

Workshop Curriculum - DIY Drone

DIY Workshop

Module 1

- What is UAV
- What are Drones
- Types of Drones
- History Of Drones
- Current Applications Of Drones
- Internet Analogy
- Future Application of Drone
- Forces of Flight

Module 2

- What are Roll, Pitch and Yaw
- Working Principle of Aeroplane
- Aero Foil
- Bernoulli principle
- Newtons Law
- Working principle of Drone
- Working principle Helicopter

Module 3

- Short introduction to various parts of drone
- Assembly of Drone

Module 4

- Sensors-Different types of Sensors
- Propellers-Types and How it generate thrust
- Frame-How material and size affects
- Radio TX and RX, Battery, PDB, ESC.

Module 5

- KK2 flight controller setup
- Configuring kk2 on assembly
- Flying Drone

Module 6

- Flying Drone
- Advantages and Disadvantages of kk2
- Different types of flight controller

Module 7

- Introduction to APM
- Configuring APM on assembly
- PID

Module 8

- Flying Drone
- Compass Sensor
- GPS sensor

Module 9

- Return to Home Drone programming

Module 10

- Mission planning configuration
- Drone Racing or short controlling competition