

# IIRS Outreach Programme

The IIRS outreach programme, which started in 2007 with 12 universities/ institutions has now grown substantially. Currently, 580 universities / institutions spread across India are networked with IIRS. The beneficiaries of the programme may include:

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

## Feedback Mechanism

IIRS has conducted six workshops in 2007, 2009, 2010, 2013, 2014, 2015 and 2016 to take feedback from participating institutions to improve the quality of future courses.



18<sup>th</sup> outreach programme feedback session during IIRS User Interaction Meet (IUIIM)-2017

## Awards

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 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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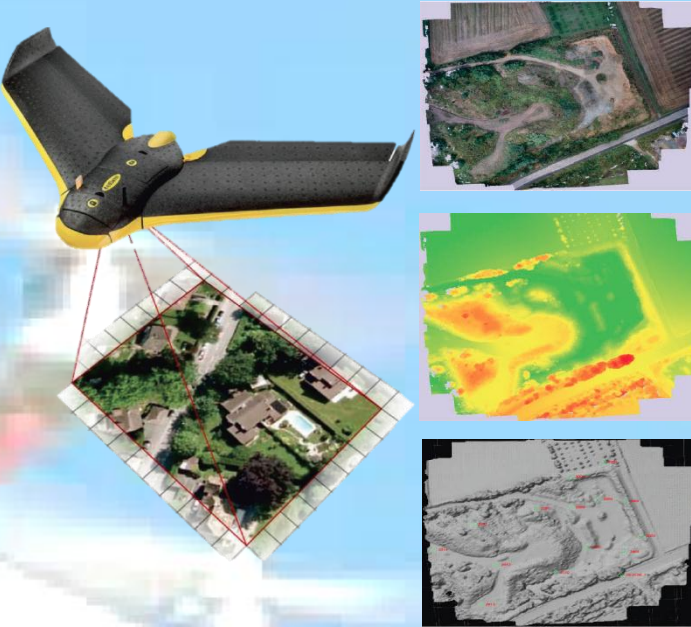
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## UAV Remote Sensing and Applications

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Organised by

**Indian Institute of Remote Sensing**  
Indian Space Research Organisation  
Department of Space, Govt. of India  
Dehradun  
[www.iirs.gov.in](http://www.iirs.gov.in)

## About the Course

The increasing development in Unmanned Aerial Vehicle (UAV) platforms and associated sensing technologies, has brought new dimension to the field of remote sensing. The UAVs enable accurate, flexible and low-cost measurements of 3D, radiometric and temporal properties of land cover features with high quality cameras, GPS and precise processing. Availability in wide range of sizes, easier deployment and cost-effectiveness of UAVs compared to conventional air borne/space borne systems make them attractive. With light weight systems, typically flying at altitudes ranging from 100 m to 300 m and the aerial strip extent ranging typically few kms, they have a great potential in applications like fire monitoring, natural resource and disaster management, 3D terrain mapping, precision agriculture, wildlife observation, vegetation measurements, etc. The huge amount of data provided by UAVs pose, a new challenge towards developing appropriate processing, storage and transmission techniques.

In view of the present and future potential of this emerging technology, Indian Institute of Remote Sensing (IIRS) offers a 5 day course on UAV based photogrammetry and remote sensing.

## Curriculum

The course will be a blend of lectures and demonstrations on:

- Fundamentals of UAV Remote sensing;
- Challenges in data acquisition and processing;
- Potential advantages of UAV data in Natural Resource management

## 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](http://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 online examination.