IIRS Outreach Programme

The IIRS outreach programme, which started in 2007 with 12 universities/institutions has now grown substantially. Currently, about 870 universities/institutions spread across India are networked with IIRS. The beneficiaries of the programme may include:

- Agrometeorologists/Meteorologists/environmentalists
- ICAR Universities/Institutes
- Central/State/Private Universities & Academic Institutions
- Central & State Government Departments
- Research Institutes
- Geospatial Industries
- NGOs

Feedback Mechanism

IIRS has conducted workshops and sessions during IIRS User Interaction Meet to take feedback from participating institutions to improve the quality of future courses.

Feedback session during IIRS User Interaction Meet (IUIM)-2018

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

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 Geo-information Science (https://elearning.iirs.gov.in).

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40th IIRS Outreach Programme

Satellite Remote Sensing in Agrometeorological Applications

December 03 – December 07, 2018

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

Satellite data and products play a key role into the development of agrometeorological information and provision of effective services on drought monitoring, food security and other weather related agro-advisory services. Over the years, India have benefited from rainfall estimations, vegetation monitoring, soil moisture monitoring and early prediction of crop output. From the beginning of the eighties, polar orbiting and geostationary satellites over the world have provided data and products to estimate rainfall, air temperature, vegetation cover, radiation and other land surface properties. With the same microwave remote sensing play a pivot role in agro meteorological parameters and products generation, retrieval of bio-physical parameters of crops, soil moisture etc.

Although multi-faceted applications operationalized for natural resource management and weather related services, Indian Space Research Organisation and India Meteorological Department are making tireless effort to continually evolve better products and services in agrometeorology based on satellite observations from earth resource and meteorological satellites. Satellite information combined with seasonal weather forecast, crop models and geographical information systems have been emerging as decision making tools to support early warning applications (drought, food, pests/diseases etc.) and evolution of integrated Agromet-advisory and hazard related services with incorporation of regional agrometeorological Information system.

Curriculum

- Concept and principles of satellite agrometeorology, overview of satellite data and their products
- Retrieval techniques and algorithms for agrometeorological parameters
- Microwave remote sensing for agrometeorological services
- Geospatial technology for agricultural drought monitoring, assessment & vulnerability analysis
- Agromet-advisory and hazard related services using satellite data and geospatial technology

Target Participants

- This course is designed for agrometeorologists, meteorologists, technologists, educators, young researchers and weather related service providers in India to strengthen their horizon of agrometeorological research and enhance their ability to integrate satellite observations with conventional agrometeorological observations and modeling expertise.
- Users attending programmes under CEC-UGC / CIET / other networks can also participate. Institutions on high speed National Knowledge Network (NKN) can also participate.

Course Study Material

Course study materials like lecture slides, video recorded lectures, open source software & handouts of demonstrations, etc. will be made available through IIRS ftp link. 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://www.iirs.gov.in/Edusat-News/
- All the participants need to register online through registration page by selecting his/her organization as nodal center.
- 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.

Course Funding & Technical Support

The programme is sponsored by National Natural Resources Management System – Standing Committee on Training and Education (SC-T), Indian Space Research Organisation, 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;
- Headphone with Microphone;
- Speakers;
- Large Display Screen (Projector or TV).

**Software and Internet Requirements**:
- Online live access through http://live.iirs.gov.in with free registration.

**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**: Institutions/ universities have to bear total expenses for establishment of the classroom facility

Award of Certificate

**Working Professionals**: Based on 70% attendance and submission of assignments.

**Students**: Based on 70% attendance and an online examination.