

About IIRS

Indian Institute of Remote Sensing (IIRS) - an ISO 9001:2008 institute, a constituent unit of Indian Space Research Organization (ISRO), Department of Space, Govt. of India is a premier training and education institute setup to develop trained professionals in the field of Remote Sensing, Geoinformatics & GPS technology for natural resources, environmental and disaster management. 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 & educational programmes that are tuned to meet the requirements of various target groups, ranging from fresh graduates to policy makers including academia. Its alumni include around 11,000 participants from India and about 1100 international participants from 95 countries.

The institute also conducts distance learning programmes which are first of its kind in the country in the field of 'Earth Observation and Geo-information technologies'. To widen its outreach, IIRS has started live and interactive Distance Learning Programme (DLP) since 2007. Today around 580 institutions and organizations are networked with IIRS and about 52,000 participants have attended various DLP courses.



IIRS has also launched e-learning courses on Remote Sensing and Geo-information Science since 2014. Its experienced faculty offer a multi-disciplinary dimension to the training programmes. IIRS is also one of the most sought after Institute for conducting tailor made courses for professionals from Central and State Government Ministries and stakeholder departments for effective utilization of Earth Observation (EO) data. The institute campus also hosts Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP), affiliated to UN and conducts international training programs in Remote Sensing and GIS.

Location & Accessibility

IIRS is located in Dehradun and its campus is endowed with scenic beauty, Dehradun is well connected to major cities via, air/rail/road. City is famous for its picturesque landscape, pleasant climate, high quality school education and several scientific organizations of national & international repute. Places of religious & tourist importance like Haridwar, Rishikesh and Mussoorie etc. are located in the vicinity of Dehradun.

Average temperatures during January would be $\sim 4-5^{\circ}\text{C}$ (evening) and $\sim 19-22^{\circ}\text{C}$ (day). Participants are advised to bring woolen clothes with them.

For more details please visit: www.iirs.gov.in

CONTACT DETAILS

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Special Training Course on Atmospheric Remote Sensing for Weather and Climate

January 2-12, 2018



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Indian Institute of Remote Sensing
Indian Space Research Organization
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4, Kalidas Road, Dehradun- 248001, India
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Introduction

Over the past 50 years a range of satellite platforms has been utilized to monitor atmospheric parameters used in meteorological and climatological studies. The information retrieved from satellite-based sensors has greatly enhanced our understanding of the processes, dynamics within the Earth-atmosphere system, quantifying processes and spatio-temporal states of the atmosphere, land and oceans. Further these observations in conjunction with model simulations help in understanding the climate system and its changes for example, monsoon system, cyclone, extreme rainfall events, clouds and precipitation, large scale circulations, atmospheric chemistry, cooling effects of increased tropospheric & stratospheric aerosols, spatial pattern of sea-level rise, climate change and land-ocean-atmosphere interactions etc. Satellite data also contribute significantly to the improvement of meteorological reanalysis products that are widely used for climate change research. There has been growing interest among researchers & scientific community on the use of satellite data on climatological observations & decision making. However academic, research institutions & user departments face challenge of creating useful parameters/products using satellite observations. In view of this, a short course is being organized by IIRS to address these issues.

Target Participants

The course is designed for professionals and specialists from university educators, educational institutes, operational & research institutes and researchers in atmospheric science, meteorology, environmental science, weather forecasting and climate. The applicants should be Post Graduate in Science/ Graduate in Engineering. Preference will be given to candidates with experience in teaching/research and higher qualification.

Significance of the Course

The course is designed with a view in understanding the processes and retrieval techniques particularly from remote sensing data to derive the desired meteorological, climatological and atmospheric parameters at regional and global scales. The course also enables course participants sharing their experiences and knowledge with the aim of further enhancing the use of geospatial technology in its application. This would give a way forward in weather observation, forecast and in climate research.

Duration and mode of training

The course will be of two weeks duration from January 2-12, 2018. The course would have a blend of lectures, case studies, demonstrations, hands on exercises, expert lectures, instrumentation setup and field visits. The institute has a rich library, well equipped laboratories, ground truth equipment and state of art computer processing facilities.

Brief overview of lectures

- Solar, terrestrial radiation and the atmosphere interactions
- Satellite Observation of Atmosphere and Earth
- Atmospheric sounding, Retrieval of cloud properties, AMV's, wind scatterometry
- Remote sensing based rainfall measurement, Indian summer monsoon studies and changing climate
- Extreme events, Numerical Weather Prediction and challenges
- Tropical & extra-tropical cyclones, Doppler weather radar
- Climate models, dust storm forecasting, GPS radio occultation in NWP
- Atmospheric aerosols, impact on environment and climate

- Air pollutants & modelling, extreme pollution episodes
- Chemistry transport modeling, green house gases and simulation

Course Fees

A nominal course fee of ₹4000/- per participants will be charged from Government & research institutions, university faculty and research students. This includes course fees, course material, registration kit, boarding and lodging. Please send a crossed Demand Draft from any Nationalized Bank drawn in favor of 'Pay & Accounts Officer, Indian Institute of Remote Sensing' payable at Dehradun. Course fees must be paid before commencement of the training program.

Important Dates


The course will commence on January 2, 2018 and will end on January 12, 2018. **Last date to apply for the course is December 8, 2017.**

Accommodation

AC/Non-AC accommodation (as available) on sharing basis, will be provided at IIRS campus. No accommodation will be provided to the accompanying person/children.

How to apply

The aspirant participants may fill the attached application form and send to us along with course fees latest by December 8, 2017. Selection preference will be given to candidates with experience in teaching/research and higher qualification. Applicants are encouraged to apply well before last date. To facilitate early registration, an advance copy of your application can be send to us via e-mail/fax/post.





Special Training Course on Atmospheric Remote Sensing for Weather and Climate

January 2-12, 2018

APPLICATION FORM

(For Official use only)

ARS-WC

Application No:.....

Date received:



1. Name (Dr/Mr/Mrs/Ms):

2. Date of birth (DD/MM/YYYY) :

3. Gender (Male/Female):

4. Designation.....

5. Organization:

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6. Address (official):

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Tel: Mob:

Fax Email:

7. Address (Residence):

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Tel: Mob:

Fax Email:

8. Education Qualification (from Bachelor degree onwards)

Table with 4 columns: Degree, University/Institution, Year of passing, Major subjects/specialization

(enclose copy of highest degree obtained)

9. Have you attended any course at IIRS [] Yes [] No

10. Details of experience in the present profession (including years of experience)- max of 50 words

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11. How the course will help in your work/organization

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12. Accomodation required [] Yes [] No

13. Details of payment: (Demand Draft No., Bank Name & Address, Date of Issue)

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14. Declaration by the Candidate I have read the announcement brochure and will abide by the rules and regulation of the institute. I will make travel arrangements for attending the course and expenses (other than mentioned in brochure) for the period of stay.

Signature of applicant

Place:

Date:

Last date to receive the completed application is December 8, 2017

Important: - The application which is incomplete is likely to be rejected - The DD of those applicants who are not selected will be refunded