IIRS Outreach Programme

The IIRS outreach programme, which started in 2007 with 12 universities/ institutions has now grown substantially. Currently, about 730 universities / institutions spread across India are networked with IIRS. The beneficiaries of the programme may include:

- Water Resource Professionals
- State Water Resources / Irrigation Departments / Training Academies
- 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 (http://elearning.iirs.gov.in).

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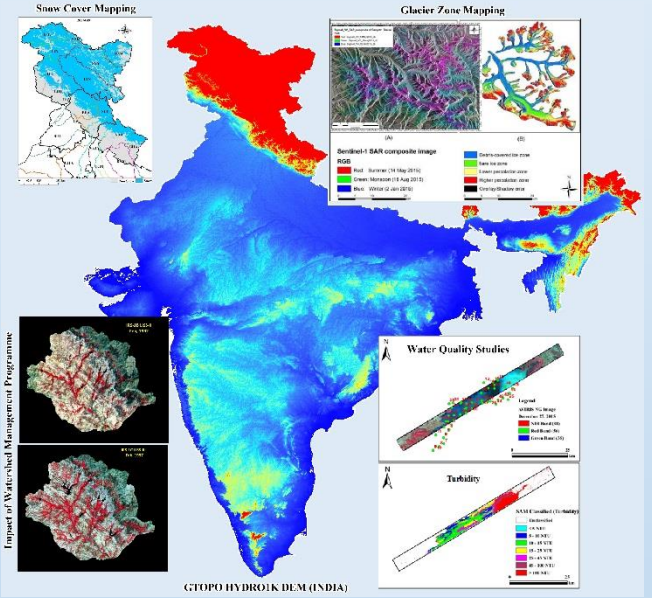
Thirty First IIRS Outreach Programme



Remote Sensing and GIS Applications in Water Resource Management

April 16-27, 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

About 71% of earth's surface is covered with water. Around 2.5% out of total water available on the earth is stored in the form of fresh water as Ice caps, Glaciers, Permanent Snow, Rivers and Lakes, Ground Water, Soil moisture, Atmospheric Water. All these sources of fresh water are important for survival of life on this planet and are vulnerable to adverse impacts of anthropogenic activities. Though abundant water is available in our country, however there is large spatial, temporal variations in its distribution. Hence, continues monitoring of all the sources of water (components of Hydrological cycle) becomes necessary for Water Resources Management. Geospatial technologies are particularly suited for qualitative and quantitative; mapping and monitoring of dynamic components of hydrological cycle like rainfall, soil moisture, runoff, evapotranspiration, snow cover, etc. along with water related disasters. This course will provide an overview on the latest advances in satellite and terrestrial based remote sensing and GIS technologies for quantitative assessment and monitoring of components of hydrological cycle and their applications in Water Resources Management. The course is therefore of special interest for the professionals, researchers and students interested in learning utility of these modern technologies in the context Water Resources Management.

Curriculum

- Overview of RS&GIS applications in Water Resources
- Rainfall data analysis and satellite based rainfall retrieval
- Surface water body and snow cover area mapping
- DEM applications in water resources
- Irrigation water management
- Watershed management
- Hydrological modelling in geospatial environment
- Flood mapping, monitoring and modelling
- Impact of climate change on water resources
- Ground Water Prospects Zonation

Target Participants

- The course is designed for professionals from Central / Sate Govt. / Private Organizations / NGO engaged in water resources management and planning, regional and national water resources projects; students and researchers aligned to research in water resources.
- The course participants have to be duly sponsored by their university / institution and application should be forwarded through coordinators from respective Organisations / centres. Users attending programmes under CEC-UGC / CIET / other networks can also participate. Institutions on high speed National Knowledge Network (NKN) can also participate using A-VIEW software.

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/
- 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 has to register online through registration page by selecting his/her organization as nodal center.

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:

Desktop based: A-VIEW software (free to download from www.aview.in or IIRS ftp link: ftp://ftp.iirs.gov.in)
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.