

IIRS Outreach Programme

The IIRS outreach programme, which was started in 2007 with 12 universities/ institutions has now grown substantially to 3400+ network institutes. The beneficiaries of the programme may include:

- Central/State/Private Universities & Academic Institutions
- Central & State Government Departments
- Forest Resource Professionals
- State Forest Departments/Forest Training Academies
- Research Institutes
- Geospatial Industries
- NGOs

Feedback Mechanism

IIRS takes continuous feedback from participating institutions to improve the quality of future courses.



Feedback session during IIRS User Interaction Meet (UIM)-2023

Awards

IIRS has received national awards for excellence in training for outreach and e-learning programme during 1st National Symposium on Excellence in Training conducted during April 11-12, 2015 in New Delhi by Department of Personnel & Training (DoPT), Govt. of India in collaboration with United Nations Development Programme (UNDP).

About IIRS

Indian Institute of Remote Sensing (IIRS) under Indian Space Research Organisation (ISRO), Department of Space, Govt. of India is a premier Training and Educational Institute set up for developing trained professionals in the field of Remote Sensing, Geoinformatics and GNSS Technology for Natural Resources, Environmental and Disaster Management. Formerly known as Indian Photo-interpretation Institute (IPI), founded in 1966, the Institute boasts to be the first of its kind in entire South-East Asia. While nurturing its primary endeavour to build capacity among the user community by training mid-career professionals, the Institute has enhanced its capability and evolved many training and education programmes that are tuned to meet the requirements of various target groups, ranging from fresh graduates to policy makers including academia.

IIRS also conducts e-learning programme on Remote Sensing and Geoinformation Science (<http://elearning.iirs.gov.in>).

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143th IIRS Outreach Programme



Geospatial Technology for Digital Agriculture

June 24-28, 2024



Organised by

Indian Institute of Remote Sensing
Indian Space Research Organisation
Department of Space, Govt. of India
Dehradun

www.iirs.gov.in



About the Course

Geospatial technology is transforming digital agriculture by providing advanced tools such as Geographic Information Systems (GIS), Remote Sensing (RS), Global Positioning Systems (GPS), Unmanned Aerial Vehicles (UAVs), field based instrumentations and wireless field sensors. These technologies enable farmers and agronomists to collect, analyze and interpret spatial data for better decision-making. By leveraging these tools, agricultural professionals can monitor crop health, optimize irrigation, manage soil properties and enhance yield predictions, leading to increased productivity and sustainability.

In today's world, digital agriculture has emerged as a transformative force, offering innovative solutions to address the challenges of food security, sustainability and efficiency. At the heart of this revolution lies geospatial technology, enabling farmers to make informed decisions based on real-time data and analysis. Now a days, government project and scheme are also digital technology oriented, which is the need of hours.

Course Contents

- Overview of Digital Agriculture and scope of Geospatial technology
- IoT and ICT technologies for digital agriculture
- Geospatial and data driven technologies for crop monitoring & crop yield prediction
- Digital soil mapping and soil quality assessment
- Advance RS & Data Analytics for Precision/smart farming

Target Participants

- This course is designed for professionals from Central / State Govt. / Private Organizations / NGO/ students & researchers engaged in agricultural applications i.e. crop inventory, crop condition assessment, crop yield modeling, crop water requirement etc. using advances in RS & GIS via UAV, Machine learning, Artificial Intelligence, sensors/ instrumentations etc.
- The candidates who want to participate in the course should be students of a final-year undergraduate course or postgraduate course (any year) at least and citizens of India.

Course Study Material

Course study materials like lecture slides, video recorded lectures, open source software & handouts of demonstrations, etc. will be made available through e-class. Video lectures will also be uploaded on e-class (<https://www.eclass.iirs.gov.in/login>).

Course Fee

There is no course fee for attending this programme.

Course Registration

- Course updates and other details will be available on URL- <http://www.iirs.gov.in/Edusat-News/>
- **Registered through Nodal centres.** The participant's registration must be approved by the coordinator of nodal centres.
- The participants can register and see their application status through URL- <https://elearning.iirs.gov.in/edusatregistration/> . In case, the application is pending for approval then participants are advised to contact the coordinator of respective nodal centre.

Registered as "Individual registrations"-

•The participants with individual registration will be automatically approved. All the registered participants will get their login credentials for ISRO Learning Management System (LMS)- <https://isrolms.iirs.gov.in>

Course Funding & Technical Support

The programme is sponsored by Indian Space Research Organisation, Department of Space, Government of India.

Programme Reception

Programme can be received through e-class platform of IIRS-ISRO using internet connectivity. No specific hardware/software required. However, it is recommended good internet connectivity at user end. To run the programme in class room, following hardware will be required:

- Desktop computer with web camera microphone and output speakers or laptop with microphone camera and output speaker.
- Large display screen/projector/TV.

Important links

To participate in this programme the interested organizations/ universities/ departments/ institutes have to identify coordinator at their end. The identified coordinator will register online his/her institute as nodal center in IIRS website

(<https://elearning.iirs.gov.in/edusatregistration/coordinator>)

Award of Certificate

Registered through Nodal centres : Based on 70% attendance, students will be awarded a "Courses Participation Certificate."

Individual Registration: A "Course Participation" certificate will be given to everyone who devotes at least 70% of each session's hours to the course. The course participation certificate will be available for download in ISRO LMS.

**There are a limited number of seats.
Registration will be done on a first-come, first-served basis.**