

IIRS – ISRO OUTREACH PROGRAMME



The banner features the IIRS and ISRO logos on the left, the Indian State Emblem on the right, and a central image of a satellite component labeled 'CARTOSAT 2E FROM ISRO'. The text on the banner includes the title 'IIRS-ISRO Outreach Programme', a description of 'Learner centric e-learning courses', and a mission statement about technology transfer and capacity building. A dark blue footer contains a detailed description of the program's focus on academia and user segments.

INDIAN INSTITUTE OF REMOTE SENSING
Indian Space Research Organisation
Department of Space, Govt. of India

IIRS-ISRO Outreach Programme
Learner centric e-learning courses
On Mission for transferring technology through
Capacity building & research

IIRS Outreach Programme focusses on strengthening the Academia and User Segments in Space Technology & Its Applications using Online Learning Platforms. Under this programme the two mode of content delivery system is developed using online learning platform (i.e) Live & Interactive mode (known as EDUSAT) and e-Learning mode.

Bhartiya Vidya Bhavan's Sardar Patel College of Engineering (SPCE) is a Network Institute with Indian Space Research Organisation (ISRO) from November 2019, under Indian Institute of Remote Sensing (IIRS). SPCE has a well-designed & well equipped Geoinformatics Laboratory with various courses conducted at UG and PG level. The resources in the form of softwares, books, lab manual / tutorial are available in the laboratory.

SPCE as an outreach network center has conducted 22 Edusat program, such as Remote Sensing (RS), Geographic Information System (GIS), Global navigation Satellite System (GNSS), Image processing, Digital elevation Modelling (DEM) and its Applications, till date with more than 1000 participants from SPCE, other institutes and industries all over India registered under the network center and certified by ISRO on completion of the courses in ONLINE mode.

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Department of Space
Government of India

Indian Space Research Organisation (ISRO)

INDIAN INSTITUTE OF REMOTE SENSING, DEHRADUN

Annual Course Calendar IIRS Distance Learning Programme - 2021



A. Course to be conducted in Morning Session (1100-1230 IST)

S. No	Course/Webinar	Tentative Time Slot	Duration	Coordinator
1.	Basics of "Remote Sensing, Geographical Information System and Global Navigation Satellite System – Through SWAYAM portal	January 04 – April 02, 2021	13 Weeks	Dr. Poonam S. Tiwari
2.	Space Technology & Applications for School Teachers.	May 31-June 04, 2021	1 Week (2 sessions per day)	Dr. Harish Chandra Karnatak
3.	Earth Observation for Carbon Cycle Studies	June 21-25, 2021	1 Week	Dr. N. R. Patel
4.	सुदूर संवेदन एवं जीआईएस प्रौद्योगिकी के मूल सिद्धांत	September 14-28, 2021 (Special course during Hindi Pakhwada)	2 Weeks	Dr. Harish Chandra Karnatak/ Mr. Kamal Pandey/Mr. Dharmendra Kumar
5.	Geospatial Inputs for Enabling Master Plan Formulation for AMRUT sub scheme.	October 11-15, 2021	1 Week	Mr. Pramod Kumar

B. Course to be conducted in Evening Session (1600-1730 IST)

S. No	Course	Tentative Time Slot	Duration	Course Director/Coordinator
1.	Overview of Geoprocessing using Python	January 18-29, 2021	2 Weeks	Dr. Harish Chandra Karnatak/ Mr. Ravi Bhandari
2.	Geo-informatics for Field Foresters	February 22-26, 2021	1 Week	Dr. Hitendra Padalia/ Dr. Ishwari Datt Rai
3.	Satellite based Navigation: A Journey from GPS to Mobile phone platform	March 01-12, 2021	2 Week	Dr. Anil Kumar/ Dr. Ashutosh Srivastav/Dr. Ashutosh Bhardwaj
4.	Geoinformatics for Disaster Management	April 05-16, 2021	2 Week	Dr. Arijit Roy/Mr. C.M. Bhatt

S. No	Course	Tentative Time Slot	Duration	Course Director/Coordinator
5.	GIS for Supply Chain Management	April 26-30, 2021	1 Week	Dr. Sameer Saran/Mr. Prasun K. Gupta
6.	Geospatial Technology for Archeological studies	May 17-28, 2021	2 Weeks	Dr. Poonam S. Tiwari/ Dr. Hina Pande
7.	Overview of Web GIS Technology	June 21- July 02, 2021	2 Weeks	Dr. Harish Chandra Karnatak/ Mr. Kamal Pandey
8.	Machine Learning to Deep Learning: A Journey for remote sensing data classification	July 05-09, 2021	1 Week	Dr. Anil Kumar
9.	Geospatial technology for hydrological modelling	July 19-30, 2021	2 Weeks	Dr. S.P.Agarwal
10.	Geospatial Modelling for Watershed Management	August 02-06, 2021	1 Week	Dr. Suresh Kumar
11.	Basics of "Remote Sensing, Geographical Information System and Global Navigation Satellite System	August 16 – November 26, 2021	14 Weeks	Dr. Poonam S. Tiwari
12.	Basics of Remote Sensing and Digital Image Analysis	August 16 – September 11, 2021	4 Weeks	Ms. Minakshi Kumar
13.	Basics of Global Navigation Satellite System	September 13 24, 2021	2 Weeks	Dr. Ashutosh Bhardwaj
14.	Basics of Geographical Information System	September 27- October 22, 2021	4 Weeks	Mr. Prabhakar Alok Verma
15.	Basics of Geocomputation and Geoweb Services	October 25 -29, 2021	1 Week	Mr. Kamal Pandey
16.	RS & GIS Applications in Natural Resource Management	November 01-26, 2021	4 Weeks	Mr. C.M. Bhatt
17.	Geo-informatics for Biodiversity Conservation Planning.	December 06-17, 2021	2 Weeks	Dr. Hitendra Padalia/ Dr. Subrata Nandy

C. International Courses/Webinar Series (1830-20:00 IST)

S. No	Course/Webinar	Tentative Time Slot	Duration	Coordinator
1.	Space based observations for meteorological hazards	September 06-10, 2021	1 Week	Dr. D. Mitra
2.	Space based Early warning Systems for Natural Disasters -	November 08-19, 2021	1 Week	Dr. P. K. Champati

S. No	Course/Webinar	Tentative Time Slot	Duration	Coordinator
	<ul style="list-style-type: none"> Flood Tropical Cyclones, Forest Fire, Landslide, Extreme Weather and Decision support systems for Disaster Early warnings 	(2 Sessions /alternate day (40 Min each)		Ray/Dr. Arijit Roy
3.	Webinar Series on: Image Restoration and Processing of SAR Data <ul style="list-style-type: none"> SAR Remote Sensing-Technology & Applications SAR Data Processing Techniques SAR Geocoding techniques SAR Interferometry 	May 07, 14, 21, 28 2021	1 hour each session	Mr. Ashish Joshi

D. Webinar Series (1100-1230 IST)

S. No	Webinar	Tentative Time Slot	Duration	Coordinator
1.	Webinar Series on Image Restoration and Processing of Optical Data <ul style="list-style-type: none"> Image pre-processing techniques- Optical remote sensing Atmospheric corrections of Optical imagery Radiometric corrections and normalization for satellite data Advances of Image processing 	April 09, 16, 23, 30, 2021	1 hour each session	Dr. Manu Mehta/Ms. Minakshi Kumar

E. Full day Workshop

S. No	Workshop Title	Tentative Time Slot	Duration	Focal Point
1.	अंतरिक्ष प्रौद्योगिकी और इसके अनुप्रयोग	January 11, 2021	1 Day	Dr. Harish Chandra Karnatak/ Mr. Kamal Pandey
2.	Satellite altimetry for River monitoring	March 17, 2021	1 Day	Dr. S.P. Aggarwal
3.	ISRO Geoportal and Information Services- ISRO Inter centre	June 16, 2021	1 Day	Dr. Harish Chandra Karnatak

S. No	Workshop Title	Tentative Time Slot	Duration	Focal Point
4.	SAR Application for flood hazard mapping and monitoring	July 14, 2021	1 Day	Dr. Arijit Roy/Mr. C.M.Bhatt
5.	Workshop on Space Technology for School children	August 12, 2021	½ Day	Ms. Shefali Agarwal/Ms. Pooja Jindal
6.	Geospatial Modeling Driven Urban Hazard and Risk Analysis	December 01, 2021	1 Day	Mr. Pramod Kumar

F. Popular Guest Talk Series on Space Technology and Application

Topic, name of the speaker and actual date and time will be announced in First Week of the respective month in Year 2021