

## Patrons

### Prof. M.K Barua

Director  
IITRAM, Ahmedabad.

## Advisory committee

### Group Captain (Dr.) Rajiv Kumar Narang

Senior fellow Manohar Parrikar Institute for Defense Studies and Analysis (Autonomous body of ministry of defense, Government of India), New Delhi.

### Shri Anil C. Mathur

Visiting professor, Center for Space Science and Technology, IIT Roorkee

## Organizing Committee

### Dr. Axaykumar Mehta

Professor, Electrical and Computer Science Engineering, IITRAM, Ahmedabad.

### Dr. Priyesh Chauhan

Assistant Professor, Electrical and Computer Science Engineering, IITRAM, Ahmedabad.

### Dr. Jagat Rath

Assistant Professor, Mechanical and Aerospace Engineering, IITRAM, Ahmedabad.

### Dr. Ravi Bhandari

Assistant Professor, Electrical and Computer Science Engineering, IITRAM, Ahmedabad.

## About IITRAM

The Institute of Infrastructure Technology Research and Management (IITRAM) in Ahmedabad is a premier institution established by the Government of Gujarat to promote high-quality technical education and research in the field of infrastructure. Located in the vibrant city of Ahmedabad, IITRAM stands at the forefront of innovation and academic excellence. The institute's vision is to be a globally recognized institution in infrastructure technology, fostering innovation, research, and holistic development of students.

IITRAM boasts state-of-the-art facilities, including cutting-edge laboratories, modern classrooms, and a well-stocked library to support hands-on learning and research. The institute is proud of its expert faculty, comprising highly qualified and experienced professors dedicated to nurturing the next generation of infrastructure professionals. Strong partnerships with leading companies provide students with real-world exposure and internship opportunities, emphasizing the importance of industry collaboration.

## Five-Day Short-Term Training Program (STTP) on Introduction to Drone Design, Navigation, and Regulations

14 to 18 October 2024



Organized by:



## Center of Excellence Drone Technology Institute of Infrastructure, Technology, Research, and Management (IITRAM)

(An Autonomous University established by  
Government of Gujarat)

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## Course coordinators

### Dr. Abhishek Rawat

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### Dr. Ajit Kumar

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Engineering, IITRAM  
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## CoE Drone Technology

The Centre of Excellence (CoE) - Drone Technology at IITRAM Ahmedabad has established a state-of-the-art lab to support cutting-edge research and education in the advancement and application of this Unmanned Technology of Drones.

The center has developed the capability to design and assemble multirotor and fixed wing UAV. The center includes workspaces with basic infrastructure for small drone fabrication, system integration, and field tests. It also provides a platform for industry experts, professionals, and researchers in drone technology to share their knowledge on design, innovations, utilization, research, and applications. The center has also initiated flight tests using swadeshi Navigation with Indian Constellation (NAVIC) and developed capability of the SLAM based Drone operations.

## STTP Theme

Drones, or unmanned aerial vehicles (UAVs), are sophisticated flying robots that can be remotely controlled or operate autonomously using software-driven flight plans, onboard sensors, and GPS. This STTP focuses on the principles of navigation, guidance, and control of drones with in-depth insights through simulations and live demonstrations.

It aims to provide a comprehensive introduction to various drone configurations, autopilot systems, electronic speed controllers (ESCs), sensors, and strategies for control and navigation.

This STTP will also cover regulations and certification process applied for the different types of drones.

## Resource Persons

- **Shri Tapan Mishra**  
Former Director SAC-ISRO and PRL
- **Prof. Dharmendra Singh**  
Director IIIT, Vadodara
- **Prof. Rajiv Kumar Narang**  
Senior fellow MP-IDSA, New Delhi
- **Prof. Abhishek** Professor, IIT Kanpur
- **Prof. Mangal Kothari** Professor, IIT Kanpur

## STTP Highlights

- Expert speakers from leading academia and industry
- Interactive sessions with a focus on design and hands-on experiments.

- Real-time multirotor demonstrations and practice.
- Rotorcraft RPAS / Drone simulator practice.
- Comprehensive themes: drone design, navigation control and guidance
- Drone fundamentals and controls
- Industry applications, emerging research
- Real time demonstration and Interactive session
- Regulatory framework

## Registration fee (in INR) / participant

- Faculty / Industrial professionals: 4000
- Research Scholars/Students: 1000
- **Last date for Registration 5<sup>th</sup> Oct. 2024**

A course kit, lunch and high tea will be served during the STTP period.

## Contact Details

For further queries, please contact:

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## Scan for Registration



For Registration

## Account details for Payment

**Bank Name:** Axis Bank Ltd

**Bank Account Name:** Institute of Infrastructure Technology Research and Management

Bank Account Number: 923010019592531

**IFSC Code:** UTIB0002645

**Branch Name:** Hatkeshwar Branch, Ahmedabad

**MICR Code:** 380211048