Announcement Brochure

IIRS Outreach Programme

Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System

August 20- November 16, 2018

Organised by

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

http://www.dlp.iirs.gov.in

iirs

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 are 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 35 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 (http:dlp.iirs.gov.in)
2. E-learning based online courses (http://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 and A-view software platform developed by Amrita e-learning Lab in collaboration with Ministry of Human Resource Development (MHRD) Government of India. The programs are available **through Internet without any cost** to the user. The live and interactive sessions will be conducted by experts from IISR-ISRO and other knowledge Institutions. IIRS has successfully conducted 22 such courses so far with participation of over **72800+ participants from 800+ academic institutions, government departments and industry**. The beneficiaries of the programme may include:

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

IIRS also conducts various theme oriented online courses and monthly webinars on recent topics on geospatial technologies and its applications. Users are encouraged to actively participate on these programs. For more detail please visit IIRS official website- ***www.iirs.gov.in***

Course Announcement

IIRS announces four courses commencing from **August 20th, 2018**. The courses are available as a Basic comprehensive course or as individual modules.

- ❖ **Basics of Remote Sensing, GIS and GNSS** (**20/08/2018 to 16/11/2018**): Comprehensive course consisting of above three courses.
- ❖ **Remote Sensing and Digital Image Analysis (20/08/2018to 14/9/2018)**: 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.
- ❖ **Global Navigation Satellite System and Geographical Information System** (**17/09/2018 to 26/10/2018**): Introduction to GPS and GNSS, receivers, processing methods, errors and accuracy, GIS, databases, topology, spatial analysis and open source software.
- ❖ **RS and GIS Applications** (**29/10/2018 to 16/11/2018**): Agriculture and Soil, Forestry and Ecology, Geoscience and Geo-hazards, Marine and Atmospheric Sciences, Urban and Regional Studies and Water Resources.

The participants can register for individual module of their choice or the entire certificate course

Target Participants

- ❖ Student of Undergraduate and Postgraduate courses (any year)
- ❖ Technical/ Scientific Staff of Central/ State Government Ministries/ Departments
- ❖ Faculty / Researchers at university / Institutions

Course Study Material

Course study materials such as lecture slides, video recorded lectures, open source software, data & handouts of demonstrations, etc., will be made available through IIRS **ftp** link (ftp://ftp.iirs.gov.in) Video lectures will also be uploaded on YouTube Channel (http://www.youtube.com/user/edusat2004)

Course Fee

There is **no course fee**.

Course Registration

Course updates and other details will be available on URL- **http://elearning1.iirs.gov.in**

- ❖ To participate in the program, organizations/universities/departments/ Institutes have to **identify a Coordinator** at their end. The coordinator is required to register his/her Institute as nodal centre at: (**https://elearning1.iirs.gov.in/edusat_lms/cordinator_registration.php**)
- ❖ All the participants have to register online through registration page (**https://elearning1.iirs.gov.in/edusat_lms/student_registration.php**) by selecting his/her organization as nodal centre
- ❖ The Coordinator is required to approve the participants from his/her institute for each course

Course Funding & Technical Support

The programme is sponsored by Indian Space Research Organization, Department of Space, Government of India and is conducted with due technical support from Amrita Virtual & Interactive E-learning World (A-VIEW).

Programme Reception

Programme can be received through Internet connectivity of 2Mbps or better. Following hardware and software set-up is required at user end:

Hardware Requirements:

❖ High-end Computer/Laptop (Windows OS);
❖ Good quality web camera (optional);
❖ Headphone with Microphone (optional) and Speakers;
❖ Large Display Screen (Projector or TV).

Software and Internet Requirements:

❖ Desktop based: **A-VIEW software** (free to download from **http://aview.in/login.php**
❖ *Connectivity & Other configurations:*
❖ NKN or any other high speed internet facility (preferably without firewall, with minimum of **2 Mbps bandwidth**)
❖ Network requirements: **Port 80** and **RTMP (port 1935)** protocol should be unblocked from user's computer and Firewall

Note: Participating Institutions have to bear total expenses for establishment of the classroom facility

Award of Certificate

Working Professionals/**Students**: Based on 70% attendance and online examination

Feedback Mechanism

The participants and participating organizations are invited to attend annual IIRS User Interactive Meet (IUIM) at IIRS Dehradun. The participants can submit their feedback online through IIRS e-Learning portal. Feedbacks are critically analyzed and implemented in next courses.

Outreach Programme Feedback Session during
IIRS User Interaction Meet (IUIM)-2018

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

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