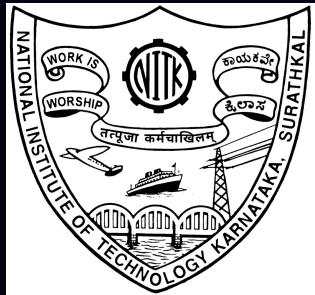


A "Five-Day"
Faculty Development Program
on

Advances in Satellite Tracking
and Geospatial Techniques for
Water Resources Management

Offline [in person] Mode

7th – 11th April 2025



Jointly Organised by

Department of Water Resources &
Ocean Engineering and Department of
Electronics and Communications Engineering,
National Institute of Technology Karnataka,
Surathkal.

in Association with
IEEE GRSS Bangalore chapter &
NITK IEEE GRSS SBC



About FDP:

The FDP aims to provide participants with a comprehensive understanding of remote sensing, geoinformatics, and advanced computational techniques for water resource applications. Covering both theoretical and practical aspects, the program includes sessions on remote sensing fundamentals, UAV applications, AI-based image processing and ISRO's advancements, satellite tracking. Hands-on training is provided through practical sessions on Google Earth Engine (GEE), Python scripting for satellite data processing, PCSWMM for hydrological modelling, and deep learning applications. Participants will also explore SAR applications, web-GIS, spectroradiometer and open-source datasets for water and agricultural studies, equipping them with essential skills for geospatial analysis and decision-making in water resource management.

Key objectives:

The Primary Objectives of the course are as follows

- To enhance understanding of remote sensing fundamentals and its applications in water resources management.
- To provide hands-on experience with advanced geospatial tools, including Google Earth Engine, Python scripting, and PCSWMM.
- To explore the integration of AI, deep learning, and SAR techniques for efficient satellite data processing and analysis.

Patron

Prof. B. Ravi

Director, National Institute of Technology
Karnataka, Surathkal

Advisory Committee

- **Prof. Subhash C. Yaragal**, Deputy Director, NITK Surathkal
- **Prof. Dwarakish G S**, Dean (Academics), NITK Surathkal
- **Prof. Udaya Bhat**, Dean (R&C), NITK Surathkal
- **Prof. Varija K.**, HOD, Department of Water Resources & Ocean Engineering, NITK Surathkal.
- **Prof. N. Shekar V. Shet**, HOD, Department of Electronics and Communication Engineering, NITK Surathkal.

Convenors

- **Dr. Shwetha H.R.**, Assistant Professor, Department of Water Resources & Ocean Engineering, NITK Surathkal.
- **Dr. Chandan M. C.**, Assistant Professor, Department of Water Resources & Ocean Engineering, NITK Surathkal.
- **Dr. Shyam Lal**, Associate Professor, Department of Electronics and Communication Engineering, NITK Surathkal.
- **Dr. Raghavendra B.S.**, Associate Professor, Department of Electronics and Communication Engineering, NITK Surathkal.

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Who can attend (in the order of preference)

- Faculty members from academic institutions.
- Engineers and researchers from Industry organizations including R&D laboratories.
- Research scholars, Ph.D, SRF, JRF and M.Tech/UG students or equivalent.

Registration Fees :

Category	Fees (in Rupees) includes GST
IEEE GRSS Student Members/NITK Students	1180
Non-IEEE GRSS Student Members	1770
IEEE GRSS Professional Members	2360
Non-IEEE GRSS Professional Members/ Industry/ Others	3540

Link for Registration:



[Click Here](#)

Payment Details:

- Name of Beneficiary : **Director NITK**
- Account Number : **37772503911**
- IFSC Code : **SBIN0002273**



Important Dates

- Last date for registration: **28-Mar-2025**
- Notification of selected participants: **30-Mar-2025**

FDP Inclusions:

- FDP kit will be provided on the day of inauguration
- Working lunch, and refreshments will be arranged during the FDP.

Accommodation:

- Accommodation will be provided on a payment basis based on availability of rooms,
- Limited accommodation on single/sharing basis and AC/Non-AC rooms are available in NITK campus.

Confirmed Resource Persons:

- **Prof. Lakshman Nandagiri, NITK**
- **Dr. Indu J., IIT Bombay**
- **Dr. Shyam Lal, NITK**
- **Dr. Pruthviraj U, NITK**
- **Mr. Suresh Kumar H N, Deputy Director Mechanical Systems Area, URSC, ISRO (Retired)**
- **Dr. Puspendra. K. Singh, SVPUAT, Meerut**
- **Dr. Shwetha H R, NITK**
- **Dr. Chandan M C, NITK**
- **Dr. Kaushik, H & H Solutions**
- **Mr. Vikas Kashyap H.S, Senior Cloud Engineer, TCS, Bangalore**

Student Coordinators:

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About WROE Department:

The Department of Water Resources & Ocean Engineering (Formerly Applied Mechanics and Hydraulics) was established in 1960 and has earned a good reputation as a centre for academic, research and industrial consulting activities. Academic programmes leading to M. Tech Degree in Marine Structures, Water Resources Engineering and Management, and Geoinformatics and Ph.D. Degrees in the broad areas of Hydraulics and Water Resources Engineering, Coastal Engineering Remote Sensing and GIS Applications are offered. Candidates sponsored under the Quality Improvement Program (QIP) are admitted to these programs in addition to regular students.

About IEEE GRSS:

The Bangalore Section IEEE Geoscience and Remote Sensing Society (GRSS) Chapter, unites like-minded IEEE members interested in satellite remote sensing and geographical information science (GISci). The chapter conducts seminars/workshops on GRS topics, promotes contributions to IEEE GRSS journals, and organizes short courses for PG students, researchers, faculty, and industry professionals.