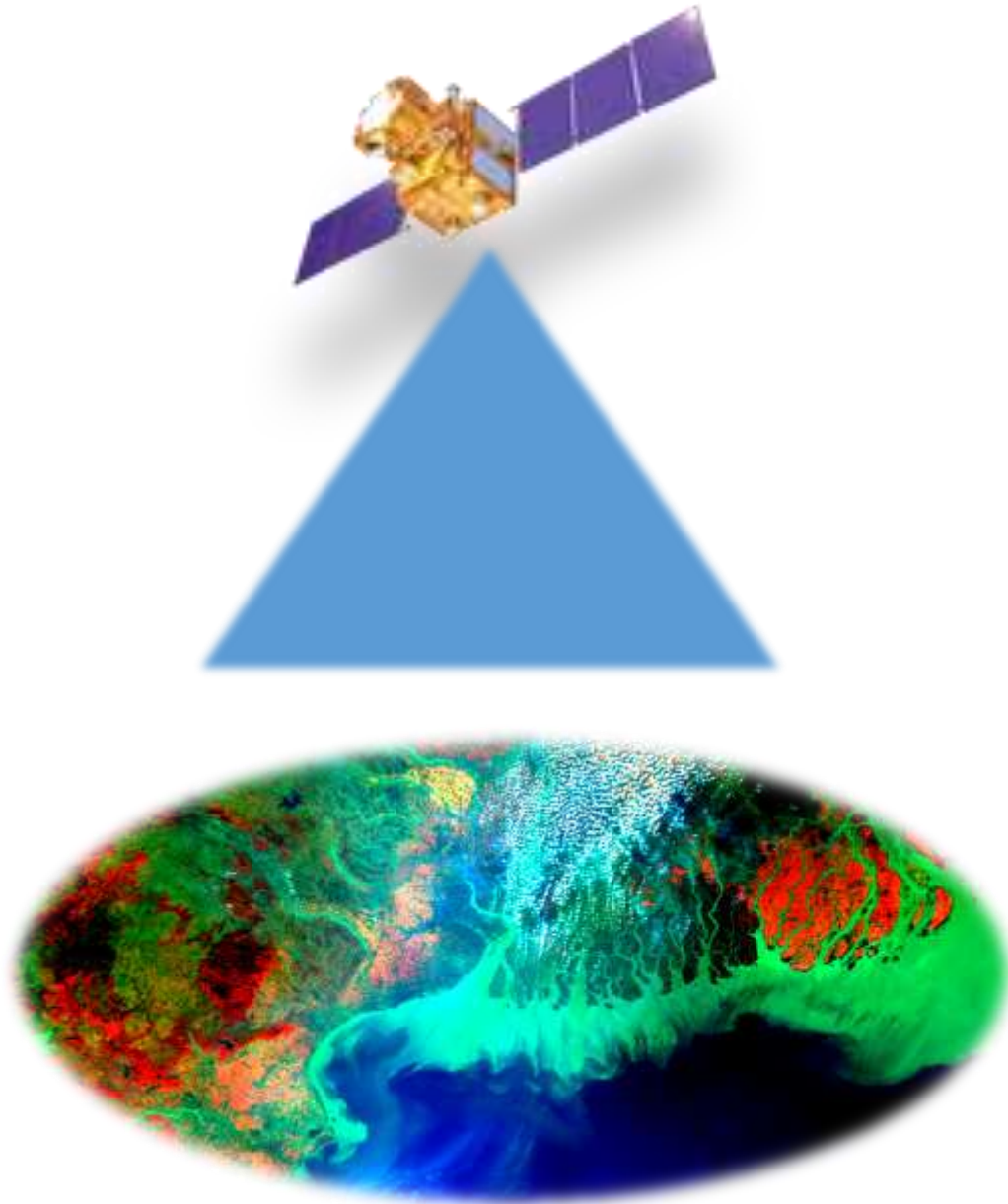# Online Certificate Course
on
"Remote Sensing & GIS Technology and Applications"
for
University Teachers & Government Officials

June 13 - July 01, 2020

Indian Institute of Remote Sensing
Indian Space Research Organisation
Department of Space, Government of India
Dehradun - 248 001, Uttarakhand
www.iirs.gov.in

INTRODUCTION

Geospatial Technologies including Remote Sensing (RS), Geographic Information System (GIS) and Global Navigation Satellite System (GNSS), individually as well as jointly, have revolutionized the generation of reliable and updated spatial information about the natural resources, natural and built environment and processes that are vital to informed decision making. Recognizing the need and importance of natural resources management using space technology, the Government of India had set-up the National Natural Resources Management System (NNRMS) in 1983, with Department of Space (DOS) as the nodal department. Capacity Building of human resource at different levels, from decision makers to working professionals, academia and the people at grass root level, is recognised as a critical element for effective use of the wealth of information generated by the Geospatial technologies.

With the advancements in sensor technology, availability of Earth Observation data from newer and advanced systems, processing methods and other allied geospatial and computing technologies, the capacity building requirement is growing day by day. Keeping this requirement in view, the NNRMS supports capacity building activities in the country so that the benefits of the space technology reach the society at large.

Indian Institute of Remote Sensing (IIRS) conducts NNRMS-ISRO sponsored training programme primarily for the faculty members of the university (including affiliated colleges) since 1994. This year, due to the COVID-19 pandemic the classroom-based course could not be organised. In view of this, IIRS is organising a Short Online Certificate Course using the IIRS E-CLASS platform (https://eclass.iirs.gov.in).

ABOUT THE COURSE

The prime objective of this course is to train the faculty members in universities and their affiliated colleges in RS & GIS technology and their applications, so that they can further train the students. Besides that, the course would also help government officials develop an understanding of the subject and utilise the knowledge in their field of interest.

The course would cover concepts and overview of Remote Sensing, Image Processing, GPS/GNSS, GIS technologies and their Applications in various domains (viz. Agriculture & Soils, Coastal & Ocean Sciences, Forest Resources & Ecosystem Analysis, Geosciences, Urban & Regional Studies, Water Resources and Natural Hazards and Disaster Risk Management).

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COURSE DURATION AND STRUCTURE

The course duration is from 13 June, 2020 to 01 July, 2020. There will be two sessions of one hour followed by an interactive session. The sessions shall be conducted from 10.00 hrs to 13.00 hrs from Monday to Saturday during the course period. The detailed schedule of the programme is available on IIRS Website (https://www.iirs.gov.in/EDUSAT-News).

TARGET PARTICIPANTS & ELIGIBILITY

- Faculty members (teachers) of UGC/AICTE approved universities and their affiliated colleges.

- Faculty members/Scientists/Engineers/ Officers and scientific/technical staff working in the Central/ State Govt. organisations/ institutions.

The participants are required to submit a proof of their employment (ID card issued by the employer or a letter certifying the employment of the applicant) at the time of online registration.

COURSE REGISTRATION

Course updates and other details are available at: https://www.iirs.gov.in/EDUSAT-News . All the participants have to register online through registration page available on the above web page.

During the registration, the participant has to select his/her Institute/office name as a nodal center from the list available in registration page. If the name of his/her Institute is not available in the list, then the participant can register by selecting Indian Institute of Remote Sensing as Nodal Centre.

The **last date to apply** for the course is **June 08, 2020 (17:30 hrs)**.

Award of Certificate

Online examination will be conducted online for all course participants attending the course. Fulfilment of criteria of qualifying marks in the exam as well as a minimum attendance are mandatory for the award of the course certificate.

Program Reception

Programme can be received through Internet connectivity of 2Mbps or better using IIRS E-CLASS platform. Following hardware and software set-up is required at user end:

Hardware Requirements at User End:

- Computer/Laptop (Windows OS)
- Good quality web camera
- Headphone with Microphone
- Speaker

Software and Internet Requirements:

Online live lectures through: https://eclass.iirs.gov.in/login or https://elearning.iirs.gov.in/

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.

Contact Details:

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Course Director, NNRMS &
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E-CLASS
ELECTRONIC COLLABORATIVE LEARNING
AND KNOWLEDGE SHARING SYSTEM

ABOUT IIRS

Indian Institute of Remote Sensing (IIRS) is a premier institute with a primary aim to build capacity in Remote Sensing and Geoinformatics technologies and their applications through training & education, research and outreach programmes. IIRS is a Centre of Indian Space Research Organisation (ISRO), Department of Space, Government of India. Formerly known as Indian Photo-Interpretation Institute (IPI), founded in 1966, the Institute is the first of its kind in Remote Sensing in entire South-East Asia. While nurturing its primary endeavour to build capacity among the user community by training mid-career professionals since its inception in 1966, the Institute has enhanced its programmes to meet the requirements of various stake-holders, ranging from fresh graduates to policy makers including academia, industry, different government departments and NGOs.

IIRS is one of the most sought-after institutes for conducting specially designed courses for the officers from the Ministries of the Government of India and State Governments for effective use of Earth Observation (EO) data from satellites for the benefit of society. Ministry of External Affairs, Government of India has recognised IIRS to conduct international training courses for the participants from ITEC (Indian Technical & Economic Cooperation) Member countries in Asia, Africa, Latin America, Central and Eastern Europe, and several Pacific and Caribbean nations.

IIRS also hosts the headquarters of the Centre for Space Science & Technology Education in the Asia and Pacific (CSSTEAP), affiliated to the United Nations, and conducts its training and education courses in RS & GIS.