



Aerobot Research
and Innovative
Engineering
Solutions LLP



DRONE ENGINEERING TRAINING PROGRAM

Admission Brochure
2025-26

AEROBOTLABS.COM

Launch Your UAV Engineering Career with Aerobot Labs

Design | Build | Automate | Lead the UAV Engineering Frontier

Aerobot Research and Innovative Engineering Solutions LLP presents an intensive, industry-ready Drone Engineer Program designed for aspiring UAV engineers, makers, tinkerers, and tech-driven professionals. From airframe design to autonomous flight scripting, gain hands-on experience and become a certified expert in the rapidly evolving drone ecosystem.

Master the Future of Flight: Drone Engineering Starts Here

Course Duration: 1 Month (Full-Time) | **Eligibility:** 12th pass with excellent skills, Diploma & BE Holders in Technical Fields

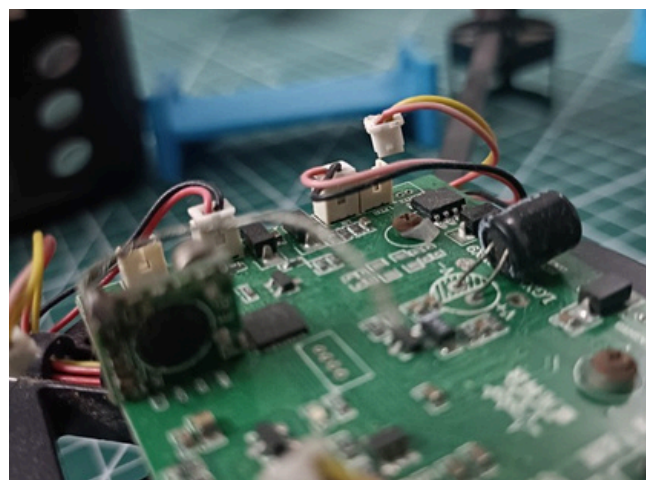
Certification: Aerobot Labs Certified Drone Engineer

What You'll Learn:

- Understand UAV systems and DGCA regulations
- Build and integrate drone hardware
- Configure flight controllers and tune performance
- Automate missions with Python and MAVLink
- Integrate payloads, troubleshoot, and deploy projects

Certification and Outcome:

Upon completion, you'll be awarded the Aerobot Labs Drone Engineer Certificate, validating your skills in UAV design, integration, and programming. You'll be equipped to enter roles in drone R&D, manufacturing, automation, agriculture, GIS mapping, surveillance tech, and aerospace startups.



Why Choose Aerobot Labs for Your Drone Engineering Training?

Aerobot Labs is a pioneer in UAV training and innovation, offering:

- A comprehensive 190-hour curriculum covering both theory and real-world builds
- Training on Pixhawk, Raspberry Pi, Jetson Nano, and other cutting-edge platforms
- A hands-on learning model: build two drone models + a final industry-use case project
- Expert mentorship from drone engineers and RPTO-certified trainers
- Access to advanced tools: CAD, Simulators, Soldering Labs, GCS, and 3D printers

Career Support and Opportunities

Graduates of this program become job-ready for positions in:

- UAV Manufacturing & Assembly
- Drone R&D & Product Design
- Field Engineering for Agriculture, Defense, and Logistics
- Startups, Drone-as-a-Service (DaaS), and Surveying Firms
- Freelance Drone Solution Building & Consulting



Course Duration & Syllabus

- **Total Duration: 1 Month**
- **Mode: Full-Time, On-Campus**

➔ Training Schedule

Week	Module Highlights
Week 1	Fundamentals of Drones, Hardware, Frame Types, Regulations
Week 2	CAD Design, Simulation, Drone Assembly & Soldering
Week 3	Flight Controllers, PID Tuning, GCS, Automation
Week 4	Payload Integration, Sensor Sync, Troubleshooting, Capstone Build

➔ Syllabus Overview

Drone Components & Hardware

- Motors, ESCs, GPS, RC, FPV

Basic Flight Principles

- Aerodynamics, flight control, communication basics.

Ground Control Systems

- Mission Planner, QGroundControl

Payloads & Sensors

- LiDAR, Multispectral Cameras, Image Triggering

Capstone Project

- Design, Assemble, Validate and Present a Real-World Use Case

Related Courses

Advance Your Skills

Aerobot Labs is not only an RPTO for basic drone pilot licensing; we also offer advanced training programs and workshops to cater to specialized interests in the drone field. After completing your Remote Pilot Certificate, you may consider these additional courses to further expand your skill set:

After certification, explore:

- DGCA-Certified Drone Pilot Training Program
- FPV Drone Build & Pilot Training
- Agri-Drone Training: Drone spraying, crop imaging & smart farming



Beginner

10 Lessons 2 Students



FPV Drone Build & Pilot Training

Our FPV Drone Pilot Training Course is a flight-focused program that trains you to master real-time control.



Beginner

5 Lessons 20 Students



DGCA-Authorized Drone Pilot Training Course (Small Category)

Get DGCA certified with our Drone Training Course — covering flight ops, safety, and hands-on piloting.



Intermediate

10 Lessons 4 Students




Agri Drone Operations Course

Learn precision spraying, mapping, and field monitoring in our Agri Drone Operations Course etc.



Aerobot Research and Innovative Engineering Solutions LLP

Chennai

 +91 - 86103 24242, +91 - 88700 33357

 aerobotlabs.com  contact@aerobotlabs.com