

# One Year Certificate Course in I “Remote Sensing (RS) and Geographic Information System (GIS)”



**College of Agricultural Engineering  
and Post Harvest Technology  
(Central Agricultural University Imphal)  
Ranipool- 737135, Sikkim, India**

## INTRODUCTION

Remote Sensing technology offers efficient tools for Earth and planetary observations, feature extraction and monitoring of the surface processes in spatio-temporal domain. Improved awareness on geospatial technologies coupled with in-situ observation techniques have started contributing significantly in the management, planning and decision-making processes of various developmental projects.

Creating industry-ready students who shall remove gaps between academic institutions and industries seeking the human resource with the applied knowledge of RS & GIS was the driving force behind this one-year certificate course. RS & GIS has tremendous scope for job creation. Academic degrees with applied know-how is the need of the hour to create job opportunities in the specific areas of expertise like applications of RS & GIS which are, presently, in abundance and can be judged by the fact that there is hardly any industry-field left untouched by the advent of RS & GIS. Industry-ready HRD who will effectively contribute to the success of industry shall best be created by the fusion of proper basic concepts, hands-on of various software, field-work, etc. The practical demands of the industry can be fulfilled by creating well-prepared HRD via academia-industry collaboration.

In the above context, this one-year course shall pave the way for job

creation in the NEHR of India as this region has a good scope for industry development that is visible through the fact that many industries are eyeing this region for their expansions.

## ABOUT THE COURSE

This Certificate Course shall be offered with the broad subjects of:

1. Fundamentals of Remote Sensing
2. Fundamentals of Geographic Information System
3. GNSS and GPS Applications
4. Fundamentals of Surveying
5. Digital Image Processing
6. Cartography and Map Design

## AIM OF THE COURSE

The aim of the course is to provide in-depth theoretical as well as practical understanding of the remote sensing principles, satellite image and data processing and interpretation, GIS and GNSS technologies. Further, the applications of these technologies in Natural Resource Management, Agriculture, Geology, Forestry etc. would be covered with more emphasis on practical exposure and hands-on practices. A short project of 3-months duration shall be part of the curricula so that the students would get exposure to live projects and also for consolidation of the acquired knowledge.

## **COURSE DURATION AND STRUCTURE**

The course is of one-year duration comprising of two semesters of six months each. The first semester is common to all the participants, which shall deal with Geospatial Technologies focusing on Fundamentals of Remote Sensing & Photogrammetry and Basics of GIS. In the second semester, the participants will be exposed to application of geospatial technologies in their respective specialisations. Participants will carry out a pilot project during the second semester.

## **TARGET PARTICIPANTS**

The course shall target the graduates, post-graduate and Ph.D. holders as well as working professionals who are interested to learn and apply the RS and GIS technology in their respective fields. Working professionals should get NOC from their employers before joining the course.

## **ELIGIBILITY**

Any graduate with 50% marks at the graduation level and working knowledge of computer applications is eligible to apply for the course. There is no age limit for the course. Total ten seats are available for the course.

## **COURSE FEE**

The course fee is INR 30,000/- per semester).

## **HOW TO APPLY**

Please fill the application in a neatly typed A4 paper as per the prescribed format available on the university website. Govt.-sponsored candidates must submit the Nomination Forms forwarded by the Competent Authorities of their parent organizations/institutes at the time of submitting the online/offline applications. The application should reach the Office of the Dean, CAEPHT, Ranipool-737135 (SIKKIM) latest by December 20, 2024.

## **ADMISSION PROCESS**

Selection for admission to the Certificate Course shall be based on the academic records. Three seats shall be reserved for Govt. sponsored candidates. If no sponsored candidate is available, the same may be allotted to the self-sponsored candidates.

## **ACCOMODATION**

Limited accommodation is available in the college hostel on payment basis.

## **ABOUT CAEPHT**

The College of Agricultural Engineering and Post Harvest Technology (CAEPHT), Ranipool-737135 (Sikkim) was established by Central Agricultural University Imphal (CAU Imphal) in the year 2006 with six disciplines; Soil and Water Conservation Engineering,

Irrigation and Drainage Engineering, Farm Machinery and Power Engineering, Process and Food Engineering, Renewable Energy Engineering and Basic Engineering and Applied Sciences. The CAEPHT is situated at Ranipool, Gangtok on National Highway 31A (renamed as NH 10) connecting Siliguri in West Bengal to Gangtok, the capital of Sikkim State.

## **CONTACT US**

For any further information, please write to:

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