ANNOUNCEMENT BROCHURE

Online Certificate Course on

Space Technology & Applications

Registrations- May 05, 2021 onward

Target Participants- School Teachers

Course Duration

May 31, 2021
to
June 04, 2021

Indian Institute of Remote Sensing
Indian Space Research Organisation
Department of Space, Government of India
4- Kalidas Road, Dehradun, India
Tel- +91- 135-2524130
Email- dlp@iirs.gov.in

IIRS OUTREACH PROGRAMME

IIRS outreach programme is an innovative distance learning initiative for training the students and professionals from academic Institutions and user departments in the field of geospatial technology & Earth Observation (EO) by utilizing state-of-art Information and communication technologies. The programme also attracts young generation to build their career in the area of space science and its applications. IIRS outreach program was initiated in year 2007 with 312 participants from twelve universities in India. Till March 2021, IIRS has successfully conducted 76 outreach programmes through live and interactive classroom mode (also known as EDUSAT programme) benefitted more than 3.05 lakhs participants from 2790 network Institutions distributed across the country. During last fourteen years, IIRS has successfully established a network of academic and professional Institutions in the country under this programme. The content of IIRS Distance Learning Program (DLP) focuses on teaching basic and advanced topics in the field of Remote Sensing, GIS, GNSS and its applications. The online sessions delivered under this programme are interactive and delivered by Subject Matter Experts (SME) from ISRO and other International Institute of repute. The online courses are delivered through indigenous active learning platform i.e. Electronic Collaborative Learning and Knowledge Sharing System (E-CLASS) of IIRS.

SPACE TECHNOLOGY & ITS APPLICATIONS

The data and information generated using Space Science and technologies are very important for socio-economic development of the society. Utilization of space based information services for better planning and decision making in the areas of weather forecasting, tele-medicine, positioning applications, environmental and climate studies, agriculture, food and water security, disaster management etc., are very important. Many space applications have reached at technical maturity level and have become the part of our day-to-day life. For example, the growth of positioning, navigation and timing applications which rely on satellite signals has spurred new commercial markets (e.g. GPS chipsets in smartphones), Direct to Home (DTH) services are now part of the society and Remote Sensing based satellite imageries are used for many geospatial applications such as cadastral mapping, thematic applications, spatial modelling etc. The applications of space technology can be divided in six major categories namely Earth Observation, Satellite Communication, Satellite Navigation, Satellite Meteorology, Environmental and Climatic studies. India being one of the leading space faring nation in the world, have its vibrant space program which has matured as a symbol of the country's sophisticated technological capabilities and its growing regional and global prestige.

OBJECTIVES OF THE COURSE

- Awareness and capacity building of school teachers on use of space technology and its application.

COURSE FEE AND MODE

- Course Fee- **NIL**;
- **Limited number of seats**. Admission on first-come-first-serve basis.
- **Mode-** Online through Internet

COURSE CURRICULUM

During the course following topics will be covered:

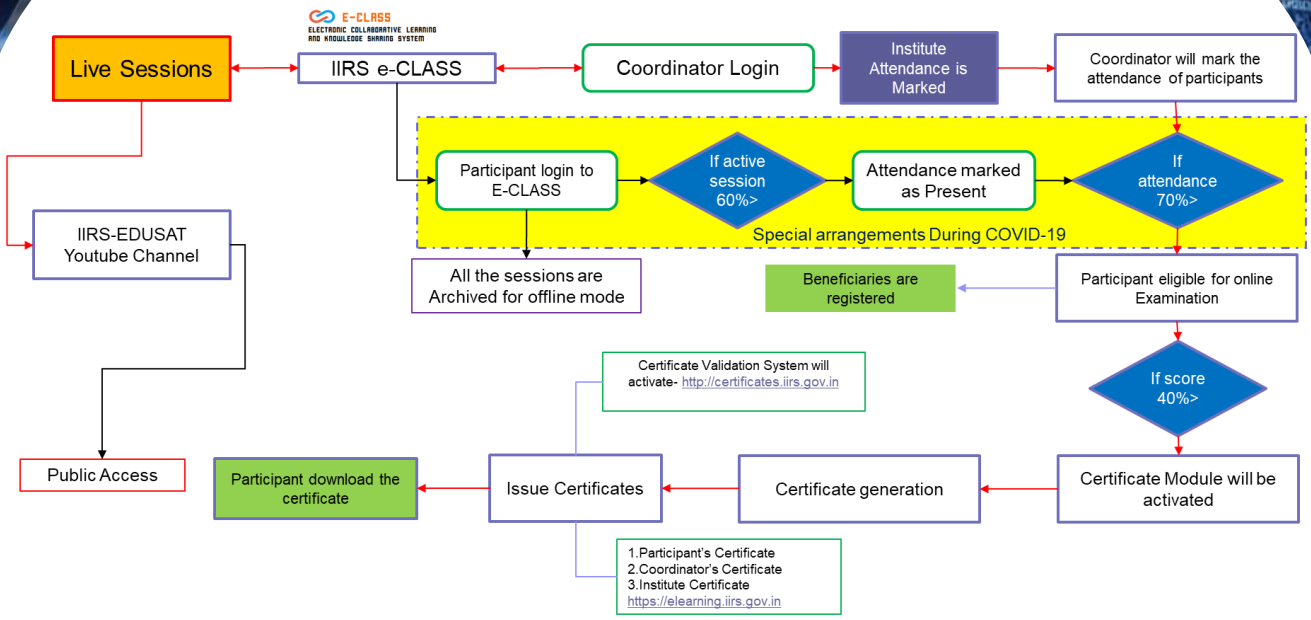
- Space Technology & Indian Space Programme;
- Satellite communication & navigation technology and its applications;
- Satellite Meteorology and Weather applications;
- Planetary Science;
- Astronomy and Space Science;
- Satellite based Earth observations & Remote Sensing Technology; and
- Remote Sensing Applications in Governance.

- **Experiments on-** Reading Satellite Imageries for information Extraction and
- Geodata access from online data repositories and problem solving using GIS

WHO SHOULD ATTEND?

- School Teachers teaching class 9th to 12th standards of all boards.
- Course will be very useful for the teachers teaching Science, Mathematics or Geography.

COURSE REGISTRATIONS AND RECEPTION



Workflow of online course under IIRS Distance Learning Programme

COURSE REGISTRATION

- All the IIRS online courses are announced at- https://www.iirs.gov.in/EDUSAT-News
- Participants can directly register for the course through URL- https://elearning.iirs.gov.in/edusatregistration/student .
- The online classes will be conducted through IIRS E-CLASS platform- https://eclass.iirs.gov.in

PROGRAMME RECEPTION

The course will be delivered through online mode. Following steps needs to be noted for joining the course:

- **Step 1-** The participant will create his/her account in IIRS e-learning website and activate the account through a link revived in his/her email;
- **Step 2-** The participant will fill the online application and submit a proof of employment.
- **Step 3-** The applications will be reviewed by IIRS and eligible applications will be approved;
- **Step 4-** On approval of the application, the participant will received admission email with login credentials of IIRS E-CLASS platform;
- **Step 5-** The participant will join the daily session as per published course schedule. The attendance of the participant will be automatically recorded by the system.
- **Step 6-** The participant will submit course feedback through a link available in E-CLASS platform.

TECHNICAL REQUIREMNET

Device- Desktop Computer/Laptop/Mobile;
Operating System- Windows, Macintosh, Linux, Android or IoS;
Web browser- Google Chrome, Firefox, Microsoft Edge or Safari;
Internet speed- 2 Mbps or 3G and above connectivity;
URL for course reception- https://eclass.iirs.gov.in

AWARD OF CERTIFICATE

The participants attaining 70% attendance will be awarded with course participation certificate from IIRS-ISRO. The participant will received certificate in his/her email.

"…if we are to play a meaningful role nationally, and in the community of nations, we must be second to none in the application of advanced technologies to the real problems of man and society."

Vikaram A. Sarabhai

About IIRS

The Indian Institute of Remote Sensing (IIRS is a constituent unit of Indian Space Research Organisation (ISRO), Department of Space, Govt. of India. Since its establishment in 1966, IIRS is a key player for training and capacity building in geospatial technology and its applications through training, education and research. The training, education and capacity building programmes of the Institute are designed to meet the requirements of working professionals, fresh graduates, researchers, academia, and decision makers. IIRS also conducts special training programmes for central and state government officials on use of space technology in governance. IIRS is also empaneled under Indian Technical and Economic Cooperation (ITEC) programme of Ministry of External Affairs, Government of India.

IIRS also hosts headquarters of Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP), affiliated to the United Nations. For more details you visit official website of the Institute at – https://www.iirs.gov.in

CONTACT DETAILS

IIRS Distance Learning Centre
Indian Institute of Remote Sensing, ISRO Dehradun
Email- dlp@iirs.gov.in
Tel- +91-135-2524130 (IIRS Distance Learning Center)
+91- 135-252-4354 (Office)
+91-135-252-4120 (Web Support)

Dr. Harish Chandra Karnatak
Scientist SG & Head, GIT&DL Department
Indian Institute of Remote Sensing, ISRO Dehradun
Email- harish@iirs.gov.in

Dr. Prakash Chauhan
Director
Indian Institute of Remote Sensing
Indian Space Research Organisation
Department of Space, Government of India
4- Kalidas Road, Dehradun, India