

## About the Institutes

**GMRIT:** GMR Institute of Technology (GMRIT) was established in the year 1997 by GMR Varalakshmi Foundation – the corporate social responsibility arm of GMR Group. GMRIT offers aspiring engineers' high quality technical education. It is currently placed among the top 50 colleges in the country and among the top 5 colleges in the state of Andhra Pradesh. GMRIT provides its learning community state-of-the-art facilities, infrastructure, and a competent faculty. The Institute encourages collaborative learning between industry and academia as a means of reinforcing its curriculum with practical and real-world experiences. It offers Eight UG and Five PG programs. All B.Tech programs are accredited by NBA under Tier-1 complying with Washington Accord and the college is accredited as an 'A' grade institution by NAAC for the three consecutive cycles. In the NIRF-ranking GMRIT was placed in the band of 201-300 for the year 2024.

**TiHAN Foundation-IIT, HYDERABAD:** NMICPS Technology Innovation Hub on Autonomous Navigation Foundation (NM-ICPS TiHAN) is a Section 8 company founded at IIT Hyderabad. Department of Science & Technology (DST), Govt of India under the National Mission on Interdisciplinary Cyber-Physical Systems (NMICPS), has sanctioned the prestigious Technology Innovation Hub to IIT Hyderabad in the technological vertical of Autonomous Navigation and Data Acquisition System (UAVs, ROVs, etc). TiHAN is a wholly funded Technology Innovation Hub in IIT – Hyderabad by Government of India through DST under NM-ICPS which is a Pan India Mission and covers the entire gamut of India that includes Central Ministries, State Governments, Industry and Academia.

## Chief Patron

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Director-Education, GMRVF

## Patron

**Dr. C.L.V.R.S.V. Prasad**  
Principal, GMRIT

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## Coordinator

**Dr. B. Anil Kumar**, Associate Professor, GMRIT

## Organizing Committee

**Dr. D. Suresh**, Sr. Assistant Professor, GMRIT  
**Dr. Yogesh Misra**, Professor, GMRIT  
**Dr. P. Kalyan Chakravarthi**, Assistant Professor, GMRIT

## Resource Persons

**Ms. N.Snehitha Sai**, R&D Engineer, AU-ICDT, Visakhapatnam  
*Topic: Introduction to UAV Technology, Data Acquisition Techniques*

**Mr.B. Teja Avinash**, Jr. Engineer, AU-ICDT, Visakhapatnam  
*Topic: Basic electronics for UAV, AI and Machine Learning in UAVs*

**Mr.M.MohithKumar**, Jr. Engineer, AU-ICDT, Visakhapatnam  
*Topic: Fundamentals of Navigation Systems, Regulations and Safety, UAV Programming.*

**Dr. Anil Kumar B**, Associate Professor, ECE, GMRIT.  
*Topic: Drone Assembling and Testing*

**Dr. M. Srinivas Rao**, Professor & Head of Innovations and Startups, GMRIT.  
*Topic: Igniting the Entrepreneurial Mindset: From Idea to Impact*



## GMR Institute of Technology Conducting Five Day Skill Development Workshop in association with TiHAN Foundation-IIT, Hyderabad

Titled

## Navigating with UAVs: Technology and Trends 27<sup>th</sup> to 31<sup>st</sup> January 2025

Organized by

Department of Electronics & Communication  
Engineering



Visit us at: <https://www.gmr.it.edu.in/>  
<https://tihan.iit.ac.in/>

## About the Departments

**Department of Electronics and communication Engineering** of GMRIT was established in 1997. The department is accredited by NBA under Tier-1 and admits 180 students annually. Strong foundation in ECE fundamentals, emphasizing mathematical, scientific principles, cultivating meritorious and self-disciplined engineers is the motto of this department. Moreover, highly qualified faculty and vibrant academic atmosphere nurture the students' innate skills to achieve the department's goals. Industry internships, extra-curricular and co-curricular activities bridge the gap between class room theories and real-world applications, eventually transforming the student potentially ready for industry. In addition, the state-of-the-art research facilities encourage students to develop research competencies and enable them to broaden their horizons.

**NM-ICPS TiHAN Foundation** will act as an engine of growth that would benefit national initiatives in health, education, energy, environment, agriculture, strategic cum security, and industrial sectors, Industry 4.0, SMART Cities, Sustainable Development Goals(SDGs) etc. NMICPS is an integrated system of upcoming technology, which in turn is being taken up on priority basis and will indeed bring a paradigm shift in entire skill sets requirement. TiHAN is recognized as a Scientific and Industrial Research Organisation (SIRO) by the Department of Scientific and Industrial Research (DSIR) under the Ministry of Science and Technology, Government of India. conceptual, theoretical, and methodological innovations. It identifies key

## About the SDW

The "Navigating with UAVs: Technology and Trends" skill development workshop is an immersive and comprehensive event designed to explore the cutting-edge advancements and practical applications of Unmanned Aerial Vehicles (UAVs) in navigation. This workshop brings together experts, industry leaders, researchers, and enthusiasts to delve into the dynamic world of UAV navigation technology, offering a blend of theoretical insights and hands-on experiences. The primary aim of the workshop is to provide participants with a comprehensive understanding of UAVs, focusing on their technological advancements, navigation methodologies, and diverse applications. The event is structured to cater to participants with varying levels of experience, offering both foundational knowledge and advanced insights into UAV navigation.

## Topics Covered

- Introduction to UAV Technology
- Basic electronics for UAV
- Introduction to Flight controllers
- Fundamentals of Navigation Systems
- Regulations and Safety, UAV Programming
- Applications of UAVs in Navigation
- Communication and Control Systems
- Sensor Fusion and Advanced Perception
- Practical Session: UAV Flight Basics
- Case Studies and Industry Insights
- Innovation and Career Opportunities in UAVs
- Igniting the Entrepreneurial Mindset: From Idea to Impact

## Contact Persons

**Dr. Anil Kumar B** : 9963268763

**Dr. D. Suresh** : 9494011543

## Eligibility

All interested Faculty, Research Scholars, PG Students, and Industry Personnel

## Registration Details

**SC Category Students** : No Fee

\*The above category participants need to submit photo copy of college ID, Caste category Certificate.

**Other than SC Category** :

UG/PG Students : Rs. 500/-

Faculty/ Research Scholars : Rs.1000/-

Participant from Industry : Rs.1500/-

\*The above registration fee excluding GST 18%.

\*The total number of participants restricted to 50. Out of 40 are SC category.

## Bank Account Details for Payment

Account : Anil Kumar B

Account number : 183610100002069

Bank Name : Union Bank of India

Branch : GMR Nagar, Rajam

IFSC Code : UBIN0818364

Phonepe/Google Pay : 9963268763

(Please call before the registration fee payment for seat availability.)

## Certificate

A test will be conducted by the end of the workshop. The certificate will be issued for those participants who have attended the program with minimum 80% attendance and scored minimum of 60% in the test.