

# Microwave Remote Sensing in Agriculture

July 05 – July 16, 2021



**INDIAN INSTITUTE OF REMOTE SENSING**  
Indian Space Research Organization  
Department of Space, Government of India  
Dehradun-248001, Uttarakhand  
[www.iirs.gov.in](http://www.iirs.gov.in)

## INTRODUCTION

The applications of remote sensing in agriculture are many and versatile that includes crop-identification, condition assessment, yield forecast, etc. Microwave remote sensing particularly has drawn considerable attention for agriculture application due to its all-weather monitoring capability and its unique sensitivity towards crop geometry, crop moisture content, crop biomass, and soil moisture. The availability of synthetic aperture radar (SAR) data at various polarizations, frequencies, and incidence angles are of great use in studies related to soil moisture, crop growth monitoring, crop classification, and even crop biophysical parameters retrieval.

## OBJECTIVES

The prime objective of this course is to train the new entrants, young, as well as working professional in this domain so as to build capacity for utilization of the vast amount of global datasets in this field.

## NUMBER OF SEATS & ELIGIBILITY

A total of 20 seats available (all seats are for Indian nationals only)

Candidates with:

- ❑ M.Sc. in Phy./ Agri. Phy /Agro-meteorology/ Soil Sci./ Entomology/ Pathology/ Agronomy/ Plant Physiol./ Hort./ Agri. Botany/ Soil Conservation & Water Management/ Climate Change Adaptation/ Env. Sci. or equivalent
- ❑ M.Sc./M.Tech. in Remote Sensing and GIS/ Geoinformatics/ Geomatics or its equivalent with specialization in Agricultural applications

## HOW TO APPLY

Interested candidates are required to fill up the online application form available in IIRS website ([www.iirs.gov.in](http://www.iirs.gov.in)). Offline applications will not be considered.

Candidates nominated by the govt. organizations & professionals working in the field of Remote Sensing & GIS Applications in Agriculture will be given preference for admission.

## TARGET PARTICIPANTS

This course is primarily meant to train working professional from govt. organizations, non-govt. organizations, Universities and Educational Institutions, entrepreneurs, researchers, in the area of remote sensing.

## COURSE DURATION AND STRUCTURE

The duration of the course will be two weeks and consists of broad overview on current global and Indian microwave sensors, data-processing and applications including various dimensions on Agriculture including soil moisture. Special emphasis on RISAT-1 data utilization will be covered including polarimetry. Detailed hands on experience is included.

## About IIRS

Indian Institute of Remote Sensing (IIRS) is a premier institute with a primary aim to build capacity in Remote Sensing and Geoinformatics technologies and their applications through training & education, research and outreach programmes.



IIRS is a Unit of Indian Space Research Organisation (ISRO), Department of Space, Government of India. Formerly known as Indian Photo- Interpretation Institute (IPI), founded in 1966, the Institute is the first of its kind in entire

South-East Asia.

IIRS is one of the most sought after institutes for conducting specially designed courses for the officers from the Ministries of the Government of India and State Governments for effective use of Earth Observation (EO) data from satellites for the benefit of society. Ministry of External Affairs, Government of India has recognised IIRS to conduct international training courses for the participants from ITEC (Indian Technical & Economic Cooperation) Member countries in Asia, Africa, Latin America, Central and Eastern Europe, and several Pacific and Caribbean nations.

IIRS also hosts the headquarters of the Centre for Space Science & Technology Education in the Asia and Pacific (CSSTEAP), affiliated to the United Nations, and conducts its training and education courses in RS & GIS.

## LOCATION & ACCESSIBILITY

Indian Institute of Remote Sensing (IIRS) is located in Dehradun, the capital city of the State of Uttarakhand, at a distance of about 260 km from Delhi and is well-connected by air, rail and road. The city is famous for its picturesque landscape, pleasant climate, high quality school education and is the gateway to several places of religious and tourist importance, such as Haridwar, Rishikesh, Mussoorie, etc.

## ACCOMMODATION

Participants will be provided accommodation in IIRS hostel. All hostel rooms are well furnished and are allotted on single/double occupancy basis. Local candidates will be considered for hostel accommodation, only if available. Indian cuisine is served in the hostel mess. The expenditure towards boarding and lodging will have to be borne by the participants as actual rates of IIRS.

## COURSE FEE

Application Fee: Nil  
Registration fee: 6500

## IMPORTANT DATES

Start date to apply: March 08 2021  
Last date to apply: May 15 2021  
Course start date: July 05 2021  
Course completion date: July 16 2021  
Announcement of selection list: June 04 2021

For more information and further clarification, please write to:

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