

ONLINE CSSTEAP SHORT COURSE
ON
“SPACE & ATMOSPHERIC SCIENCE”

Organized By

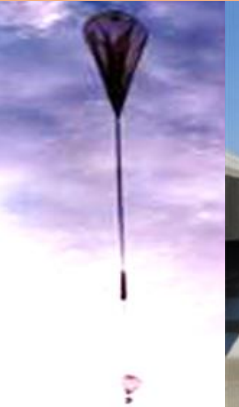
Conducted By



Virtual Platform: GoToMeeting
December 7 – 14, 2020

Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP)
 (Affiliated to the United Nations)
 IIRS Campus, 4, Kalidas Road, Dehradun, India
www.cssteap.org

Physical Research Laboratory (PRL)
 (A Unit of Dept. of Space, Govt. of India)
 Navrangpura, Ahmedabad, India
www.prl.res.in



INTRODUCTION

Earth's atmosphere is unique as it supports life by absorbing harmful radiation from the Sun and infrared radiation from the Earth. The research foci of the space and atmospheric sciences is to understand the radiative, chemical, ionization, and dynamical processes occurring in the Earth's atmosphere and near-Earth space environment. In recent decades, the major emphasis has been on the studies of trace gases, aerosol-radiation interactions, climate change, water vapour and clouds, wave dynamics, and effects of solar disturbances/geomagnetic storms on space weather and the upper atmosphere. These studies are enabled by employing state-of-the-art and in-house built rocket-, balloon-, and ground-based instruments, optical and radio probing techniques, solar telescopes, laboratory experiments along with theoretical simulations and modelling.

ABOUT CSSTEAP AND PRL

The CSSTEAP was established in India in November 1995 with its headquarters in Dehradun and is considered as the Centre of Excellence by UNOOSA. The 1st campus of the Centre was established in Dehradun, India and is hosted by Indian Institute of Remote Sensing (IIRS), a constituent unit of Indian Space Research Organisation (ISRO). The CSSTEAP has been imparting training and educational programmes related to RS & GIS, Satellite Communication, Satellite Meteorology, Space Science, Global Navigation Satellite Systems, and Small Satellite Mission, helping participants in developing research skills through its Master Degree, Post Graduate and Certificate programmes.

Known as the cradle of Space Sciences in India, the Physical Research Laboratory (PRL) was founded in 1947 by Dr. Vikram Sarabhai. As a unit of Department of Space, Government of India, PRL carries out fundamental research in selected areas of Physics, Space & Atmospheric Sciences, Astronomy, Astrophysics & Solar Physics, and Planetary & Geosciences.

OBJECTIVE OF THE COURSE

The objective of the course is to create an understanding of the basics and current research trends in the field of space and atmospheric sciences with major focus on

- solar atmosphere, flares, Coronal Mass Ejections (CMEs), space weather, and magnetosphere-ionosphere coupling.
- Ionosphere-thermosphere coupling, wave dynamics in the ionosphere, thermosphere, mesosphere, stratosphere and troposphere;
- chemistry and dynamics of trace gases and aerosols in the lower atmosphere and their impact on radiation and climate;

COURSE CONTENTS

- Structure of the Sun, Solar Eruptions (flares, CMEs), Space Weather forecasting
- Optical aeronomy, ionosphere, solar wind, magnetosphere
- Space Instrumentation
- Upper, Middle, Lower atmospheric dynamics and coupling
- Atmospheric composition and chemistry
- Aerosols and climate impacts

ELIGIBILITY AND HOW TO APPLY

Applicants should have a Master's degree in Physics/Astronomy/Astrophysics/Solar Physics/Meteorology or other equivalent qualification relevant to Space and Atmospheric Science, OR Bachelor's degree in Engineering, (B.E./ B. Tech.) in Electronics and allied fields / Environmental Science/Engineering. Applicants having teaching or research experience would be preferred.

Applicants are requested to send the scanned copy of their application forwarded by the Head of their respective institute for consideration through e-mail to uncsc@prl.res.in. Since the whole course will be conducted in English, the applicant should have proficiency in English language.

Announcement of course: October 26, 2020

Last date for application (via e-mail): November 18, 2020.

Link for lectures will be shared with selected applicants in due course. Applicants are advised to check the website/portal www.cssteap.org regularly for further updates/information.

CONTACT DETAIL

For any course related query, the applicants may contact

Dr. Jay Banerji

Course Director

Physical Research Laboratory

Navrangpura, Ahmedabad 380 009

India

Email: uncsc@prl.res.in

Ph: +91-8141026595



**CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION
IN ASIA AND THE PACIFIC**
(AFFILIATED TO THE UNITED NATIONS)

**APPLICATION FORM FOR SHORT COURSE ON
“SPACE AND ATMOSPHERIC SCIENCE”**

DECEMBER 7-14, 2020

**Conducted by
Physical Research Laboratory, Ahmedabad, India
(Through Online mode)**

**Last date for receipt of application: November 18, 2020
(Through e-mail to uncsc@prl.res.in)**

Affix
Recent Passport
Size Photograph

(PLEASE TYPE OR USE BLOCK CAPITALS)

- 1.Name (Dr/Mr/Ms):
2. Father's Name:
3. Date of Birth (DD/MM/YYYY):4. Place of Birth:
- 5 Gender (Male/Female):6. Nationality:
7. Contact Information: Present official Address (Valid until what date):
.....
.....
Home: Office:
Mobile:..... E-mail:
8. Permanent home Address (in your country):
.....
.....
Telephone:.....Alternate E-Mail (G-mail or Yahoo):.....

9. ACADEMIC QUALIFICATIONS:

Degree/(Bachelor/Master)/ Diploma	Duration of Course (mention from which year to year)	University/ Institution Name	Year of passing	Grade/ Percentage	Major subjects/ specialisation

10. DETAILS OF EMPLOYMENT AND EXPERIENCE:

(a) Present Position:

Organisation and Complete Address.....

Date of joining this Organisation (dd/mm/yyyy):

(b) Work Experience:

Name of the Organisation(s)	Position(s)/Post(s) held	Nature of work done	Duration

11. Have you done any other course from CSSTEAP (If 'yes'; please give details including the month & year)

12. DETAILS OF PASSPORT (Not applicable to Indian applicants):

Passport Number	Place of Issue (City and Country)	Date of Issue	Passport Valid up to	Issuing Authority

13. DECLARATION BY THE CANDIDATE:

I have read the announcement brochure and the information provided in the application is correct.

Date :

Place:

Signature of Candidate

14. RECOMMENDING/ NOMINATING AGENCY CERTIFICATE :

Dr/Mr./Ms.....is recommended/nominated to attend the Short Course on "Space and Atmospheric Science," to be conducted by Physical Research Laboratory, Ahmedabad, India during December 7-14, 2020 through online mode. We envisage utilizing his/her experience in specific tasks of our organization/agency. He/She possesses adequate knowledge of English Language required for the course.

Date :

Place :

Signature:

Name in Capital Letters:

Designation :

Phone No :

Fax No :

Email :

(Official Seal of the recommending/nominating authority)

Please send the scanned copy of the application form duly signed by the recommending/nominating agency to the Course Director, Space and Atmospheric Science, Physical Research Laboratory, Navrangpura, Ahmedabad 380 009, India by email to uncsc@prl.res.in.