MAHATMA HANSRAJ FACULTY DEVELOPMENT CENTRE
(A CENTRE OF MOE, GOVT. OF INDIA, UNDER PMMMNMTT SCHEME)
HANSRAJ COLLEGE, UNIVERSITY OF DELHI
(NAAC ACCREDITED A++ GRADE)

in collaboration
with

MIRANDA HOUSE, UNIVERSITY OF DELHI
(NAAC ACCREDITED A++ GRADE)

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STUDENT LEARNING CENTRE, HANSRAJ COLLEGE

is organising
One Week (online) Workshop (for students only)
on

Introduction to QGIS and Image Processing

(Training Program for Absolute Beginners)
NO REGISTRATION FEE

OCTOBER 30 - NOVEMBER 6, 2023

5:30 PM - 7:00 PM

LIVE SESSIONS

REGISTRATION LINK:
https://forms.gle/S3KBQcxFDbxfJCXw5

zoom

@hrcduofficial

ABOUT HANSRAJ COLLEGE

Hansraj College is one of the largest constituent colleges of University of Delhi and has been ranked as one of the top five colleges for Science, Arts and Commerce several times in the last decade. The faculty and students of the college have contributed immensely in the field of academics, sports and cultural activities. The college faculty is dedicated towards growth and development of the institution academically and administratively to constantly thrive for excellence. Hansarians have been placed in diverse professions and services worldwide and are bringing fame and laurels to the institution.

ABOUT MIRANDA HOUSE

Miranda House, College for Women at University of Delhi, is amongst the premiere institutions of the country. It was awarded All India Rank One amongst colleges under the National Institutional Ranking Framework (NIRF) consecutively for seven years 2017, 2018, 2019, 2020, 2021, 2022 and 2023. The National Assessment and Accreditation Council (NAAC) has accredited the college with Grade A++ in its Second Cycle and Grade A+ in its First Cycle. Established on 07 March 1948 by the then Vice Chancellor of University of Delhi Sir Maurice Gwyer, it chronicles the history of women's education in India. Since its inception it has carved a unique niche for itself as a globally recognized premiere institution of higher learning. Department of Biotechnology, Government of India, has given it the Star College status. Miranda House has a rich legacy. The extremely distinguished list of alumnae imparts a sense of confidence and pride in students. Being a college established and maintained by the University, Miranda House has a special place among the women's colleges of the University of Delhi. Its location in the heart of the University Campus, and its close interaction with the various Departments of the University and other campus colleges gives it a unique advantage.

ABOUT STUDENT LEARNING CENTRE, HANSRAJ COLLEGE

To inculcate the spirit of knowledge sharing among students, develop contemporary soft skills, help students facing problems and to cater students with research interests, Internal Quality Assurance Cell, Hansraj College has set up a Student Learning Centre in 2020. The centre majorly deals with the issues and challenges related to the students. The challenges may range from basic subject learning to equipping themselves with advanced learning to keep up the pace with the ongoing and fast changing world.

ABOUT THE PROGRAMME

The primary aim of this short course is to provide participants with a practical introduction to QGIS, a powerful open-source Geographic Information System (GIS) software. This course is designed to equip attendees with the fundamental skills necessary to utilize QGIS for various applications, with a particular focus on image processing.

OBJECTIVES OF THE PROGRAMME

- To familiarize participants with the basics of QGIS, its interface, and core functionalities.
- To enable participants to import, manage, and manipulate spatial data in QGIS.
- To provide hands-on experience in image processing using QGIS.
- To foster a deeper understanding of the practical applications of QGIS in research

COURSE OUTLINE

The course will consist of sessions, each tailored to build upon the knowledge gained in the previous session. The sessions will cover the following topics:

Session 1:
- Getting Started with QGIS
- Overview of QGIS and its features
- Installing and setting up QGIS

Session 2:
- Basic GIS Operations
- Adding and displaying spatial data in QGIS
- Understanding spatial data types (vector and raster)
- Basic data manipulation (zooming, panning, attribute table)
- Coordinate systems and projections

Session 3:
- Data Manipulation and Analysis
- Data editing and attribute management
- Spatial analysis tools in QGIS

Session 4:
- Image Processing
- Introduction to remote sensing and satellite data
- Importing and processing satellite images in QGIS
- Image enhancement and classification

Session 5:
- Visualization and Presentation
- Creating maps and cartographic design
- Exporting maps

RESOURCE PERSONS

Ms. Pragnya Makar
PMRF Ph.D Research Scholar at IIT Delhi
M.Tech, Remote Sensing and GIS (specialisation in Marine and Atmospheric Sciences), Indian Institute of Remote Sensing (ISRO)

Prof. (Dr.) Priyanka Puri
Professor, Miranda House, University of Delhi
Elected Executive Member of Ocean Society of India
First Delhi-NCR Chapter

COURSE LOGISTICS

- Duration: (1 hour training + 1/2 hour hands-on) per day
- Audience: Beginners with little or no prior experience in GIS or QGIS.
- Participants should have a laptop/desktop and a stable internet connection

EXPECTED OUTCOMES

This short course aims to improve skills in geospatial technology, empowering beginners to leverage the capabilities of QGIS for their research and analysis. By the end of this course, participants will be equipped with practical skills that can significantly enhance their ability to visualize and interpret data.

REGISTRATION DETAILS

Interested participants are requested to follow the steps mentioned below in order to register for the FDP:

- Pre-registration to the programme is through online mode only.
- Participants are required to fill the registration form using the following link (Please ensure that you have proof of valid Student ID before filling up registration form):

Registration link: https://forms.gle/S3KBQcxFDbxfJCXw5

- The last date for registration is **October 29, 2023**
- Participants will be informed by **October 29, 2023**
- Attendance norms are strict. Participants are required to clear the assessment component for getting the e-certificates.
- Further details will be communicated to the registered participants.

ELIGIBILITY: The programme is interdisciplinary and is open to all interested participants. All UG, PG and Research Scholars from any university/college are eligible to participate.

MHRFDC TEAM

Patron

Padma Shri Dr. Punam Suri

Chairman, Governing Body, Hansraj College

Chairperson, MHRFDC

Prof. (Dr.) Rama

Principal, Hansraj College

Cordinator, MHRFDC

Mr. Ashutosh Yadav

Deputy Cordinators, MHRFDC

Ms. Deepshikha Yadav

Dr. Anurag Kakkar

MIRANDA HOUSE TEAM

Patron

Prof. (Dr.) Bijayalaxmi Nanda

Principal, Miranda House

Workshop Convenor

Prof. (Dr.) Priyanka Puri

Miranda House

STUDENT LEARNING CENTRE, HANSRAJ COLLEGE TEAM

Coordinator, SLC, Hansraj

Dr. Pooja Arora