

IIRS Outreach Programme

The IIRS outreach programme, which started in 2007 with 12 universities/ institutions has now grown substantially. Currently, 880 universities / institutions spread across India covering 30 States and 2 Union Territories are networked with IIRS. The beneficiaries of the programme may include:

- Central/State/Private Universities & Academic Institutions
- Central & State Government Departments
- Forest Resource Professionals
- State Forest Departments/Forest Training Academies
- Research Institutes
- Geospatial Industries
- NGOs

Feedback Mechanism

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



IIRS Outreach programme feedback session during IIRS User Interaction Meet (IUIIM)-2018

Awards of Appreciation

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 Geoinformation Science (<https://elearning.iirs.gov.in>).

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IIRS DLP Team

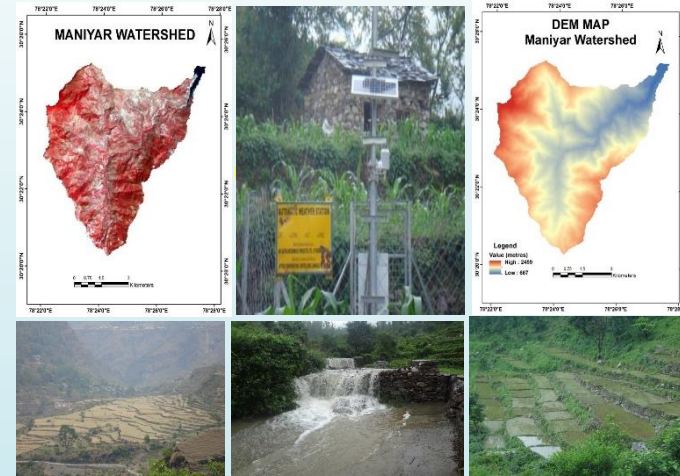
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45th IIRS Outreach Programme



RS and GIS Applications in Watershed Management

April 08- April 12, 2019



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)(presently as 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 candidates who want to participate in the course should be a student of final year undergraduate course or postgraduate course (any year). Technical/ Scientific Staff of Central/ State Government/Faculty/researchers at university/institutions are also eligible to apply for this course. Applications of participants have to be duly sponsored by university/institute and forwarded through coordinators from respective centres.

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.

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

The Course is free of cost.

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

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

- IIRS Learning Management System.

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 70% attendance and attending 40% in the online examination.