

SHORT COURSE
ON
Ocean Atmosphere Interaction
using Geospatial Techniques

June 2-13, 2025



***Last date for receipt of
application: March 31, 2025***



Organized By



CSSTEAP

Conducted By

iirs

IIRS, ISRO

Background

Geospatial technology has a wide range of applications to achieve quantitative understanding of the key biogeochemical-physical interactions between the ocean and the atmosphere. Remote sensing can be specifically useful for understanding the coupling between ocean and atmosphere and its implications on Asian summer monsoon system, tropical cyclone, ocean wave dynamics, ocean biogeochemistry, ocean productivity, atmospheric/oceanic pollution and coastal zone.

About CSSTEAP and IIRS

CSSTEAP was established in India in November 1995 with its headquarters at Dehradun. The centre has emerged as a Centre of Excellence in capacity building in the field of space science and technology applications. For more information, visit www.cssteapun.org

IIRS (established in 1966), a constituent unit of Indian Space Research Organization (ISRO), is a key player for training and capacity building in geospatial technology and its applications through training, education and research in Southeast Asia. The training, education and capacity building programmes of the Institute are designed to meet the requirements of professionals at working levels, fresh graduates, researchers, academia, and decision makers (www.iirs.gov.in)

Objective of the course

The overall objective of this two weeks training programme is to generate awareness among users/researchers/professionals/decision-makers/academicians on space technology and its applications in understanding various ocean atmosphere coupled processes.

Faculty & Medium of Instruction

The core faculty is drawn from IIRS and premier agencies from India dealing with ocean and atmospheric processes. The faculty has rich experience in the field of atmospheric/marine sciences and applications based on space-based observations. The medium of instruction shall be in English. Participants having competence in spoken and written English language will be given preference.

Course Content

- Overview on earth observation satellites for the atmospheric and oceanic studies
- Satellite retrieval of meteorological and oceanic parameters
- Role of atmosphere ocean interaction in south Asian monsoon system.
- Impact of air sea exchange on ocean biogeochemistry
- Role of oceanic/atmospheric processes on tropical cyclone.
- Wind generated ocean wave dynamics from space.
- Air quality monitoring over India and surrounding marine region
- Ocean atmosphere coupled modeling
- Ocean productivity and ocean pollution
- Land ocean interaction in coastal zone

Number of seats

:20 (Government Nominated Candidates)

:05 Paid Seats (Private & Self-Sponsored Candidates)

Course Fee & Accommodation

A course fee of US \$300 (equivalent to INR for Indian participants) is applicable for paid seats which includes course materials. However, for government sponsored candidates from Asia Pacific region, the Director CSSTEAP may waive off the course fee. Preference in admission will be given to the candidates who are financially supported by their organizations. Accommodation for the participants will be arranged in the International Hostel at IIRS, Campus on chargeable basis of Rs. 120/day. Course fee may be sent through online transfer/ NEFT/RTGS/SWIFT in favour of CSSTEAP, payable at Dehradun with following bank details:

Banking Institution: Punjab National Bank

Account Name: Centre for Space Science and Technology Education in Asia and the Pacific

Account Number: 0111032100000236

SWIFT: PUNBINBBDPR

IFSC Code: PUNB0445600

Address Bank: Survey of India Branch, New Cantt. Road, Dehradun, India

Fellowship

A few fellowships covering to and fro international air travel, domestic travel in India and living expenses (INR15,500 for two weeks) in India are available from the Government of India.

However, first preference will be given to the fully self-sponsored candidates and then to the candidates whose sponsoring organization will be bearing international to and fro travel.

Medical Insurance

Medical, life, and disability insurance should be undertaken before leaving their country for India by the participants themselves or on their behalf by their sponsoring institute/organization for covering entire health and disability risks. No medical expenses will be borne by the Centre. Candidates in sound physical and mental health only need to apply.

Medical fitness certificate from Authorized Government medical officer covering status of Eye, Chest (Tuberculosis), Vaccinations, heart, lungs, liver, spleen, Hydrocele, skin & V.D., Hepatitis, HIV, Yellow fever and other contagious diseases be enclosed with the application form. In case if any information requiring medical attention is hidden and if found during the course, the Centre will be obliged to send the candidate back to their home country any time. The travel cost will be borne either by the nominating/sponsoring authority or by the candidates themselves.

Eligibility and Selection Procedure

- The course is aimed at users, decision-makers, researchers, and professionals working in the field of marine and atmospheric sciences.
- The candidate should have a Master's degree in science or Bachelor's degree in engineering or equivalent qualification (Essential Qualification).
- 5 years of experience in the relevant field (Desirable).

- Basic knowledge in mathematics and/or statistics is desirable.
- Limited seats are available for this course, which will be filled with participants from different Asia Pacific countries
- Five paid seats are available for Private & Self sponsored candidates from different Asia Pacific countries.
- The candidates have to pay full course fee of US\$ 300 (equivalent to INR for Indian participant) which includes course materials and field trips.
- For Paid Seats or Self-Sponsored Participants travel from place of work to Dehradun and back, tour allowance and daily allowance during the entire period of training will be borne by the candidate/ organization.
- Government employees and professionals working in the field of marine and atmospheric sciences would be given priority.
- Candidate should have proficiency in the English language as the course will be conducted in English.
- The selection of candidates will be carried out by a designated selection committee.

How to Apply

- Eligible candidates can apply online through the CSSTEAP website. <https://admissions.cssteapun.org>
- Applicants are requested to send the application forwarded by the Head of their respective institute/Organisation.
- Self-sponsored candidates can directly submit application
- Incomplete applications will not be considered for selection
- ***Last date for application: March 31, 2025***

Contact Details

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Indian Institute of Remote Sensing (IIRS)

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Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP)
(Affiliated to the United Nations)
IIRS Campus, Dehradun, India

www.cssteapun.org



Indian Institute of Remote Sensing (IIRS)
Indian Space Research Organisation (ISRO),
Department of Space, Government of India
Dehradun, India

www.iirs.gov.in