



JOINT FACULTY DEVELOPMENT PROGRAM

Next Generation **AI** for Remote Sensing Data Analytics and Multi-Domain Applications

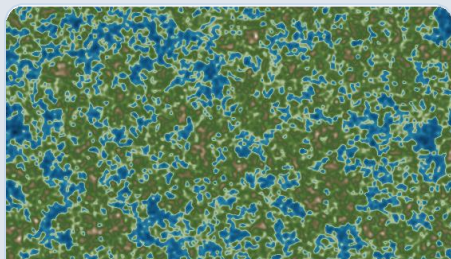
3rd - 14th August 2026

Online Mode

Mon-Fri • 4:00 - 8:00 PM

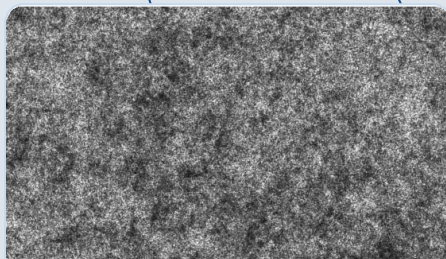
SUPPORTED BY

Ministry of Electronics and Information Technology (MeitY),
Government of India



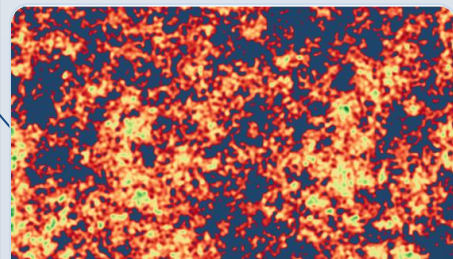
OPTICAL

MULTISPECTRAL



SAR

RADAR BACKSCATTER



NDVI

VEGETATION INDEX

Representative earth-observation data products — optical, SAR & AI-derived vegetation analytics

COORDINATORS

PRINCIPAL COORDINATOR

Dr. Ajay Kumar Maurya

NIT Patna

ajay.ec@nitp.ac.in

PRINCIPAL COORDINATOR

Dr. Santosh Kumar Tripathy

NIT Patna

stripathy.cs@nitp.ac.in

JOINT PRINCIPAL
COORDINATOR

Prof. Sanjeev Manhas

IIT Roorkee

sanjeev.manhas@ece.iitr.ac.in

JOINT PRINCIPAL
COORDINATOR

Dr. Ranjeet Kumar Ranjan

IIITDM Jabalpur

ranjeet.kr@iiitdmj.ac.in

ABOUT THE THEME

This FDP equips faculty members with advanced knowledge and practical skills in remote sensing, geospatial analytics and data-driven approaches for agriculture and Earth observation. It emphasizes integrating satellite data with AI, Machine Learning and Deep Learning to address real-world challenges – crop monitoring, land use/land cover classification, soil moisture estimation, disaster assessment and climate change analysis – with hands-on experience on multispectral, hyperspectral and SAR datasets.

OBJECTIVES

- Fundamental & advanced concepts of remote sensing and geospatial data analytics.
- Understanding of optical, SAR, thermal and hyperspectral satellite datasets.
- Pre-processing skills – radiometric, geometric & atmospheric correction.
- Practical ML/DL techniques for remote sensing applications.
- Agricultural applications: crop classification, health assessment, yield prediction.
- Disaster monitoring & assessment – flood and drought analysis.
- Hands-on tools: Python, Google Earth Engine (GEE), ESA SNAP & geospatial software.

FDP INCLUDES

- 40 hours of instructor-led live online hands-on learning & interactive query sessions (10 days × 4 hrs).
- Study material, training PPTs, recorded sessions & project code.
- E-certificate on ≥75% attendance and completion of end-of-FDP assessment.
- Experts from industry & prestigious institutes (IIT, NIT, CFTI, ISRO) from India and abroad.

WHO CAN PARTICIPATE

Faculty members and research scholars of recognized universities from India and abroad, and industry personnel. **Priority is given to faculty members.**

POTENTIAL RESOURCE PERSONS

Dr. Hari Shankar
Scientist/Engineer 'SF', IIRS Dehradun

Dr. Dharmendra Pandey
Scientist/Engineer 'SF', SAC ISRO

Dr. Deepak Murguan
Lead EO Scientist, Cropin

Dr. Dipankar Mandal
IIT Guwahati

Dr. Subhadip Dey
IIT Kharagpur

Dr. Gopal Singh Phartiyal
BITS Pilani

...and other experts from industry and prestigious institutes such as IITs, NITs and CFTIs.

REGISTRATION FEE (w.e.f. 14 July 2026)

ACADEMIA – FACULTY / STUDENT
(INDIA / SAARC / AFRICA)

Rs. 885/-

INDUSTRY PARTICIPANTS

Rs. 1770/-

REST OF THE WORLD

USD 60

REGISTRATION PROCESS

- Pay the registration fee through **online mode** to the account below.
- Fill the registration form: https://docs.google.com/forms/d/e/1FAIpQLSczpTBcSVdaj3Rb9lztCeTSrU1HaFmtWXq8M5ohZizCP_xelQ/viewform?usp=header

Beneficiary Name	PDPM IIITDM Jabalpur
Bank Name	INDIAN BANK
A/C No.	50018692852
IFSC Code	IDIB000M694



REGISTRATION DEADLINE 31st July 2026, 11:59 PM (IST)