

IIRS Outreach Programme

The IIRS outreach programme, which was started in 2007 with 12 universities/ institutions has now grown substantially to 3219+ 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 has conducted eleven workshops in 2007, 2009, 2010, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021 and 2022 to take feedback from participating institutions to improve the quality of future courses.



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 and DMS Programme

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>).

ISRO's Disaster Management Support (DMS) Programme has been actively supporting the Central and State governments by providing operational services during pre-disaster, during-disaster and post-disaster time-frames, including experimental forecasts, using space systems. Capacity Building (CB) in space technology for disaster management under ISRO DMS Programme has been identified as a key element to motivate the participants to develop innovative methods, tools, data products and services in the field of disaster management using space technology. DMS-CB program is one such unique effort funded by ISRO initiated to fulfil the CB requirements in the country.

Contact Details

Dr. Sanjeev Kumar Singh
(Course Coordinator)

Dr. Charu Singh
(Course Director)

Dr. Yogesh Kant
(Head. ASD/MASG)

Dr. D. Mitra
(Group Head. MASG)

IIRS DLP Team

Dr. Poonam S. Tiwari
Programme Coordinator
IIRS Outreach Programme

Shri Ashok Ghildiyal
Technical Officer

Shri Janardan Vishwakarma
Technical Officer

Tel: 0135-2524130
Email- dlp@iirs.gov.in

Indian Institute of Remote Sensing,
Indian Space Research Organisation
Department of Space, Govt. of India,
4-Kalidas Road, Dehradun

7014th IIRS Outreach Programme



RS and GIS Applications in Atmospheric and Oceanic Hazards

February 27-March 3, 2023



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

A disaster is an event, located in time and space, that negatively affects life, property, livelihood or industry often resulting in permanent changes to human societies, ecosystems and environment. Events such as tsunami, extreme rainfall, floods, and cyclones, by themselves, are not considered disasters. Rather, they become disasters when they adversely and seriously affect human life, livelihoods and property. Disasters can be caused by naturally occurring events or they can be due to man-made events. A natural disaster is a major adverse event resulting from natural processes of the Earth; examples include tsunami, dust storms, floods, cyclones, storms, and other geological or atmospheric-oceanic processes. A natural disaster can cause loss of life or damage property, and typically leaves some economic damage in its wake, the severity of which depends on the affected population's resilience and on the infrastructure available. The man-made disasters such as fire and anthropogenic emissions are also play adverse effect to human life. Disasters are becoming more frequent, and the number of persons affected is increasing. The impact of the natural disasters is impossible to avoid, but it may be possible to plan ahead of time to minimize the impact that any given disaster might have on human health, life and property. Therefore, the information of such type of events is required well advance in time to minimize the impact on society.

Objective of the Course

The course is designed with a view to provide participants an understanding of the scientific concepts and an overview on approaches & pathways of atmospheric and oceanic hazards (i.e., tsunami, cyclone, floods, storm surge, extreme rainfall, dust storm, air quality and fog). The participants will also gain knowledge and ability to access, analyze, and apply satellite remote sensing data for atmospheric and oceanic disasters. They will also understand the advantages and limitations of remote sensing observations for preparedness and mitigation during disasters.

Target Participants

The target for this course includes participants across a broad spectrum of the community who need to be aware of the threat of natural as well as

man-made disasters. This course is designed for central and state government officials, policy makers, professionals and specialists from universities, educational institutes, operational & research institutes, and research scholars.

Course Contents

- Introduction to Atmospheric and Oceanic Hazards
- Overview of Earth Observation Satellites and Sensors for atmospheric and oceanic hazards studies
- Applications of satellite data for the analysis of extreme rainfall events, extreme dust episodes
- Satellite data applications in Tropical Cyclone studies
- Overview of storm surge and Tsunami
- Applications of satellite data in air quality assessment.

Course Study Material

Course study materials like lecture slides, video recorded lectures etc. will be made available through e-class. Video lectures will also be uploaded on e-class <https://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/>
- To participate in this programme the interested organizations/ universities/ departments/ Institutes has to identify a coordinator at their end. The identified coordinator will register online his/her Institute as nodal center in IIRS website.
- All the participants have to register online through registration page by selecting his/her organization as nodal center.

Course Funding & Technical Support

The programme is sponsored under DMS Programme-Capacity Building activities 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

Courses updates and other details will be available on URL – <https://www.iirs.gov.in/EDUSAT-News>

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

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

All the participants have to register online through registration page by selecting his/her organization as nodal centre.

<https://elearning.iirs.gov.in/edusatregistration/student>

Award of Certificate

Working Professionals and Students: Based on 70% attendance

There are limited number of seats. Registration will be done on first come first serve basis