

ISRO Disaster Management Support (DMS)- Capacity Building (CB) Program

ISRO has been actively supporting the Central and State governments, under ISRO's Disaster Management Support Programme (DMSP) by providing operational services during pre-disaster, during –disaster, and post –disaster time frames, including experimental forecasts, using space systems. Capacity Building (CB) in space technology for disaster management under ISRO DMS programme has been identified as a key element to motivate the participants to develop innovative methods, tools, data products, and services in the field of disaster management using space Technology. DMSP-CB program is one such unique effort funded and initiated by ISRO to fulfill the CB requirements in the country.

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>).

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.

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7013th IIRS Outreach Programme



Geospatial Modeling Driven Urban Hazard and Risk Analysis

February 13-17, 2023



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

Current scenario of climate change due to intensified anthropogenic activities is one of the major causes for increased intensity and frequency of disasters. It is expected that there will be an increase in the number and severity of extreme climate events in the coming years. Urban population is highly vulnerable to increasing disasters and extreme events due to their sheer volume and density of population. The situation is exacerbated due to intensification of human activities, changes in land use/land cover, increase in impervious surfaces etc. in urban areas. Understanding the impact of these disasters in urban areas is of paramount importance in order to minimize the losses incurred as urban areas has significant contribution in a nation's growth as well as more and more population is being concentrated in urban areas.

Geospatial technologies such as remote sensing, Geographic Information System (GIS) and Global Navigation Satellite System (GNSS) can be employed effectively for assessment and modeling of disasters. Remote sensing provides synoptic view and data required for updated mapping and timely information for disaster affected areas. Similarly, GIS and GNSS have been employed for various aspects of disaster cycle such as mapping and assessment, modeling of risk and vulnerabilities and disaster response systems.

Hence, we invite you to attend this one-week online course on "Geospatial Modeling Driven Urban Hazard and Risk Analysis". The course is scheduled during February 13-17, 2023. The course will contain five lectures (One each day) covering various aspects of urban hazards.

Overview of Program

The course is conducted through IIRS outreach facility. IIRS has successfully conducted 163 courses so far through its outreach programme with 5,82,369 participants from 3219+ Institutions/Universities (as of 31st January,2023) spread across India.

Objective of the Course : To familiarize urban planners and administrators with application of geospatial techniques in risk modelling of various hazards in urban areas.

Content : Overview of Geospatial Appl. For Hazards & Risk Analysis, Urban Flood Hazards and Risk Modeling, Urban Seismic Risk Assessment, Air Pollution Hazard Assessment, Geospatial Research and Modeling for Heat Waves and Urban Micro-climate Studies

Target Participants

The course is designed for Professionals, researchers and students (at least Graduate) engaged in the field of Urban & Regional Planning, Geospatial Technologies, Disaster Risk and Mitigation, Environmental Studies, Civil Engineering, Architecture and Modeling Community.

Registration Fee

There is no registration fee.

Course Registration

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

Award of Certificate

All the participants who attend the programme through e-class portal will get a e-certificate for participation.

Funding & Technical Support

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

Programme Reception

- Individuals can attend the course live via any web browser through the e-class portal of IIRS, Dehradun i.e. <https://eclass.iirs.gov.in>.

Important links

Courses updates and other details will be available on URL – <https://www.iirs.gov.in/EDUSAT-News>

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>)

All the participants have to register online through registration page by selecting his/her organization as nodal centre on below link:

<https://elearning.iirs.gov.in/edusatregistration/student>

There are limited number of seats. Registration will be done on first come first serve basis