

## Eligibility & Mode of Selection

- P.G. and Ph.D. students from a recognized university/institute working for their thesis/project in relevant domain are eligible to apply.
- These relevant domains of interest include: Remote Sensing & GIS with applications in Agriculture and Water resources.
- The applicant must submit letter of authentication from their Supervisor [or] Head of the Department [or] Head of the Institute indicating their association with the institute and a “No Objection Certificate (NOC)” for allowing the student to undergo training in the workshop, if selected.
- There is no dedicated format. However, it must be obtained on institute/university letter head.
- A one-page abstract of student research proposal has to be submitted along with application.
- Candidates will be shortlisted based on their credentials, and research domain.
- This workshop is limited to 20 participants only.

## Privileges to Participants

- NO Registration fee
- Participants will be reimbursed round-trip ‘sleeper’ class train fare (or, Non AC bus fare) between their place of residence and Hyderabad
- NO charges for accommodation and food

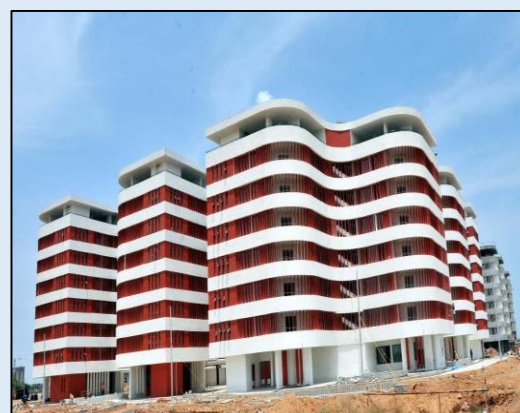
## Registration Link

- Fill the google form (with supporting documents) on or before 25 June 2022, Saturday

<https://forms.gle/8ECoxZTZy9XptQh39>

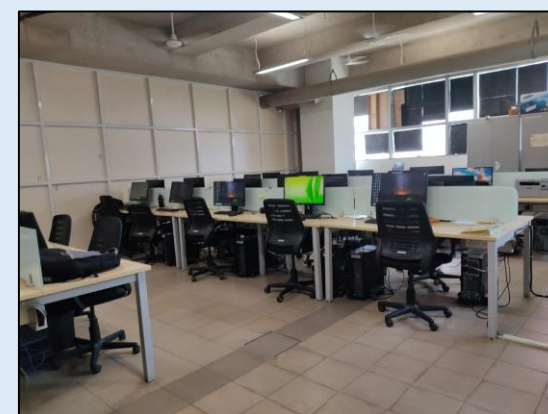
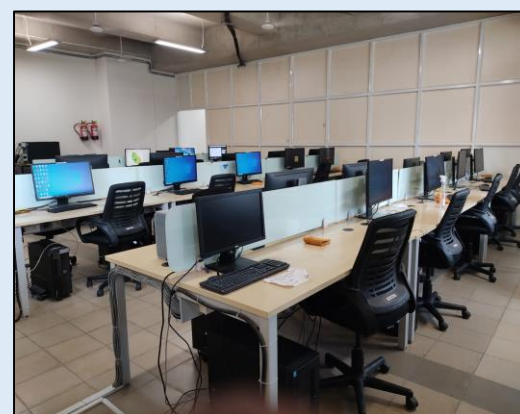
## Accommodation

- Accommodation to the participants will be provided in IITH student hostels
- Food to the participants will be served in IITH mess



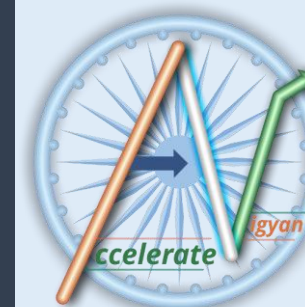
## Venue

- All lectures and practice sessions will happen in the GIS Lab (Room: C-207)
- Geographical location: 17.59580, 78.12330



## Mark your Calendar

- Submission of Application → 25 June, Saturday  
(through google form)
- Intimation on Selection → 26 June, Sunday
- Confirmation by Participants → 27 June, Monday
- Confirmation by Participants → 28 June, Tuesday  
(Waitlisted candidates)
- Workshop dates → 01-07 July 2022



7-Day SERB Sponsored Workshop on  
**Remote Sensing and GIS for Agriculture  
and Water Resources Management**

**01 – 07 July, 2022**



**Organized by**

Department of Civil Engineering  
**Indian Institute of Technology Hyderabad**  
Kandi, Sangareddy – 502284, Telangana

## About IIT Hyderabad

Indian Institute of Technology Hyderabad (IITH) is a premiere institute of science and technology established in 2008. IITH has been consistently ranked in the top 10 institutes in India under Engineering category (source: NIRF) making it one of the most preferred schools for science and technology in the country. The very foundation of IIT Hyderabad is based on research and innovation. IITH creates a unique holistic ecosystem for education that offers interactive learning, a very flexible academic structure, and cutting-edge research.

## About Civil Engineering Department

Department of Civil Engineering since its inception in 2008 has been at the forefront of teaching, research and consulting with a focus in the broad areas of Geotechnical, Structural, Transportation, Hydraulics and Water Resources, and Environmental Engineering. The department vision is to become a pioneering department in the country for teaching, research and consultancy in existing and emerging areas of Civil Engineering.

## About Karyashala Scheme

KARYASHALA is an effort by the Science and Engineering Research Board (SERB), Government of India via Accelerate Vigyan to improve research productivity of promising PG and Ph.D. Students from universities and colleges through high-end workshops on specific themes and aims to provide opportunities to acquire specialized research skills.

## Workshop Objectives

- Impart theoretical concepts of RS and GIS
- Showcase the application of RS and GIS in solving scientific problems of agriculture and water resources
- Demonstrate various open-source GIS tools developed for agriculture and water resources applications
- Discuss research problems of participants and extend support to the extent possible

## Course Coordinator

**Dr. KBVN Phanindra**

Associate Professor, CE, IITH

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## Supporting Team

Mr. Ch. Syam ([Ce19mtech11022@iith.ac.in](mailto:Ce19mtech11022@iith.ac.in)) 63036 00764

Mr. G. Rajendar ([rajender.g@ce.iith.ac.in](mailto:rajender.g@ce.iith.ac.in)) 99595 44326

Day	Session	Topic	Speaker
1	Forenoon	Overview of Remote Sensing (Image acquisition, processing, analysis) and G.I.S. (Map projections, Geo-processing, GIS modelling)	Dr. K.B.V.N. Phanindra Civil Engineering, IIT Hyderabad
	Afternoon	Hydro-geologic characterization and Groundwater management using GIS tools	
2	Forenoon	Hydrologic Modelling with QGIS tools – Methodology and Applications	Dr. Venkat Reddy K Civil Engineering, NIT Warangal
	Afternoon	Demo / Hands on session on QSWAT	
3	Forenoon	Internet of Things (IoT) for Agriculture	Prof. Surya Durbha CSRE, IIT Bombay
	Afternoon	Demonstration / Tutorial on IoT for Agriculture	
4	Forenoon	Watershed Management using QGIS tools – Methodology and Applications	Dr. Raaj Ramsankaran Civil Engineering, IIT Bombay
	Afternoon	Demo / Hands on session on IWAMS in QGIS	
5	Forenoon	An overview of precision irrigation and precision agriculture	Prof. J. Adinarayana CSRE, IIT Bombay
	Afternoon	Training on Agri-DSS (A decision support system for agricultural applications)	
6	Forenoon	Data acquisition, processing, and analysis for Urban flood modeling	Dr. Satish K. Regonda Civil Engineering, IIT Hyderabad
	Afternoon	Demo / Hands on session on Google Earth Engine (with focus on urban floods)	
7	Forenoon	Introduction to Python scripting, working with IDLE, Plugins in QGIS	D. Sravani Civil Engineering, RGUKT Nuzvid
	Afternoon	Demo / Hands on session on HS-FRAG (A QGIS plugin for segmentation)	