

Small Unmanned Aircraft (SUA) Advanced Rating Training

Let's be a CAD certified pilot for SUA!



CONNECTION TECHNOLOGY 裝備未來
FUTURESKILLS

Small Unmanned Aircraft (SUA) technology is now a core FutureSkill in the Industry 4.0 era, powering data-driven operations across inspection, mapping, and smart-city applications. To fully unlock these benefits, pilots must operate safely and legally within regulated airspace—yet the rules and restrictions can be complex.

Hong Kong Productivity Council (HKPC), in collaboration with the Civil Aviation Department (CAD), offers the SUA Advanced Rating (A/B) Training Course to bridge this gap. Aligned with CAD's Advanced Rating (A/B) requirements, the programme blends expert instruction with scenario-based practice to build strong competency in safety oversight, risk assessment, and advanced operational planning. On completion, participants are equipped to apply for the CAD Advanced Rating (A/B) in accordance with current legislation—elevating their capability from basic flying to professional, compliant operations.

Objectives

After attending theoretical knowledge training and practical flight training, participants need to pass the theoretical examination & practical assessment to prove the competence in operating SUA. Participants may

- ✓ Obtain knowledge of SUA operation and safety regulation in Hong Kong
- ✓ Obtain certificate issued by Hong Kong Productivity Council to apply for Advanced Rating (A/B) Qualification from Civil Aviation Department (with minimum participation of 80% of total training hours, passed theoretical knowledge examination & practical assessment)

Date and time	Day 1 – Day 5 Time: 09:00 - 18:00
Venue	<u>HKPC Building</u> : Theoretical Knowledge Instruction <u>POI Outdoor Venue</u> : Practical Flight Training
Medium	English materials with Cantonese instruction
Course fee	HK\$ 9,840 per person
Remarks	<ul style="list-style-type: none"> • Course fee includes training material, flight training, drone rental, administration and assessment fees • 2-hour flight log within the past 12 months prior to the 1st Day of the Practical Training is required to be submitted for each participant • Participant with drone flying experience is recommended

Course Schedule

Schedule	Content		Venue
Day 1	Theoretical Knowledge Instruction (4 hours)	Theoretical Knowledge Instruction (4 hours)	HKPC Building
Day 2	Theoretical Knowledge Instruction (4 hours)	Theoretical Knowledge Instruction (4 hours)	HKPC Building
Day 3	Theoretical Knowledge Instruction (4 hours)	Theoretical Knowledge Examination (2 hours)	HKPC Building
Day 4	Practical Flight Training (4 hours)	Practical Assessment (4 hours)	POI Venue
Day 5	Practical Assessment (4 hours)	Practical Assessment (4 hours)	POI Venue

Course Content

Part 1: Rules and regulation

- ✓ Hong Kong and global SUA regulators
- ✓ Legal framework: Civil Aviation Ordinance and its sub-legislation with core statues on Cap. 488G
- ✓ CAD SUA safety requirements and technical guidance

Part 2: Airspace

- ✓ Airspace classification and SUA operating limits
- ✓ Restricted Flying Zones (RFZs) for SUA
- ✓ Other critical airspace considerations

Part 3: Maps, units of measurement and navigation

- ✓ Augmented Reality Flight Mapping and Chart Utilization
- ✓ Units of measurement (SI and aviation) with smart conversion tools
- ✓ Time System Conversion & Synchronization
- ✓ Principles of navigation and restrictions

Part 4: Aircraft general knowledge

- ✓ Flight Dynamics and Performance Modeling for SUA
- ✓ Systems Architecture and Components
- ✓ Operational limitations: performance envelope, weight and balance, environmental constraints
- ✓ Predictive Maintenance and Smart Battery Lifecycle Management

Part 5: Meteorology

- ✓ Atmospheric Risk Modeling: Weather Effects on SUA Performance
- ✓ Acquiring and interpreting weather
- ✓ Local weather assessments prior to operations

Part 6 : Airmanship and human performance

- ✓ Safety Management for SUA Operations
- ✓ Crew Resource Management (CRM)
- ✓ Data Retention and Regulatory Compliance
- ✓ Human Factors: Perception and Illusions
- ✓ Medical fitness and wellness standards for remote pilots

Part 7 : Operations manual, flight planning and procedures

- ✓ Mission Pre-Planning and Site Survey
- ✓ Operational Risk Assessment and Mitigation Strategy
- ✓ Normal and emergency operating procedures: SOPs, contingencies, fail-safes
- ✓ Operations Manual (OM), Checklists, and Document Control
- ✓ Hazard Identification and Situational Awareness
- ✓ Communications Protocols with ATC and Other Airspace Users
- ✓ Pre-Flight, In-Flight, and Post-Flight Procedures and Logging

SUA Training Organisation (STO) Examiners & Trainers

Mr. LAW Lap Yan, Lyan

- Programme Manager, SUA Training Organisation
- Principal Consultant and Head, Industry 4.0+ and Low-altitude Economy, New Industrialisation Division
- Digital@HKPC & Reindustrialisation Center Manager, HKPC
- Hong Kong Industrial Drone Technology Center Manager, HKPC
- Registered Remote Pilot (Advanced Rating), Hong Kong Civil Aviation Department
- Certified Industrie 4.0 Expert & Industrie 4.0 Principal Advisor, Fraunhofer IPT Germany
- Certified Drone Pilot – Commercial (CDP-C), UAV Academy, UK
- Certificate of Competence in Remote Pilot – Theoretical Knowledge/General Airmanship Syllabus, UAC Academy, UK
- Certificate of Practical Flight Assessment, UAV Academy, UK

Mr. TSE Pak To, Bruce

- Lead Instructor & Practical Assessor, POI Corporation Limited
- Examiner and Instructor, DJI Academy UTC Hong Kong
- Registered Remote Pilot (Advanced Rating), Hong Kong Civil Aviation Department
- Certified Drone Pilot – Commercial UAS Training – Level 1, Aerial Photography (Basic) & UAS Inspection, DJI Academy UTC Hong Kong
- Certified Drone Pilot – Remote Pilot License (RePL), up to 25kg, FPV Australia, Civil Aviation Safety Authority, Australia
- Chief Consultant, Chinese UAS Education Development Exchange Association (中華無人機教育發展交流協會)

Mr. TSANG Ho Kin, Leo

- Instructor, POI Corporation Limited
- Registered Remote Pilot (Advanced Rating), Hong Kong Civil Aviation Department

Enrolment Method

Please complete the enrolment form ([Download here](#)) and return the form by below method:

1. Email to sua@hkpc.org
2. Send us the crossed cheque payable to “Hong Kong Productivity Council by post within two weeks.

Mailing Address: 5/F, HKPC Building, 78 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong (Attn: Miss Kitty CHOW). Please write down your full name, contact no. and course name at the back of the cheque.

Remarks

- (i) The course enrolment is made on first-come-first-served basis.
- (ii) Application will be processed only upon receipt of the completed enrolment form and payment.
- (iii) Please contact the Course Secretariat if you would like to complete the course fee by other payment methods.
- (iv) Instructor assignment is subject to change without prior approval