



**ONLINE CSSTEAP SHORT COURSE
ON
“REMOTE SENSING & GIS
TECHNOLOGY AND APPLICATIONS”**

Organized By

Conducted By



**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**



**Indian Institute of Remote Sensing (IIRS)
Indian Space Research Organisation (ISRO)
Department of Space, Government of India
4, Kalidas Road, Dehradun, India
www.iirs.gov.in**



**Virtual Platform: GoToMeeting
November 16 – 27, 2020**



INTRODUCTION

Remote Sensing (RS) and Geographic Information System (GIS) is a very promising technology for modeling, analyzing, disseminating, monitoring, planning, decision-making and management of the spatial information of the complex system earth. Worldwide the researchers, academicians, decision makers and professionals are using this technology to model almost each and every fields of life like agriculture, soil science, forestry, ecology, climate, ecosystems, water resources, urban studies, geoscience, atmospheric science, marine science, geo-hazards etc. The recent development of RS & GIS tools, availability of huge satellite data, worldwide connectivity through internet, and high performance computing environment opens up new vistas for managing the natural resources of system earth.

ABOUT CSSTEAP AND IIRS

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.

The IIRS (established in 1966) 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.

OBJECTIVE OF THE COURSE

The overall objective of the 2 weeks training course is to generate awareness among users/ researchers/ professionals /decision-makers /academicians on the basics to recent advances in RS and GIS technology and its wide area applications. The participants will be familiarized with principles of RS and GIS, earth observation sensors & platforms, digital image processing, Image classification techniques, GIS database creation, and spatial data analysis. The participants will also familiarized with the RS and GIS applications in the field of agriculture & soils, forest resources & ecosystem analysis, geoscience, coastal & ocean sciences, urban & regional studies, water resources, geological disasters, and hydro-meteorological disasters.

COURSE CONTENTS

First Week

- Basic Principles of Remote Sensing & GIS
- Earth Observation Sensors & Platforms
- Spectral Signatures & Visual Image Interpretation
- Digital Image Processing
- Image Classification Techniques & Separability Analysis
- GIS Database Creation and Spatial Data Analysis

Second Week

- RS and GIS Applications in Agriculture & Soils
- RS and GIS Applications in Forest Resources & Ecosystem Analysis
- RS and GIS Applications in Geosciences
- RS and GIS Applications in Coastal & Ocean Sciences
- RS and GIS Applications in Urban & Regional Studies
- RS and GIS Applications in Water Resources
- RS and GIS Applications in Geological disaster
- RS and GIS Applications in Hydro-meteorological disaster

ELIGIBILITY AND HOW TO APPLY

Master's degree in science or Bachelor's degree in engineering or equivalent qualification relevant in the field of study with at least 5 years of experience in teaching/research or professional experience in the field of natural resources or environment, e.g. agriculture, soils, forestry, ecology, geosciences, water resources, human settlement, land use planning, oceanography, environmental analysis, etc. (For candidates with higher qualifications, the minimum experience may be relaxed). Basic knowledge in mathematics and/or statistics is essential.

Applicants are requested to send the scan copy of their application forwarded by the Head of their respective institute for consideration through e-mail at cssteap-admissions@iirs.gov.in. Since whole course will be conducted in English, the candidate should have proficiency in English language.

Announcement of course: October 9, 2020

Last date for application (via e-mail): October 31, 2020.

CONTACT DETAIL

For any course related query, the candidates may contact any of the contact detail.

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(Course Director)

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Mr. Hari Shankar

(Course Coordinator)

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Uttarakhand, India



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

**APPLICATION FORM FOR SHORT COURSE IN “REMOTE SENSING & GIS
TECHNOLOGY AND APPLICATIONS”**

November 16 - 27, 2020

**Conducted by
Indian Institute of Remote Sensing, Dehradun, India
(Through Online mode)**

**Last date for receipt of application: October 31, 2020
(Through e-mail: cssteap-admissions@iirs.gov.in)**

Affix
Recent Passport
Size Photograph

1. Name (Dr/Mr/Mrs/Miss):
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 EXPERIENCE:

(a) Present Position:

Organisation and Complete Address.....

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

(b) Experience during past 15 years:

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: Please provide valid passport details below and if not holding a valid passport, please forward copy of the passport whenever available.

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 are correct.

Date :

Place:

Signature of Candidate

14. NOMINATING AGENCY CERTIFICATE:

Dr/Mr./Ms.....is nominated to attend the Short Course on "Remote Sensing & GIS Technology and Applications" to be conducted by Indian Institute of Remote Sensing, Dehradun, Uttarakhand, India during November 16 - 27, 2020 through online mode. It is envisaged to utilize his/her experience in specific tasks of our organization. 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 sponsoring or nominating authority)

Please send the scan copy of application form duly signed by the nominating agency to the Course Director, CSSTEAP RS & GIS, Indian Institute of Remote Sensing (ISRO), Dehradun - 248001, Uttarakhand, India by through Email at cssteap-admissions@iirs.gov.in.