PROGRAMME CHARACTERISTICS

The programme integrates knowledge and skills from various disciplines such as aviation, engineering, management, and finance to provide a comprehensive understanding of aviation engineering and operations management. The programme emphasises the practical application of theoretical concepts through hands-on projects, case studies, and industry collaborations, allowing students to gain practical experience in aviation engineering and operations management.

The mixed mode of study allows students to study either <u>full time or part time</u>. Local students can vary their study mode from semester to semester according to their personal preferences. This flexibility is not available to non-local students, who are constrained by visa requirements.

Core Courses

AAE5102	Operations Research, Resource Planning and Engineering Management in Aviation
AAE5103	Artificial Intelligence in the Aviation Industry
AAE5106	Flight Standards and Airworthiness
AAE5110	Air Transport Economics and Policy
AAE5111	Human Factors, Accident Prevention and Aviation Safety Risk Management
AAE5112	Airport Operations and Management

Electives Courses

AAE5101	Next-generation Air Traffic Control and Air Traffic Flow Management
AAE5105	Fleet Management and Aviation Sustainability
AAE5108	Future Air Mobility and Low-Altitude Airspace Management
AAE5109	Advanced Neuro-ergonomics and Cognitive Science in Aviation
AAE5113	Modern Treasury and Finance Strategies in Aviation
AAE5114	Aircraft Leasing Management
ISE5022	Financial Decision Analysis for Technology Management

AWARD REQUIREMENTS

To qualify for the MSc in Aviation Engineering and Operations Management , students must complete one of the following tracks:

- 7 taught subjects, including a minimum of 6 core courses, and a **Dissertation**; or
- 10 taught subjects, comprising at least 6 core courses.

Additionally, students must fulfill the Academic Integrity and Ethics (AIE) Requirement. No credit fee will be charged for this subject.

 $^{\#}$ Students have the option to apply for and receive a Postgraduate Diploma (PgD) upon meeting the specified criteria.

CONTACT

General enquiries
AAE General Office
Email: aae.info@polyu.edu.hk







Academic matters and detailed programme information Professor Lingxiao WU Email: lingxiao-leo.wu@polyu.edu.hk







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MASTER OF SCIENCE IN AVIATION ENGINEERING AND OPERATIONS MANAGEMENT 民航工程與營運管理學理學碩士學位

For 2026/27 September Entry

Information presented in this leaflet is subject to changes and does not form part of any contract between the University and any person.



WHY <u>AVIATION ENGINEERING</u> AND OPERATIONS MANAGEMENT?

Embark on a transformative journey with our Master Programme in Aviation Engineering and Operations Management, designed to equip you with a comprehensive skill set that merges technical expertise with essential managerial knowledge.

Our industry-relevant curriculum, developed in collaboration with leading experts, ensures that you acquire the skills necessary to meet the evolving demands of the aviation sector. Through hands-on projects and case studies, you will apply theoretical concepts to real-world challenges, enhancing your employability. Explore cutting-edge technologies like data analytics and artificial intelligence that optimise operations and enhance safety. Benefit from extensive networking opportunities with industry professionals and peers, broadening your career horizons across various aviation sectors. Engage in innovative research projects that contribute to the advancement of aviation knowledge.

Prepare to take flight in a dynamic career landscape with our programme's strong emphasis on practical skills and industry relevance. Join us and lead the future of aviation!

PROGRAMME AIMS

- To provide advanced education and training for students seeking to enhance their knowledge and pursue advanced careers in civil aviation engineering, operations, and management.
- To empower students to build their competence, enhancing their competitiveness in the job market and positioning them as essential contributors to the civil aviation industry.
- To equip students with a profound understanding and proficiency in the latest advanced technologies within civil aviation engineering, operations, and management.
- To enable students to apply their acquired knowledge and skills to effectively address practical challenges and manage aviation operations.

ADMISSION

The applicant should hold a Bachelor's degree with Honours in engineering, science, or technology, or qualifications that meet the academic criteria for Corporate Membership of the Hong Kong Institution of Engineers (HKIE), or an equivalent qualification.

Consideration will also be given to candidates without Honours degrees who have other relevant qualifications and/or appropriate work experience.

Applicants who are not native speakers of English, and the Bachelor's degree or equivalent qualification is awarded by institutions where the medium of instruction is not English, are expected to fulfil the following minimum English language requirement:

- A score of 80 or above in the Test of English as a Foreign Language (TOEFL) Internetbased test: OR
- An Overall Band score of 6.0 or above in the International English Language Testing System (IELTS) Academic module.

IMPORTANT DATES

- Period of application: Now until 30 April 2026
 - Early Round Application Deadline: 15 October 2025.
 - Main Round Application Deadline: 15 January 2026.
 - Extended Round: 30 April 2026.
- Commencement of study: 1 September 2026

FINANCIAL AID AND SCHOLARSHIPS

Tuition Fee

HKD 8,500 per credit for local and non-local students.

Scholarships

Merit-based AAE MSc Dissertation Scholarship* is available for students who opt to complete a 9-credit dissertation.

*PolyU reserves the right to change or withdraw a scholarship at any time. In the case of any dispute/disagreement, PolyU's decision is final.

