

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:

- Soil and Water Conservation Officers
- State Land Resources / Departments / Training Academies
- State Watershed Directorates
- 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>).

Contact Details

Dr. Suresh Kumar
Course Director
Tel: 0135-2524140

Email: suresh_kumar@iirs.gov.in

Mr. Justin George K
Course Coordinator
Tel: 0135-2524141

Email: justin@iirs.gov.in

IIRS DLP Team

Dr. Harish Karnatak
Head, GIT& DL Dept.
Tel: 0135-2524332

Email: harish@iirs.gov.in

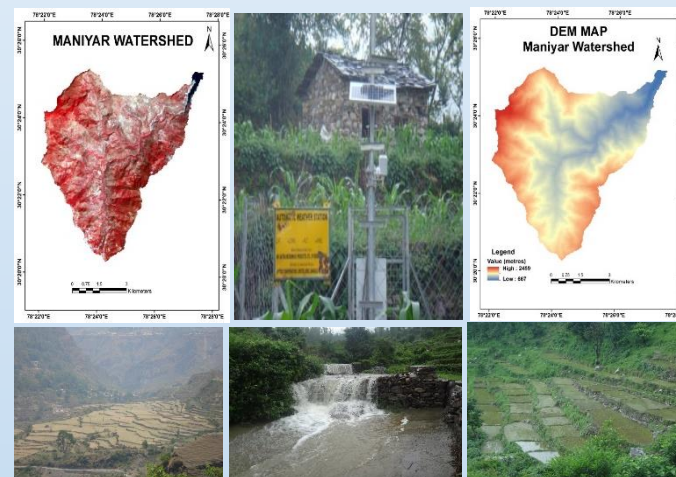
Dr. Poonam S Tiwari
Tel: 0135-2524334; email: poonam@iirs.gov.in

Mr. Janardan Vishwakarma
Tel: 0135-2524130; email: janardan@iirs.gov.in

Mr. Ashok Ghildiyal
Tel: 0135-2524130; email: ashokg@iirs.gov.in

Indian Institute of Remote Sensing,
Indian Space Research Organisation
Department of Space, Govt. of India,
4-Kalidas Road, Dehradun
Email: dlp@iirs.gov.in

Thirty Second IIRS Outreach Programme



Geospatial Modelling for Watershed Management

May 01 – May 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

Watershed is a natural hydrologic entity governed by the terrain topography from where run-off is drained to a point and used for planning and management of natural resources. Watershed management encompasses an integrated/comprehensive approach for proper planning, utilisation and conservation of various resources including land as well as water, resulting in the overall improvement of resources within the area. Hence, continuous monitoring and assessment of various components becomes necessary for effective Watershed Management.

Geospatial technologies including remote sensing, GIS and GPS has emerged as a powerful tool in recent years for assessment and monitoring of natural resources. Integrated Watershed Management Programme (IWMP) (currently WDC-PMKSY) a flagship programme of Govt of India was envisaged to restore the ecological balance by harnessing and conserving soil and water resources. IWMP emphasizes use of geospatial technology in natural resource assessment, planning and monitoring of the watershed. Nearly 50,000 micro watersheds in 10 states are being monitored using high spatial resolution remote sensing data through BHUVAN. This course will provide an overview on the principles of watershed management, use of geospatial technologies for watershed management including the use of digital elevation models (DEMs) for terrain analysis of watershed, spatial modelling of soil erosion and soil and water conservation planning. The course is therefore of special interest for the professionals, researchers and students interested in learning utility of these modern technologies in the context of Watershed Management.

Curriculum

- Concept and principles of watershed, Overview of RS and GIS applications in watershed management
- Terrain analysis for watershed characterization
- Geospatial modelling for soil erosion assessment in watershed
- Soil and water conservation planning
- Monitoring of watershed development programs using RS and GIS

Target Participants

- The course is designed for professionals from Central / State Govt. / State watershed directorates/ Private Organizations/ NGO engaged in land resources management and planning/ students and researchers aligned to research in watershed management.
- 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/>
- All the participants need to register online through registration page by selecting his/her organization as nodal center and can have online live access through <http://live.iirs.gov.in>
- 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:

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.