

ACADEMY LEVEL COURSE

AERIAL MAPPING AND SURVEYING COURSE

**DRONE
ACADEMY**
— ASIA —

The UAV Academy of Asia Sdn Bhd (1302071-D)



LOCATION

Futurise Centre, Persiaran APEC,
Cyber 8, Cyberjaya Selangor.

*In-House (Group) Training
Across Malaysia

COURSE FEES

RM 2,950 per pax

DURATION

2 Days • 9am – 5pm



An aerial photograph of a tropical coastline. A paved road runs diagonally from the top right towards the bottom center. To the left of the road, there are several buildings with red roofs and a dirt area. To the right of the road, there is a body of water with a boat. The background is filled with dense green forest.

COURSE OVERVIEW

Drone technology is changing the way surveying and mapping jobs are done today. Drone mapping specialisation is generating immense value for companies across industries. In the coming years, we expect larger construction, agriculture, mining, and surveying companies to invest heavily in these services. High-quality maps can be produced more quickly and cheaply than traditional methods, and the demand for drone mapping services proliferates.

This 2 Days Intensive Aerial Mapping & Surveying Training Course is designed to teach you how to use current drone mapping technology to collect, analyse and export high-quality mapping data for commercial use.

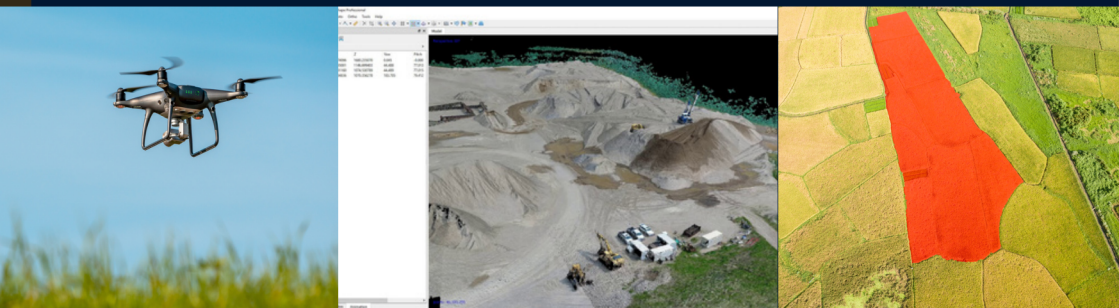
The course is most suited for participants who already have beginner-level drone operation skillsets.

COURSE OBJECTIVE

This Aerial Mapping and Surveying Training using Drones aims to guide participants from Data Acquisition with Autonomous Flight Planning, Data Processing and Data Analysis to produce high-quality aerial maps to make informed business decisions.

LEARNING OUTCOMES

- Master End-to-end Drone Surveying Processes and Techniques
- Understand How to Implement Aerial Mapping in Your Business or Operations.
- Develop the ability to Evaluate the Best Drones for Aerial Surveying.
- Plan Automated Flights using Techniques by Commercial Drone Pilots.
- Learn How to Incorporate Known Points (KP)/Ground Control Points (GCPs) into your Aerial Mapping Operations to Obtain Good Quality Outputs.
- Use Image Processing Software to Process Aerial Data and Learn Data Accuracy Verification Techniques.
- Visualise and Analyse Aerial Survey Outputs using Data Visualizing Software.



COURSE MODULES

Module 1: UAS Technologies and Aerial Mapping

- 1.1 Type of Aerial Mapping UAS
- 1.2 Industry Challenges and Drone Applications
- 1.3 Aerial Mapping Benefits
- 1.4 General Aerial Mapping Challenges

Module 2: UAS Safety, Laws, Rules and Regulations

- 2.1 UAS Regulators in Malaysia
- 2.2 Airspace Management
- 2.3 Permit Application in Malaysia
- 2.4 Privacy and Data Protection

Module 3: GNSS Fundamentals

- 3.1 Introduction to GNSS and Coordinates
- 3.2 Type of Accuracy
- 3.3 Control Point Target Types and Functions
- 3.4 Control Points Layout Planning

Module 4: Automated Flight Planning

- 4.1 Introduction to Automated Flight Planning App
- 4.2 Method 1: Draw on Screen
- 4.3 Method 2: Import KML/Shapefile
- 4.4 Aerial Mapping Camera Settings

Module 5: Automated Flight Safety & Execution

- 5.1 Automated Flight Safety
- 5.2 Aerial Mapping Flight Checklist
- 5.3 Aerial Mapping Full Mission Execution
- 5.4 Aerial Mapping Pause-Resume Mission

COURSE MODULES

Module 6: Aerial Mapping Data Processing I

- 6.1 Introduction to Data Processing
- 6.2 Foundational Utilities of Data Processing Software
- 6.3 Aerial Mapping Data Post-Process with GCPs
- 6.4 Aerial Mapping Outputs Generation and Modifications

Module 7: Aerial Mapping Data Processing II

- 7.1 Data Accuracy Verification
- 7.2 Outputs Exporting Options
- 7.3 Batch Process
- 7.4 Summary for Faster Processing

Module 8: Data Visualization & Analysis

- 8.1 Introduction to Data Visualizing Software
- 8.2 Foundational Utilities of Data Visualizing Software
- 8.3 Creating Visualizing Objects on Aerial Mapping Output
- 8.4 Data Visualizing Software Plugins

Module 9: Aerial Mapping Course Assessment

- 9.1 Aerial Mapping Theory Test
- 9.2 Aerial Mapping Laws & Regulations Test
- 9.3 Aerial Mapping Flight Planning Test
- 9.4 Aerial Mapping On-site Operation Test

COURSE SUMMARY

Scan to
WhatsApp us.



DURATION

2 Days, 9am-5pm



COURSE FEES

RM 2,950



PREREQUISITES

Basic Drone
Operating Skills



CERTIFICATE

Certificate of
Training



MINIMUM AGE

18 Years Old



LOCATION

Cyberjaya
or
Customised
Location



EQUIPMENT

DJI Drones
Provided
*To Bring Own
Laptop



MATERIALS PROVIDED

Student Handbook
*Software License
Not Included



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AERIAL MAPPING AND SURVEYING COURSE SCHEDULE

DAY 1

TIME	CONTENT	
10.00 am – 11.00 am	Introduction to UAS Technologies	<ul style="list-style-type: none"> Type of UAS and Industrial Applications Aerial Mapping Benefits and Challenges
11.00 am – 12.00 pm	Safety Rules and Regulations	<ul style="list-style-type: none"> UAS Safety Precautions & Emergency Procedures UAS Regulations & Permit Application in Malaysia
12.00 Pm – 1.00 pm	GNSS Fundamentals	<ul style="list-style-type: none"> Type of Accuracy & Trilateration GPS Correction Method
1.00 pm – 2.00 pm	Lunch	
2.00 pm – 3.00 pm	Automated Flight Planning (Pilot 2)	<ul style="list-style-type: none"> Mission Planning Using DJI Pilot 2 - Draw on Screen Method
3.00 pm – 4.15 pm	Automated Flight Execution	<ul style="list-style-type: none"> On-Field Operation Automated Flight
4.15 pm – 4.45 pm	Automated Flight Planning (KML)	<ul style="list-style-type: none"> Mission Planning Using Google Earth Pro - Import KML Method
4.45 pm – 5.00 pm	Recap for Day 1 and Q&A	

DAY 2

TIME	CONTENT	
10.00 am – 1.00 pm	Data Processing	<ul style="list-style-type: none"> Introduction to Types of Data Sets Aerial Data Post-Process Photogrammetry Software Tutorial
1.00 pm – 2.00 pm	Lunch	
2.00 pm – 4.00 pm	Data Value Adding & Analysis	<ul style="list-style-type: none"> GIS Software Tutorial
4.00 pm – 4.45 pm	Automated Flight Operation Test (Team)	
4.45 pm – 5.00 pm	<ul style="list-style-type: none"> Recap and Conclusion Presentation of Certificate Q&A / Discussions 	



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ADDRESS

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