One-Week Faculty Development Program on Basics of Remote Sensing and GIS Organized by IQAC & Department of Geography, St. Xavier's College (Autonomous), Ranchi, Jharkhand

26th May - 31st May, 2025



Mode of Training- Offline, Hybrid & Online



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About the FDP

Remote sensing and GIS has become an important tool in the field of geography and other discipline. Remote sensing and GIS is increasingly being used by planners, economists, political analyst, biologist, geologist, and many sector for product designing, research and studies. This FDP aims to enhances skills in modern geographical techniques, providing hands-on experience to the participants. This course will be beneficial for all the faculty members of the colleges/ Universities.

About the Venue

The Department of Geography, established in 1953, currently offering NEP-based FYUGP and CBCS PG programs with state-of-the-art facilities like smart classrooms, 2 dedicated Remote sensing and GIS labs with one additional shared lab. Total number of desktop computers for the lab is above 120 with high speed internet connectivity and in house- cloud facility for easy data sharing. We promote use of open source software's for remote sensing and GIS such as QGIS, and ILWIS. We also have licenses of Industry reputed applications such as Geomedia, Erdas imagine and ArcGIS.





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No of Seats- 50 participants

Course Fee –

Mode of Training	Course Fee
Online	1000/-
Offline (Physical mode)	2000/-
Hybrid (At least 50 % of the FDP Sessions should be in offline mode)	2000/-

[To be paid in account name- SXC Conference A/c No- 1776010126496 IFSC Code- PUNB0177620]

Kindly keep the transaction slip for future reference.

Course Registration- interested individuals can register themselves using following link-

Registration link- <u>https://forms.gle/QARGKLTtKnwNWJmo6</u>

Last Date for Registration: 21st May, 2025

Program Highlights

Fundamentals of Remote Sensing, GIS, and GPS; Digital Image Processing, GIS Database Creation, Computer aided mapping

Curriculum

26th May 2025: Remote Sensing Basics, Digital Image Processing 27th May 2025: GIS Introduction, Spatial Data 28th May 2025: DEMs, LULC, Image classification 29th May 2025: GPS, Computer aided mapping 30th May 2025: GIS & GPS Integration, GIS operation 31st May 2025: Hands on and Valedictory

Expected Outcome

Faculty development program is expected to improve the basic understanding of geospatial techniques particularly remote sensing, GIS and GPS among the course participants. It is also expected to improve the ability of participants to use these techniques in field of research.

Advisory Committee-

Dr. Fr. Robert P. Kujur, S.J, Chief Patron and Principal, St. Xavier's College, Ranchi Dr. Fr. Ajay Minj, S.J., Patron and Vice- Principal, St. Xavier's College, Ranchi Dr. Jitendra Shukla- Head, University Department of Geography, Ranchi University, Ranchi Shri Animesh Roy- Head, Department of Geography, St. Xavier's College, Ranchi Dr. Sarvottam Kumar- Head, Department of Geography, DSPMU, Ranchi

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Organizing Committee-

Convenor

Dr. Rajeev Ranjan Shrivastava 9431357351

Program Co-Coordinator

Ms. Angeline P Toppo

Program Director Dr. Shiv Kumar 9835757677

Program Assistants Ms. Utkarsha Rani ; Mr. Godwin Pereira

Program Coordinator Dr. Sandeep Chandra 9470562282

Schedule of the Program

Day	Session 1 (Theory) 10:00 to 11:00 am	Tea Break 11:00 to 11:30 am	Session 2 (Theory) 11:30 to 12:30 pm	to 2 pm	Session 3 (Practical) 2:00 to 3:00 pm	0 pm	Session 4 (Practical) 3:30 pm to 4:30 pm
26 th May 2025	Inaugural and overview of the program		Fundamentals of Remote Sensing		RS Data Browsing and Downloading and Key Interpretation		Hands- on
27th May 2025	Fundamentals of GIS		Data Type and Applications of GIS	12:45 pm	Introduction to GIS Software, GIS Database	:00 to 3:30	Hands- on
28 th May 2025	Fundamentals of GPS		Image Rectification and Classification	Lunch Break 1	NDVI, Image Classification and Accuracy Assessment	Break 3:	Hands on
29 th May 2025	Integration of GIS with Remote Sensing and GPS		Basic Principles of Computer Assisted Cartography		Preparing Map layout	Tea]	Hands on
30 th May 2025	Recent Trends in Remote sensing, GIS, GPS		Use of Python in Geospatial analysis		GIS Data Analysis techniques	-	Hands on
31 st May 2025	Digital Elevation Models (DEM)		Hands on (Practical)		Hands on (Practical)		Valedictory Session and Certificate Distribution