IIRS Outreach Programme

The IIRS outreach programme, which was started in 2007 with 12 universities/ institutions has now grown substantially to 3800+ network institutes. 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

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 (*http://elearning.iirs.gov.in*).

Urban and Regional Studies Department

Urban and Regional Studies Department (URSD), formerly known as Human Settlement Analysis Group (since its inception in 1983 in collaboration with ITC, The Netherlands) is engaged in capacity building activities for the sustainable development of urban regions. Since 1968, 800+ professionals under various on-campus courses and 17000+ professionals through IIRS outreach programmes have been trained in Urban and Regional Studies, namely M.Tech. and P.G. Diploma (IIRS and CSSTEAP) and AMRUT courses and customized special courses for various Ministries and User Departments such as HUDCO, NCRPB, TCPO, etc. Under NNRMS programme, a large number of University faculty members have been trained in geospatial applications in Urban and Regional Studies.

Contact Details

Organisers

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Geospatial technology for modelling of Urban Environment
May 26-30, 2025

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

The course delves into the theoretical foundations of geospatial technology for modelling urban environments. In an era where urbanization is rapidly transforming our cities, the ability to effectively model and analyze urban landscapes is paramount for informed decision-making and sustainable development. This course is designed to equip participants with the fundamental knowledge necessary to leverage geospatial technology in understanding, assessing, and managing urban environments. Over the span of five days, participants will delve into various aspects of geospatial technology for urban modelling. From mapping land use patterns to analyzing urban sprawl and assessing environmental impacts, participants will emerge with a comprehensive understanding of how geospatial technology can be harnessed to inform urban planning, policy-making, and sustainable development initiatives.

We invite you to attend this training program on Geospatial technology for modelling of Urban Environment. The course is scheduled from May 26-30, 2025.

Curriculum

- Urban Sprawl and Growth Modeling
- Urban Green Space mapping
- Air pollution monitoring
- Urban Flooding
- Role of Google Earth Engine in Urban Studies

Expected Outcome

At the end of this course participant will be able to develop a theoretical understanding of geospatial technology for urban modelling. Problem-solving skills will be enhanced and they will be able to deal with real-world applications of geomatics in urban planning.

Overview of Program

The course is conducted through IIRS outreach facility. IIRS has successfully conducted 163 courses so far through its outreach programme with more than 5 lakhs participants from more than 3200 Institutions/ Universities (as of 31st January, 2023) spread across India.

The course aims to equip urban planners, environmental scientists, researchers, and students with the skills to apply geospatial technologies for modeling and analyzing urban environments. It will focus on the integration of geographic information systems (GIS), remote sensing, and spatial data analysis to support sustainable urban planning, resource management, and the assessment of urban impacts on ecosystems.

Target Participants

Urban planners, GIS professionals, environmental scientists, and Research Scholars seeking to deepen their theoretical knowledge.

Course Fee

There is no course fee for attending this course.

Course Registration

Participants can register through 2 different methods
- **Registration through Nodal centres.** The participant's registration must be approved by the coordinator of nodal centers.
- **Registration as "Individual Participants"-** The participants with individual registration will be automatically approved. All the registered participants will get their login credentials for ISRO Learning Management System (LMS)- https://isrolms.iirs.gov.in .

Course Funding & Technical Support

The programme is sponsored by Indian Space Research Organisation, Department of Space, Government of India.

Programme Reception

Programme can be received through e-class platform of IIRS-ISRO using internet connectivity. No specific hardware/software required. However, it is recommended good internet connectivity at user end. To run the programme in class room, following hardware will be required:
- Desktop computer with web camera microphone and output speakers or laptop with microphone camera and output speaker.
- Large display screen/projector/TV.

Important links

To participate in this programme the interested organisations/universities/departments/institutes have to identify coordinator at their end. The identified coordinator will register online his/her institute as nodal centre in IIRS website (https://elearning.iirs.gov.in/edusatregistration/coordinator)

Award of Certificate

Registered through Nodal centres : Based on 70% attendance and examination, students will be awarded a "Courses Participation Certificate."

Individual Registration: A "Course Participation" certificate will be given to everyone who devotes at least 70% of each session's hours to the course. The course participation certificate will be available for download in ISRO LMS.