

Faculty Development Program on Basics of Remote Sensing and GIS
Organized by IQAC & Department of Geography, St. Xavier's College (Autonomous), Ranchi, Jharkhand
19th May - 23rd May, 2025



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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 enhance 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 -INR 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- <https://forms.gle/QARGKLTtKnwNWJmo6>

Last Date for Registration: 15th May, 2025

Program Highlights

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

Curriculum

19th May 2025: Remote Sensing Basics, Digital Image Processing

20th May 2025: GIS Introduction, Spatial Data

21st May 2025: DEMs, LULC, Image classification

22nd May 2025: GPS, Computer aided mapping

23rd May 2025: GIS & GPS Integration, GIS operation 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 Director

Dr. Shiv Kumar
9835757677

Program Coordinator

Dr. Sandeep Chandra
9470562282

Program Co-Coordinator

Ms. Angeline P Toppo

Program Assistants

Ms. Utkarsha Rani ; Mr. Godwin Pereira

Schedule of the Program

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