# **IIRS Outreach Programme**

The IIRS outreach programme, which started in 2007 with 12 universities/ institutions has now grown substantially. Currently, 920+ universities / institutions spread across India covering 29 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 Academia Meet (IAM) at IIRS Dehradun.



# **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 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 Geoinformation Science (https://elearning.iirs.gov.in).

# **Contact Details**

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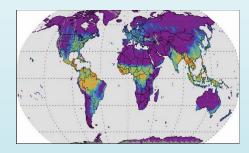
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# Fifty seventh IIRS Outreach Programme





# Geo-processing and Visualization on Web Platform

January 27- February 07, 2020



# 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**

Today large amount of satellite imagery and geospatial data collected from different sources is available at free of cost. Satellite imagery combined with power of Geographic information System can be a great tool for supporting environmental management, disasters, global climate change, natural resources, wildlife, land cover and many other applications.

Processing this vast amount of data in time and space efficient manner and deriving useful information and knowledge from data is one of the most challenging aspect of geospatial technology.

We invite you to attend this training program on Geoprocessing and visualization on web platforms. The course is scheduled from January 13-24, 2020.

## Curriculum

- Overview of GIS and different geospatial data types
- Overview to Python programming using
- Introduction anaconda and Jupyter notebook
- Raster data processing, resampling and analysis
- Vector data processing and analysis
- Geo-spatial data visualization on web
- Familiarization to various open source geospatial data processing libraries e.g. GDAL, Geopandas etc.

# **Expected Outcome**

- •At the end of this course participant must be able to
- •Write program in python to read, write and process different raster formats.
- •Write program in python to read, write and process different vector formats.
- •Write program to visualize geospatial data in form of maps, images etc.

# **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 Disaster Management Agencies/ Private Organizations/ NGO engaged in Disaster Management and planning/ students and researchers aligned to research in Disaster 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 coordinator/participant login . Video lectures will also be uploaded on YouTube Channel (https://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- <a href="https://www.iirs.gov.in/Edusat-News/">https://www.iirs.gov.in/Edusat-News/</a>.
- 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.