

2025-26 | Five Day Boot Camp on



Drone Technology Fundamentals and Applications

Date: 22/12/2025 to 26/12/2025

Coordinators:

Dr. Anand Darji, Professor, SVNIT, Surat

Mr. Dhruv Singh Thakur, Assistant Professor, CGPIT, UTU, Bardoli

Dr. Suresh Dahiya, Assistant Professor, SVNIT, Surat

Dr. Dipti Rana, Associate Professor, SVNIT, Surat

Mr. Pratham Gheewala, Lecturer, CGPIT, UTU, Bardoli

Team Members:

Mr. Aksh Patel, Research Associate, SVNIT, Surat

Mr. Rinkesh Patel, Research Associate, SVNIT, Surat

Ms. Shreya Sidabache, Lab Engineer, SVNIT, Surat

Mr. Rishbh Amar, Project Engineer, SVNIT, Surat

Number of Students Participated: 31

Department of Information Technology/Cyber Security
C. G. Patel Institute of Technology,
Uka Tarsadia University
Boot Camp Report
on
“Drone Technology Fundamentals and Applications”

About the Bootcamp Program:

SVNIT, Surat, and CGPIT, UTU, Bardoli jointly organized a Bootcamp Training Program on Capacity Building for Human Resource Development in Unmanned Aircraft Systems (Drone Assembly, Navigation, and Related Applications) in India, under a project funded by the Ministry of Electronics and Information Technology (MeitY).

Main Objective:

The program is designed to equip students, researchers, faculty members, and working professionals with a comprehensive understanding of drone systems, including design, assembly, navigation, control, data communication, and regulatory compliance, while fostering innovation and industry readiness in drone technologies across India.

This interactive Boot Camp covered:

- Fundamentals of Drone Dynamics and Systems
- Drone Sensors and Applications
- Navigation, Control, and Communication
- Machine Learning
- Hands-on Practical Training

Practical exposure includes:

- Drone assembly and live flying demonstrations
- Practicals on Ardupilot and Mission Planner
- 3D printing sessions for drone components

The sessions are delivered by renowned academicians and industry experts, ensuring participants gain both academic depth and practical industry insights.

Expected Outcomes of the Bootcamp

Upon successful completion of the bootcamp, participants are expected to:

- Gain strong conceptual clarity in drone fundamentals and advanced applications
- Develop hands-on skills in drone assembly, configuration, programming, and flight control
- Understand regulatory requirements and safe drone operation practices
- Acquire exposure to modern tools, software platforms, and emerging technologies
- Enhance employability and research capability in drone and allied technology domains
- Receive certification and a 100% refund of the registration fee, reinforcing successful learning outcomes.

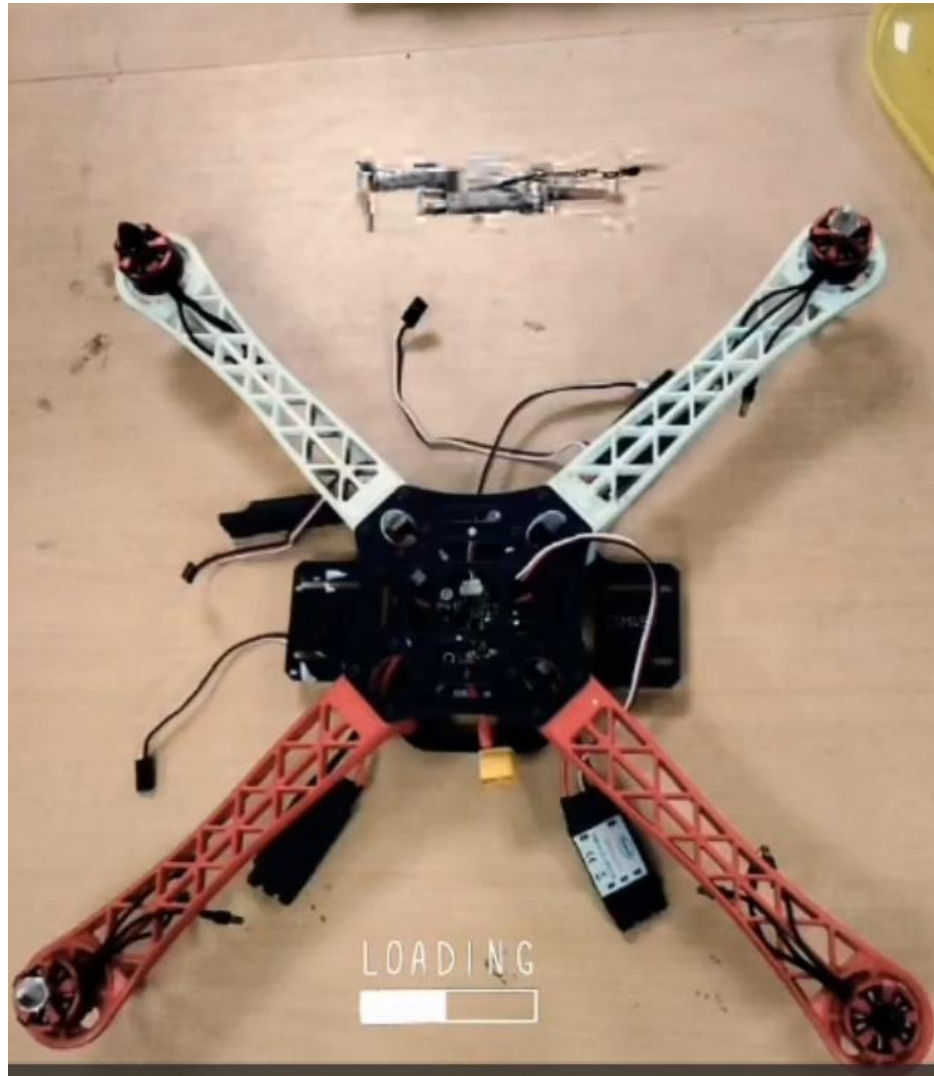
Glimpses of the sessions



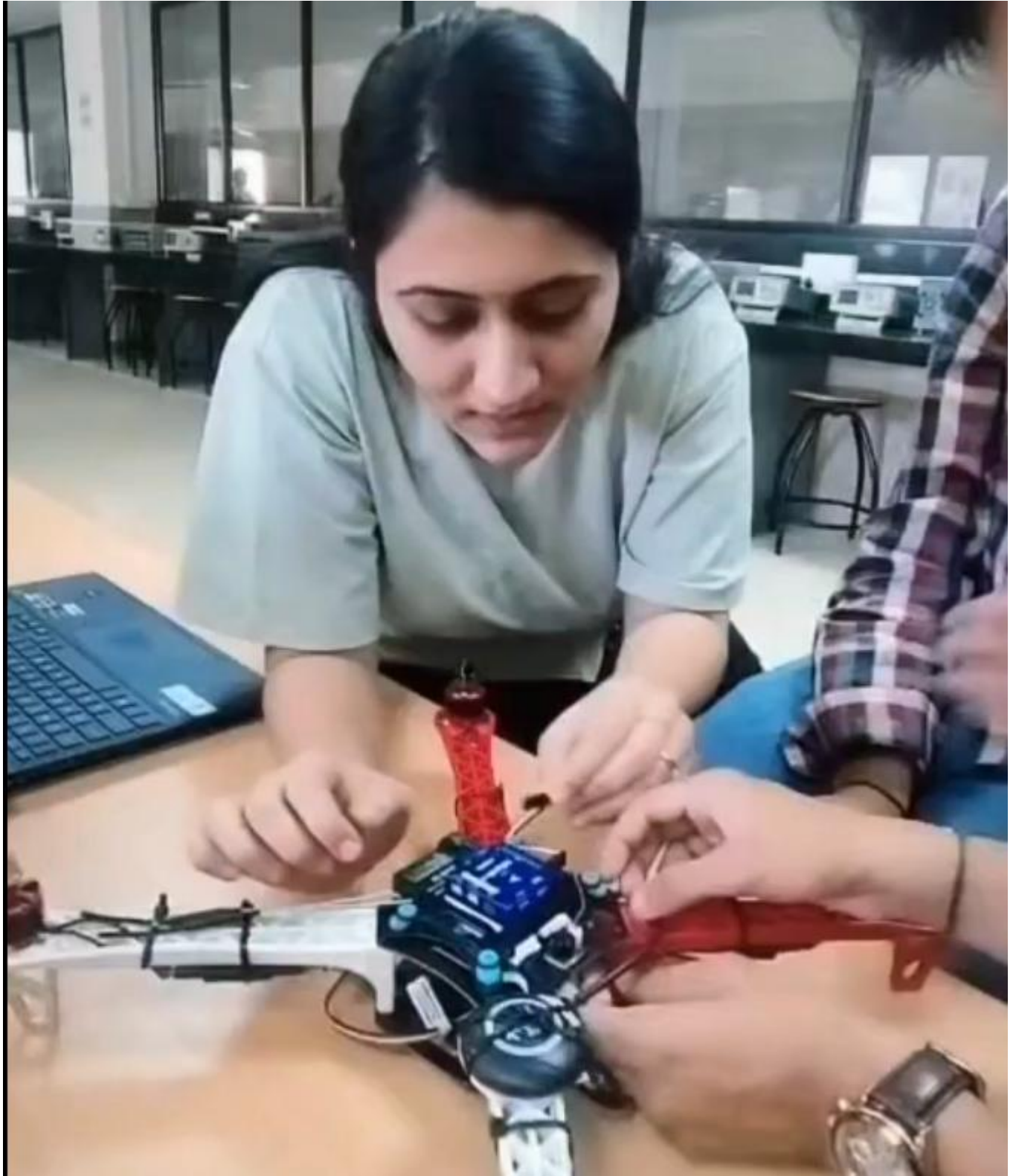
Dr. Anand Darji is presenting a session.



Hands-on session conducted by Ms. Shreya Sidabache.



Drone Hardware



Students doing hands-on practice



Group photo session with students & trainers



BOOT CAMP

on

Drone Technology Fundamentals and Applications

conducted by

S.V. NATIONAL INSTITUTE OF TECHNOLOGY, SURAT

and

CHHOTUBHAI GOPALBHAI PATEL INSTITUTE OF TECHNOLOGY, BARDOLI

Date: 22 - 26 December 2025



About Bootcamp Program:

SVNIT, Surat and CGPIT, Bardoli are jointly organising a Bootcamp Training Program on Capacity Building for Human Resource Development in Unmanned Aircraft Systems (Drone Assembly, Navigation and related Applications) in India, under a project funded by MeitY (Ministry of Electronics and Information Technology).

Tentative Bootcamp Course Content:

- Introduction to drone dynamics: Processors, Pixhawk, Autopilot, and Interfacing of peripherals
- Introduction of DGCA rules
- Introduction of Drone Sensors
- Drone Applications
- Deep Learning
- Drone navigation and control using GPS and GNSS
- Data Communication, diversity, and networking
- Drone Assembly and Flying Demonstration
- Practical Session on 3D printing
- Practicals on Ardupilot and Mission Planner
- Python for Drone and More...

Duration : 5 days (40 Hrs)

Benefits of the Program:

- Theory & Hands-on experience on tools
- Session delivery by renowned/industry experts
- Certification upon successful completion

Eligibility:

- Studying in B.E./ Btech or Postgraduate in M.Sc./ MCA/ M.E./ M.tech. or PhD
- Faculty/ Working Professional/ Staff from Industry/ Govt. organizations (with above education qualification)



Team Members:

1. Aksh Patel (Research Associate) (+919662166835)
2. Rinkesh Patel (Research Associate) (+918849486604)
3. Shreya Sidabache (Lab Engineer) (+919601608360)
4. Rishabh Amar (Project Engineer)(+6352954130)

Registration :

- Fees: Rs. 500/- (Refundable)

Candidates who successfully complete the course, will get 100% refund of the registration fees.

Date : 22 - 26 December 2025

Timing: 9:30 A.M. to 6:30 P.M.

Hostel Accommodation may be provided based on prior approval from the organizing authority on a payment basis (not included in the Registration Fee)

Training Location/ Address: SVNIT, Surat

Contact Details:

Email: rishabhamar_proj@eced.svnit.ac.in

Contact number: (+91) 6352954130

Payment Details: Rs. 500/- in cash to be paid to Mr. Pratham Gheewala

Registration Link:

<https://forms.gle/xkvVMYftswxsTspo7>

Or

Scan through QR code reader



Limited Seats are Available (Registration will be done on a first-come, first-served basis)

For more details visit: www.svnit.ac.in

Avionics Lab site:

<https://www.svnit.ac.in/web/department/Electronics/MeitY%20Drone%20Project/>

Coordinators:

1. Dr. Anand Darji, add@eced.svnit.ac.in
2. Mr. Dhruv Singh Thakur, dhruv.thakur@utu.ac.in
3. Dr.Suresh Dahiya, suresh.dahiya@eced.svnit.ac.in
4. Dr.Dipti Rana, dpr@eced.svnit.ac.in
5. Mr. Pratham Gheewala, pratham.gheewala@utu.ac.in

Concluding Remarks:

The Bootcamp on Drone Technology Fundamentals and Applications serves as a valuable initiative toward strengthening India's drone ecosystem by nurturing skilled professionals and innovators. By combining theory, practical training, regulatory awareness, and exposure to cutting-edge technologies, the program creates a solid foundation for participants to pursue careers, research, and entrepreneurship in the drone sector. With its structured curriculum, expert-led sessions, and hands-on learning approach, the bootcamp stands as a significant step in advancing technology-driven education and national capacity building in unmanned aerial systems.