

IIRS-ISRO Outreach Program on “Application of Remote Sensing and Geographical Information System (RS & GIS)”

About Geography Department:-

Department of Geography, School of Liberal Arts (SLA), Noida International University (NIU) Greater Noida is going to conduct program on “Application of Remote Sensing and Geographical Information System”. Department offers under graduate, post graduate and PhD in Geography along with the specialization of Physical Geography, Geo-informatics, Disaster Risk Management, Climate Change, Environmental Geography, Land use/land cover dynamics, urban studies, Natural Resource Management. Department is equipped with FOSS (Free Open Source Software) GIS laboratory, Internet facilities for Student and staff, seminar room with ICT facility.

About IIRS

Indian Institute of Remote Sensing (IIRS) 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, Geo-informatics and GPS Technology for Natural Resources, Environmental and Disaster Management. Formerly known as Indian Photo-interpretation Institute (IPI). The Institute has enhanced its capability and evolved many training & education programs that are tuned to meet the requirements of various target groups, ranging from fresh graduates to policy makers including academia.

IIRS-Outreach Programme

IIRS Outreach Program is Popular across India. IIRS conducts e-learning Program (<http://elearning.iirs.gov.in>) on Remote Sensing and Geoinformation Science. The IIRS Outreach Program, which started in 2007 with 12 universities/institutes, has now grown substantially. Currently **626+** academic institutions, government departments and industry.

Fortunately, Geography Department/ NIU joined the first time for this program with IIRS-Edusat. IIRS has successfully conducted 22 such courses so far with participation of over **46590+ participants**. Such a program will be conducted regularly time to time through IIRS. According to our theme we are going to run an innovative program from July, 2018 onwards.

Surely, this program will be proved beneficial in all aspects of learning as well as teaching. The Certificate Courses will be helpful to aptitude development of skill for all the learners.

About the Course:

The application of geospatial technologies are increasing rapidly, creating an urgent demand for trained manpower. IIRS utilizes the Ku-Band facility of INSAT-4CR, an ISRO satellite and Internet, for conducting Distance Learning Program of the Indian Universities. The target group includes, student at Undergraduate/Postgraduate level and Faculty/researchers at different universities/institutions. Under its Outreach Program, IIRS has established its their own Teaching and Studio and up linking facility in the campus under national beam coverage of ISRO satellites, connecting numerous classroom end users, internet bandwidth is also used as an alternative option. This program can be received live using A-VIEW e-learning tool developed by Amrita University in internet environment with login permission.

Course Offered:

- Recent Trends in Remote Sensing and GIS Application in Carbon Forestry
- Microwave Radar Remote Sensing and its Applications
- RS & GIS Applications in Water Resource Management
- UAV Remote Sensing and Applications
- Remote Sensing and Digital Image Analysis
- Hyper spectral Remote Sensing
- Global Navigation Satellite System and Geographical Information System

- RS & GIS Applications
- Basics of Remote Sensing
- Geographical Information System and Global Navigation Satellite System
- Close Range Photogrammetry and Terrestrial Laser Scanning

Course study materials will be made available through IIRS ftp site and lecture videos are uploaded in YouTube Channel. <http://www.youtube.com/user/edusat2004>

Course Registration: Determine your eligibility:

Before applying online, make sure your eligibility. Eligibility details are given below:

- The course is open for all the Student of undergraduate course/ Postgraduate course
- Technical/ Scientific Staff of Central/ State Government Ministries/ Departments
- Faculty / Researchers at university / institutions are also eligible to participate in this course.

Selection of Course details:

During online application form you have to select the course which you wish to apply.

- Universities/institutions/Institute:
We have list of universities/institutions/colleges networked under IIRS Outreach Program. Select your university.

After approval from IIRS /ISRO you can register.

- Personal Details:

Name:

Designation:

Date of Birth:

Gender:

Nationality:

E-Mail:

- Educational Details:

Please provide your education details starting from *SSC to Degree level*

- Other details:

Please provide the detail as per the online form

- Documents Upload:

Please upload your recent photograph & identification proof

The online registration is mandatory but a hard copy of the application must be submitted to Coordinator.

- There is no registration fee Award of Certificate:
 - ✓ Based on 70% attendance
 - ✓ Must secure minimum 40% marks in all qualifying online examinations.
 - ✓ Feedback

Sponsored & Technical Support:

The programme is sponsored by National Natural Resources Management system-standing committee on Training and Education (SC-T), Indian Space Research Organization, Development of Space, Government of India and is conducted due technical help from satellite Communications & Navigation Programme (SCNP), ISRO; Development and Educational Communication Unit (DECU), ISRO and A-VIEW, Amrita university, National mission on Education through Information and Communication Technology. All facilities we get through IIRS, Dehradun and IT section NIU.

Programme Reception & Practical lab work at Geography Department:

Hardware:

- High end Computer
- Good Quality Camera

- Headphone with Camera
- Speakers
- Large Display Screen through Projector (Smart Class)

Software and Internet:

- Desktop based A-VIEW software
- Web based-<https://live.aview.in>
- National Knowledge Network (NKN)

Web Browser Based:

- URL-<http://live.iirs.gov.in>
- User registration and activation through email
- Participate through live two way casting with interactive live class

RS & GIS Lab:

- Practical lab work related exercise
- Digital image processing & interpretation
- Handling of open software's and other licensed software's
- Creation of all geographical Map's
- To Operate GPS receiver

For all infrastructural and moral support, credit goes to Prof. Jayanand (Registrar), Honorable Vice Chancellor Dr. R D Sharma, and Mr. Kazim (IT Manager). It is very appreciable contribution for to all of us.

More Details follow below links:-

Edusat News: <http://www.iirs.gov.in/Edusat-News>

Instructions: https://elearning1.iirs.gov.in/edusat_lms/student_instructions.php

Online Registration of Students for all courses:

http://elearning.iirs.gov.in/edusat_lms/student_registration.php

- **Tentative Annual Course schedule of Outreach of Outreach Program (2019)**
- **Module wise examination**

Programme Coordinator:

Vineet Chandan (Assistant Professor)

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Annual Course Calendar IIRS Distance Learning Programme - 2019

S. No	Course	Tentative Time Slot	Duration	Course Director/ Coordinator
1	Hyperspectral Remote Sensing and its applications	January 21- February 1, 2019	2 Weeks	Dr. Anil Kumar/ Mr. Vinay Kumar
2	Principles of Polarimetric SAR Remote Sensing and its Processing	Feb 18, 2019 to March 01, 2019	2 Weeks	Dr. Anil Kumar/ Mr. Shashi Kumar
3	Advances in Forest Remote Sensing	March 04- 16, 2019	2 Weeks	Dr. Hitendra Padalia/ Dr. Subrata Nandy
4	Remote Sensing based Mapping, Monitoring and Modelling of Landslide and Earthquake Hazards	April 01-05, 2019	1 Week	Dr. R. S. Chatterjee/ Dr. S. L. Chatteraj
5	RS and GIS Applications in Watershed Management	April 15-19, 2019	1 Week	Dr. Suresh Kumar
6	Satellite Remote Sensing for Air Pollution studies	May 20-24, 2019	1 Week	Dr. D. Mitra/ Dr. Yogesh Kant
7	Advances in Remote Sensing and geospatial technologies for Disaster early warning, monitoring and mitigation.	June 10- 21, 2019	2 Weeks	Dr. Arijit Roy/ Shri C.M. Bhatt
8	Basics of "Remote Sensing, Geographical Information System and Global Navigation Satellite System	August 19 – November 15, 2019	13 Weeks	Dr. Poonam S. Tiwari
9	Remote Sensing and Digital Image Analysis	August 19 - September 13, 2019	4 Weeks	Ms. Minakshi Kumar
10	Global Navigation Satellite System - GPS, GAGAN, NavIC etc.	September 16- 27, 2019	2 Weeks	Dr. Ashutosh Bhardwaj
11	Geographical Information System	September 30- October 25, 2019	4 Weeks	Mr. Prasun Kumar
12	RS & GIS Applications	October 28 – November 15, 2019	3 Weeks	Dr. Arijit Roy
13	RS and GIS in Urban and Regional Planning	December 09-20, 2019	2 Weeks	Mr. Pramod Kumar

Full day online workshop under IIRS Outreach Programme, 2019

S. No	Workshop Title	Tentative Time Slot	Duration	Focal Point
1	Geospatial technology for Disaster Risk Reduction	March, 2019	1 Day	Mr. C. M. Bhatt
2	Microwave RS in Agriculture	March 25/26, 2019	1 Day	Dr. Dipanwita Haldar
3	Satellite data access from online data repositories and ISRO Bhuvan geoportal	June, 2019	1 Day	Mr. Kamal Pandey
4	Hyperspectral imaging for terrestrial & planetary exploration	July, 2019	1 Day	Mrs. Richa U. Sharma/ Dr.S.L.Chatteraj