# **IIRS Outreach Programme**

The IIRS outreach programme, which was started in 2007 with 12 universities/ institutions has now grown substantially to 2800. The beneficiaries of the programme may include:

- Central/ State/ Private Universities & Academic Institutions
- Central & State Government Departments
- ICAR Universities/ Institutes Professionals
- Agriculturists
- 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)-2020

# **Awards of Appreciation**

IIRS has received national awards for excellence in training for outreach and e-learning programme during 1<sup>st</sup> 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 Photointerpretation 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 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

**Dr. Dipanwita Haldar**Course Coordinator

**Dr. Poonam S Tiwari**Programme Coordinator
IIRS Outreach Programme

IIRS DLP Team
Mr. Janardan Vishwakarma
&
Mr. Ashok Ghildiyal
Tel: 0135-2524130
Email- dlp@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

## **IIRS Outreach Programme**



# **Geospatial Modelling for Watershed Management**

August 02 - 06, 2021



# **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 management encompasses an integrated/comprehensive approach for proper planning, utilization and conservation of various natural resources including soil as well as water, resulting in the overall improvement of resources within the area. Continuous monitoring and assessment of various components natural resources 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 watershed management. Integrated Watershed Management Programme (IWMP) (currently Prime Minister Krishi Sinchayee Yojna (Watershed Development Component) (WDC-PMKSY) a flagship programme of Govt. of India was envisaged to restore the ecological balance by harnessing and conserving soil and water resources.

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.

#### **Course Contents**

- Overview of RS and GIS applications in watershed management
- Digital Terrain analysis for watershed characterization
- Geospatial modelling for soil erosion assessment in watershed
- Land Use Planning & Soil and water conservation Measures
- Monitoring of watershed development programs using RS and GIS

## **Target Participants**

The IIRS outreach programme, which was started in 2007 with 12 universities/ institutions has now grown substantially to 2800. 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 / Research scholars
- Geospatial Industries
- NGOs

# **Course Study Material**

Course study materials like lecture slides, video recorded lectures, open source software & handouts of demonstrations, etc. will be made available through eclass. Video lectures will also be uploaded on e-class (https://www.eclass.iirs.gov.in/login).

#### **Course Fee**

There is no course fee for attending this programme.

# **Course Registration**

Course updates and other details will be available on URL- <a href="http://www.iirs.gov.in/Edusat-News/">http://www.iirs.gov.in/Edusat-News/</a>. All the participants has to register online through registration page available on above web page.

# **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**

- Individuals can attend the course live via any web browser through the elass portal of IIRS Dehradun i.e.
  - https://eclass.iirs.gov.in
- The participants can also attend the live workshop via the YouTube channel of IIRS i.e
  - https://www.youtube.com/user/edusat2004
- The content of the workshop will be available offline after 24 hours in the eclass portal.

#### **Award of Certificate**

- All the participants who attend 70% sessions of the course live via e-class portal.
- The participants who attend the course sessions via IIRS youtube channel should mark their attendance via offline session available after 24 hrs.

# **Pre-requisites:**

- Graduate in Science/ Agriculture Science/ Agricultural or Civil Engineering
- Understanding of Basic concepts of Remote Sensing and GIS

There are limited number of seats.

Registration will be done on first come first serve basis