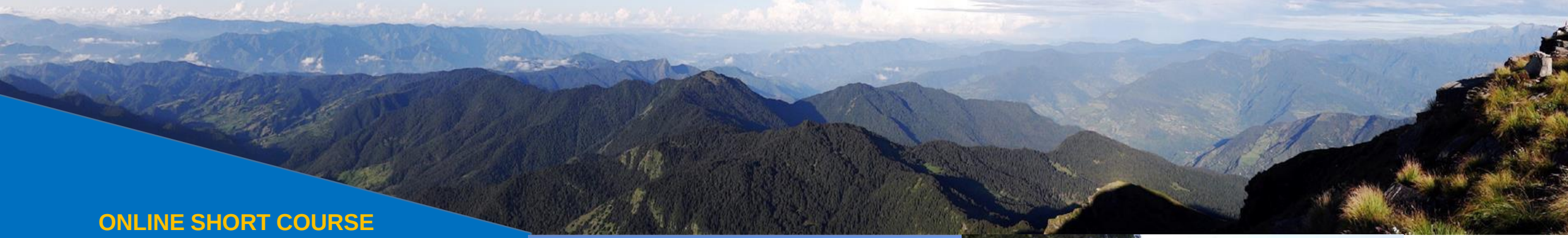

# ONLINE SHORT COURSE

# ON

# "OPEN-SOURCE GIS TECHNOLOGY & GEOWEB SERVICES"

**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**
CSSTEAP (cssteapun.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

**Through: Virtual Platform**
**September 4 – 15, 2023**


## INTRODUCTION

Open-source GIS has received substantial attention in last few years due to its free to use licensing policy and support for indigenous technological development by having access to the source code and flexibility to change it and redistribute. Apart from this, in geospatial domain web services are very important to achieve interoperability in data and information available with different data providers. Today, the geospatial services available in internet through various geo-portals are increasing rapidly.

## ABOUT CSSTEAP AND IIRS

CSSTEAP was established in India in November 1995 with its headquarters in Dehradun and over the past 27 years, the center has emerged as a Centre of Excellence in capacity building in the field of space science and technology applications. The 1st campus of the Centre was established at Dehradun, India and is hosted by Indian Institute of Remote Sensing (IIRS). 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 programms.

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 South east 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 this two weeks training programme is to generate awareness among users / researchers / professionals / decision-makers / academicians on geospatial technology in open source GIS and web GIS environment. The participants will be familiarized with the various geo-spatial data processing (Vector/Raster) using open source GIS software, Geo-RDBMS concepts, open geodata repositories and concepts of geo web services for developing any generic geo web portal. The course will help the participants to explore GIS customization in open source environment through programming concepts. The course will include theory and hands on sessions to facilitate in-depth learning.

## COURSE CONTENTS

***First Week***

- Overview of Geospatial Technology and its applications.
- GIS data structure and data models.
- Concept of Open Source GIS and FOSS4G.
- Popular open geo-data repositories.
- Raster and Vector data Analysis using FOSS4G.

***Second Week***

- Ground data collection and concept of mobile GIS.
- Concept of geo web services and API.
- Developing understanding of OGC web services through Geoserver.
- Overview of geo-RDBMS through PostGIS.
- Geoprocessing using python programming language.
- Geoprocessing in cloud environment.

## ELIGIBILITY AND HOW TO APPLY

Master's Degree in science or Bachelor's degree in engineering or equivalent qualification relevant to the course objectives with at least 03 years of experience in teaching/research or professional experience in the field of geospatial technology, computer science, geography, mathematics, software development and related fields.

For candidates with higher qualifications, the minimum experience may be relaxed. Basic knowledge in mathematics and / or statistics is essential. The course will be conducted in English language, the candidate should have proficiency in English language.

Applicants are requested to register online by opening the admissions portal at www.cssteapun.org or https://admissions.cssteapun.org/login. They are advised to read each and every instruction before applying online https://admissions.cssteapun.org/uploads/cssteap_online_short_course.pdf .The application should be duly forwarded by the Head of the applicant's organization for consideration. There is no course fee for applicants applying through proper channel. Link for lectures will be shared with selected applicants in due course. Applicants are advised to check the website/portal www.cssteapun.org regularly for further updates/information

**Announcement of course: July 07, 2023**

**Last date for receipt of application August 27, 2023.**

## COURSE CONTACT DETAIL


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