Announcement Brochure

IIRS Outreach Programme

Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System
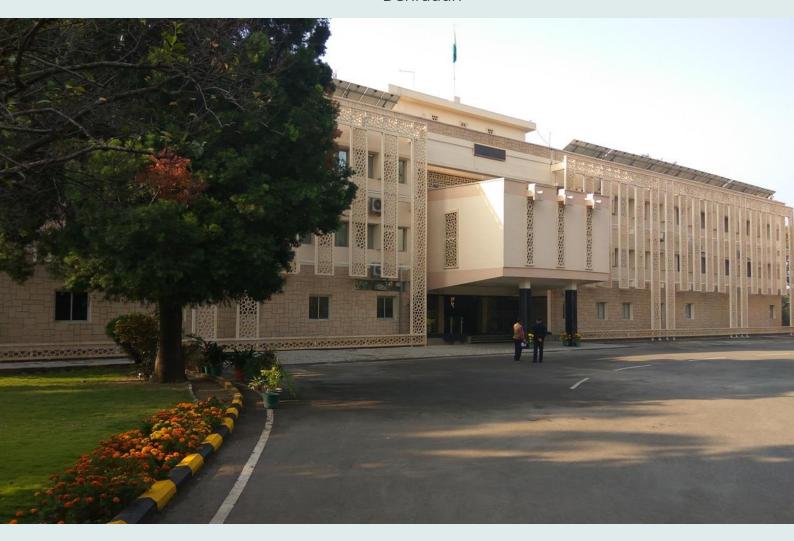
*There are limited number of seats. Registration will be done on first come first serve basis

August 25- November 21, 2025

Organised by

Indian Institute of Remote Sensing
Indian Space Research Organisation

Department of Space, Govt. of India

About IIRS

Indian Institute of Remote Sensing (IIRS), a unit under Indian Space Research Organization (ISRO), Department of Space, Government 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 endeavor 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 tuned to meet the requirements of various target user groups in the society, ranging from fresh graduates to policy makers including academia.

The training and education programmes at IIRS includes the short duration customized courses, PG Diploma, Master's Degree (M.Tech and M.Sc.) in various disciplines. IIRS also conducts distance-learning programmes under IIRS Outreach Activity.

IIRS Outreach Programme

IIRS Outreach Programme focusses on strengthening the Academia and User Segments in Space Technology & Its Applications using Online Learning Platforms. IIRS distance learning program was initiated in 2007 with the participation of twelve universities in India. Till date, IIRS has successfully conducted 101 programs through live and interactive classrooms (also known as EDUSAT programme)

and also launched five online courses under e-learning programme. Currently IIRS distance learning programme is being conducted through following modes:

1. Live and Interactive classroom sessions (https://eclass.iirs.gov.in/login)
2. E-learning based online courses (https://elearning.iirs.gov.in)

Live and Interactive classroom

The use of Remote Sensing, Geographical Information System, Global Navigation Satellite System and associated geospatial technologies is increasing rapidly, creating an urgent demand for trained manpower. The live and interactive mode of distance learning is enabled through Internet based platform. The programs are available **through Internet without any cost** to the user. Experts from IISR-ISRO and other knowledge Institutions will conduct the live and interactive sessions. IIRS has successfully conducted 213 such courses so far with participation of over *107900***+ participants from 3900+ academic institutions, government departments and industry**. The beneficiaries of the programme may include:

❖ Central/State/Private Universities & Academic Institutions;
❖ Central & State Government Organisations/Departments;
❖ Research Institutes;
❖ Geospatial Industry;
❖ NGOs.

IIRS also conducts various theme oriented online courses and webinars on recent topics on geospatial technologies and its applications. Users are encouraged to actively participate on these programs. For more details, please visit IIRS distance learning website- https://www.iirs.gov.in/EDUSAT-News

Course Announcement

IIRS announces following courses commencing from **August 25, 2025**. The participants can register for either comprehensive course or individual modules (only three) of their choice.

Comprehensive Course:
Course Id-164

❖ **Basics of "Remote Sensing, Geographical Information System and Global Navigation Satellite System (August 25- November 21, 2025):** Comprehensive course consisting of above five courses.
Registration Start Date: 04 August 2025
Registration End Date: 24 August 2025

Modules:/ Course Id-165

❖ **Remote Sensing and Digital Image Analysis** **(25-08-2025- 19-09-2025):** Basic Principles of Remote Sensing, Earth Observation Sensors and Platforms, Spectral Signature of different land cover features, Image interpretation, Thermal & Microwave Remote Sensing, Digital Image Processing: Basic Concepts of Rectification and Registration, Enhancement, Classification and accuracy assessment techniques.
Registration Start Date: 04 August 2025
Registration End Date: 18 August 2025

Modules:/ Course Id-170

❖ **Overview of Global Navigation Satellite System** **(22/09/2025 – 03/10/2025):** Introduction to GPS and GNSS, receivers, processing methods, errors and accuracy,
Registration Start Date: 01 September 2025
Registration End Date: 21 September 2025

Modules:/ Course Id-172

❖ **Overview of Geographical Information System** **(06/10/2025 to 29/10/2025):** GIS, databases, topology, spatial analysis and open source software.
Registration Start Date: 15 September 2025
Registration End Date: 28 October 2025

Modules:/ Course Id-173

❖ **Overview of Geocomputation and Geo-web services** **(03/11/2025 to 07/11/2025):** Geocomputation and Geoweb Services

Registration Start Date: 13 October 2025
Registration End Date: 02 November 2025

Modules:/ Course Id-174

❖ **RS & GIS Applications in Natural Resource Management** **(10/11/2025 to 21/11/2025):** Agriculture and Soil, Forestry and Ecology, Geoscience and Geo-hazards, Marine and Atmospheric Sciences, Urban and Regional Studies and Water Resources.
❖ Registration Start Date: 20 October 2025
❖ Registration End Date: 09 November 2025

Target Participants

❖ Undergraduate and Postgraduate (any year)
❖ Technical/ Scientific Staff of Central/ State Government/Faculty/researchers at university/institutions

Course Study Material

Course study materials like lecture pdf, video recorded lectures, open source software & handouts of demonstrations, etc. will be made available through E-CLASS & ISRO LMS . Link is given below
https://eclass.iirs.gov.in/login **Link for registered through Nodal centers**
https://isrolms.iirs.gov.in/ **Link for registered as "Individual participants**

Course Fee

There is **no course fee**.

Course Registration & Award of Certificate

For Participation through Institute/ Universities/Institutes/Department
The participants **registered through Nodal centers** need to follow the below guidelines.

❖ The participant's registration must be approved by the coordinator of nodal centers. 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 center.

- ❖ All the approved participants will receive email with login credentials of ISRO E-CLASS platform (https://eclass.iirs.gov.in)
- ❖ The training programme will be conducted in online mode in *live* session during **1600 -1730 hrs** Indian Standard Time (IST). The day-to-day schedule will be published in E-CLASS platform.
- ❖ Participant has to join the daily classes as per the lecture schedule published by ISRO.
- ❖ The participant will join the live sessions in a group through their nodal center and will have to strictly maintain the training lecture schedules and guidelines.
- ❖ The daily session attendance will be submitted by the coordinator through E-CLASS CMS.
- ❖ In case, the participants are not able to join the live session through nodal center, then they can also join it, with the permission of co-ordinator, through E-CALSS platform using their login credentials. In this case, the attendance will be automatically recorded by the system based on the active presence in the live session.
- ❖ All the sessions will also be available "offline" under participant's login in E-CLASS platform after 24 hours of live session.
- ❖ The participants can post the questions related to the session topic either through their coordinator or directly through E-CLASS chat box. A few relevant questions will be selected by the moderator for discussion at end of the session.
- ❖ The participants with 70% attendance will be eligible for online examination.
- ❖ The schedule for online examination will be announced by IIRS and all the eligible participants has to appear in online examination under invigilation/ supervision of coordinator of respective nodal centre.
- ❖ All the participants need to submit their training feedback at end of the programme.
- ❖ The participants scoring minimum 50% score in online examination will be awarded with "**Course Completion**" from IIRS, Dehradun.
- ❖ The certificate will be distributed through coordinator of respective nodal centre.

- ❖ **Participants can register using Individual registration option also, if their institute not registered under IIRS Outreach network**

For Individual Participation
The participants registered as "**Individual registrations**" need to follow the below training guidelines.
- ❖ 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 .
- ❖ The training programme will be conducted in online mode in *live* session during **1600 -1730 hrs** Indian Standard Time (IST) through IIRS YouTube Channel- https://www.youtube.com/@iirsoutreachdehradun .
- ❖ The day-to-day schedule will be published in ISRO LMS.
- ❖ After login to the ISRO LMS, the participant will able be to see the following major components:
  - o Course Guidelines & Announcements;
  - o Recorded Video Sessions;
  - o Attendance;
  - o Course Feedback;
  - o Course Certificate.
- ❖ The Course activity of the participants in ISRO LMS will be recorded by the system as "Course Dedication".
- ❖ The Course dedication will be recorded for each participant based on time dedicated to the training activities (video logs, participation in discussion forum and Course feedback submission).
- ❖ A certificate for **'Course Participation'** will be given to everyone who devotes at least 70% of the total session's hours to the course.
- ❖ The Course participation certificate will be available for download in ISRO LMS.

Course Funding & Technical Support
The programme is sponsored by Indian Space Research Organization, Department of Space, Government of India.

Number of seats:
Comprehensive Course: 10,000 seats
Modules: 5,000 seats
The Nodal Center Coordinators will be provided with 25 seats in every course to register students of their institute

Programme Reception

Programme can received live through E-CLASS platform of IIRS-ISRO or using IIRS youtube channel using internet connectivity. No specific hardware /software required. T*he content of the sessions will be available offline after 24 hours in the E-class portal.*

Important Links

Course updates, and other details will be available on URL- https://www.iirs.gov.in/EDUSAT-News

Feedback Mechanism

The participants are required to submit their feedback online through IIRS e-Learning portal. Feedbacks is critically analyzed and implemented in further courses. Selected participants and participating organization will be invited to attend annual IIRS Academia Meet (IAM) at IIRS Dehradun.

Outreach Programme Feedback Session during IIRS Academia Meet (IAM)-2025

IIRS received two national awards for excellence in training for outreach and e-learning programme by Department of Personnel & Training (DoPT), Govt. of India in collaboration with United Nations Development Programme (UNDP).

Contact Details	
IIRS Distance Learning Centre Indian Institute of Remote Sensing, Indian Space Research Organisation Department of Space, Govt. of India, 4-Kalidas Road, Dehradun-248001	
Technical (LMS, Individual Registration, Login, Certificates, Study material etc.) *Technical (E-CLASS, Live Programme reception, Nodal Registration, Coordinator Login etc.)*	*Shri Janardan Vishwakarma* *Technical Office-D* *Shri Ashok Ghildiyal* *Technical Office-D* *Email: dlp@iirs.gov* *Tel: 0135-2524130*
Attendance & Web support	*Mr. Sagar Sharma* *Email: websupport@iirs.gov* *Tel: 0135-2524120*
For General Query & certificate	*Ms. Muskaan, GIT& DL Office* *Email: dlp@iirs.gov.in; Tel: 0135-2524354/4130* *Monday to Friday (9:30 AM to 05:00 PM)*
Course/ Training Management	*Dr. Poonam S Tiwari* *Programme Coordinator* *0135-2524334*