



सत्यमेव जयते

# MeitY

Government of India

**Dr. B.R. Ambedkar, National Institute of Technology  
Jalandhar, Punjab-144011**



**FIVE DAYS WEEKENDS  
(DECEMBER 18-22, 2023)**

## **BOOTCAMP ON**

# **EXPLORING DRONES: APPLICATIONS AND SECURITY MEASURES**

**UNDER THE PROJECT "CAPACITY BUILDING FOR HUMAN  
RESOURCES IN UNMANNED AIRCRAFT SYSTEM (DRONE &  
RELATED TECHNOLOGY)" SUPPORTED BY THE MINISTRY OF  
ELECTRONICS AND INFORMATION TECHNOLOGY**

### About Bootcamp

The aim of the Bootcamp is to provide participants with a comprehensive understanding of the evolving landscape of unmanned aerial vehicles (UAVs) in both their practical applications and the critical aspect of security. Through a combination of theoretical knowledge and hands-on exercises, participants will be equipped with the skills necessary to harness the potential of UAVs for various tasks and safeguard against potential security threats and challenges in this rapidly advancing field. The objectives of bootcamps are as follows:

- Gain a comprehensive understanding of UAV technologies, from foundational theories to advanced applications.
- Explore real-world use cases across industries, from agriculture to surveillance and beyond.
- Dive into the crucial aspect of UAV security, ensuring safe and responsible operation.
- Hands-on experience with UAV operation, flight planning, and simulation.
- Network with fellow enthusiasts and industry experts, fostering valuable connections.

### Bootcamp Contents

- Principles of UAV Flight: Aerodynamics, Propulsion, and Control
- UAV Components, Systems Overview, and Applications
- UAV Flight Planning and Operation
- Advanced UAV Concepts, Emerging Trends and Innovation
- Security challenges of UAVs
- Swarm Intelligence and Collaborative UAVs
- AI and Machine Learning in UAVs

### Who Can Attend?

- Studying in 1st year/ Second semester onwards of B.E. / B.Tech./ equivalent (or)
- Pursuing B.Sc. / BCA / equivalent (or)
- Studying in Postgraduate- M.E. / M.Tech. / M.Sc. / MCA / equivalent (or)
- PhD Research scholars from the relevant stream (or)
- Faculty / Working Professionals / Staff from Industry / Govt. organization (with above educational qualification)

### Resource Persons

- Experts from academia and industry in Unmanned Aerial Vehicles & related technologies

### Registration

- Registration Fee Rs 250/- (Excluding GST) for external Participants Rs. 250/- for internal participants (Limited seats available)

### Bootcamp Registration Link

[https://www.nitj.ac.in/events\\_registration/  
bootcamp2023/login](https://www.nitj.ac.in/events_registration/bootcamp2023/login)

or

(Scan QR-Code to Register)

**"Hands-On Sessions"**  
**Limited Seats Available**



### **Patron**

Prof. Binod Kumar  
Kanaujia  
(Director NITJ)

### **Co-ordinators**

- Prof. Arun Khosla
- Dr. H. Chore
- Dr. O. P. Verma
- Dr. K. P. Sharma
- Dr. Samayveer Singh

### **Contact Details**

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