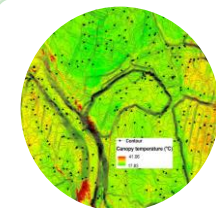
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Advanced Geospatial Technologies for Smart Agriculture

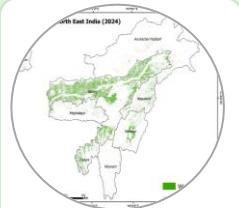
📅 10th – 21st August, 2026



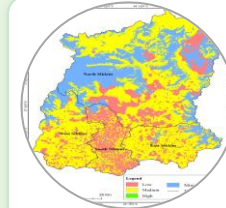
Satellite Remote Sensing



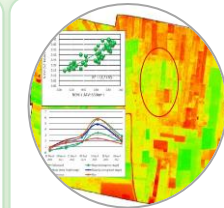
GIS Mapping



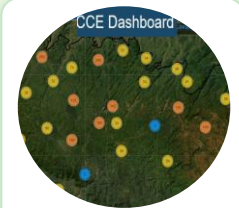
Crop Monitoring



Soil Analysis



UAV applications



Mobile app & dashboard

Organized by



North Eastern Space Applications Centre
Department of Space, Government of India
Umiam-793103, Meghalaya

About the Course

Course Title Advanced Geospatial Technologies for Smart Agriculture

Duration Two Weeks

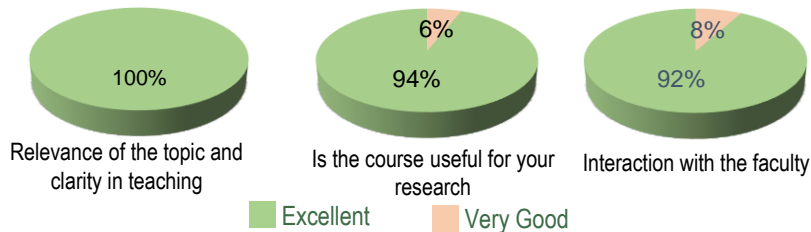
Period 10th to 21st August, 2026

It is a compact two weeks program covering both basic and advanced applications of geospatial technologies in agriculture and allied areas. This course is designed to provide a comprehensive knowledge on RS & GIS and its role in natural resources management for smart agriculture. Further focus of this course is to impart the understanding of the concepts, applications and the utilization of geospatial technology for effective agricultural management in near real time scenario.

Curriculum

- Fundamentals of space technologies and image processing
- Advanced GIS applications
- Soil resources assessment and land capability mapping
- Site suitability analysis for crop planning
- Crop stress detection and damage assessment
- Field-level crop monitoring, yield assessment and site-specific crop management
- Time-series analysis using Google Earth Engine
- Multimodal data analysis for smart agriculture
- Geospatial technology in allied agricultural activities (Animal Husbandry, Fisheries, Sericulture etc.)
- Introduction to mobile applications and services
- UAV remote sensing in agricultural applications

Feedback from Participants of Previous Course



Hands-on & Practical Training



Trainees will be guided during hands on session and to familiarize with the available tools in the open source GIS software. In addition to tutorial and lectures, trainees are encouraged to work extra hours during off time and take up their own independent study. Exposures will also be provided on data browsing, ordering, downloading from 'Bhoonidhi' portal of NRSC.



Target Participants

The course is aimed at Govt. Officers, Faculties from Academic Institutions, Researchers, Entrepreneurs, Progressive Farmers and Students with field experience who will be benefited from this course with the additional knowledge of using geospatial technology as a tool for planning & management in their respective domain.



Registration

Participants are suggested to register for the course by visiting our site at <https://nesac.gov.in/outreach/> latest by July 13, 2026 to book a seat as number of seats are limited.

Course Fee

The course fee of Rs. 9500/- (Rupees nine thousand and five hundred only) will be charged from each participant, which includes registration kit, tuition fee, course materials and food (morning tea, lunch and evening tea) during the training hours. A non-refundable fee of Rs.500/- is payable during registration and adjustable against the course fee (Account details: A/C Name: North Eastern Space Applications Centre; A/C No: 10228761316; IFSC: SBIN0002010; State Bank of India, Umiam Branch. Government-sponsored/nominated participants are exempted for this registration fee. Shortlisting of participants will be communicated via mail.

Accommodation

Accommodation will be arranged in the NESAC Outreach Hostel on twin sharing/single occupancy basis. The daily charges are:

Daily lodging
₹ 240 / bed

Breakfast
₹ 60

Dinner
₹ 75

Important Dates

Tentative number of seats	:	30
Opening of registration	:	10 June 2026
Closing of registration	:	13 July 2026
Intimation of selected candidates	:	15 July 2026
Last date for payment	:	05 August 2026
Release of final list of participants	:	08 August 2026



Glimpses from our previous courses