U1016 Introduction to Drones3-Day Practical Training for Beginners





Welcome to the future - Drones are changing the World!

Drones, or formally known as unmanned aerial vehicles (UAVs), are transforming the way people get their jobs done. Today, drones are not just for hobbyists or photographers but also for a multitude of sectors and industries. For example, drones are used to assist police in tracking intruders and suspects. Drones have also been deployed for search and rescue operations, and tracking fire's progression for firefighters. In construction industries, drones are now used to monitor sites and keep track of the construction progress; while in precision agriculture, drones are used for crop monitoring, disease detection, and aerial crop spraying. There are many more interesting and exciting applications of drones, as the related technologies are just beginning to be affordable and widely available.

It's incredibly fun to fly a drone, no matter your age or experience level. Drones are extremely useful both as recreational devices and as tools of work. Before flying your drone, however, there are restriction, requirements, regulations and rules that you need to be aware of and follow.

Who should attend this UAV training

This training provides a comprehensive overview of UAVs, from theory to practical. During hands-on sessions, participants will learn how to fly a drone in a professional manner. This training is ideal for both beginners, hobbyists, as well as for professionals who intend to work on commercial drone services and consultancy projects.

Benefit

The course will enable you to:

- Understand the basic of drones and their various parts
- Understand aviation law and flying safety
- > Fly a drone on your own!

Date: TBD
Time: 0900 – 1700
Venue: TBD

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Course Outline

Day 1: Introduction to Drones

Overview:

- UAV Types
- What is LOS, ELOS and BLOS flight
- How does a multi-rotor fly?

What are the major parts of the drones and what do they do:

- Propellers, motors, DJI smart battery
- Sensors (GPS, IMU, compass, obstacle sensors)
- Camera (gimbal, camera, filter)

The remote and how to use it:

- Controls on the remote
- Functions on the remote

DJI GO4 app:

- Functions of the app
- User interface
- Basic settings

Hands-on:

- Take-off and landing
- Basic movement without rotation

Day 2: Flying Safety

Safe flying:

- Common sources of interference and how to avoid them
- Good flying practices
- Common errors and how to avoid them
- Making a pre-flight checklist
- Sources of error for each sensor
- How to handle when the error affects flight
- How to calibrate the IMU, compass and gimbal
- Understanding the LEDs on the drone

Return to home:

- Understanding how return to home works
- How to configure return to home effectively
- Conditions that trigger return to home automatically

Malaysian Aviation Law:

- Do's and dont's
- Liabilities and responsibilities

Hands-on:

- Flying and showing some LED errors
- Triggering return to home

Day 3: Flight Modes

Flight modes:

- What are the different flight modes
- When do I use the different flight modes?
- Precautions for each flight mode

First person view (FPV) flying:

- How to avoid potential problems
- How to ensure video link is strong
- How to navigate with only the screen

Hands-on:

- Flying in P mode
- Flying in S mode
- Flying in A mode
- Flying in A mFlying FPV

About AIRWORKS ACADEMY

AIRWORKS is the appointed training partner of DJI's UTC (Unmanned Aerial Systems Training Center). Aiming at UAV professional application, we offer full range of training programs including introductory courses for UAV operator, and advanced professional courses for selected industries, such as aerial photography, precision agriculture, search-and-rescue, traffic monitoring and analysis, construction and site inspection, mobile telecommunication inspection, oil and gas inspection, and more.



AIRWORKS has a robust faculty team consisting of professors and certified drone specialists who have numerous experiences in professional drone operations and applications. The team has received specialized master training by UTC Co. Ltd. In Shenzhen, China to deliver professional training courses in accordance with DJI and UTC standards and requirements.



AIRWORKS ACADEMY

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