

## Programme Aims

- To provide advanced education and training for students who intend to upgrade their knowledge and to seek a higher-level career in the area of Aviation and Aeronautical Engineering;
- To enable students to develop their competence to increase their competitiveness in the job market and become the backbone in aviation industry;
- To enable students to have good understanding and mastering of the most up-to-date advanced technologies in the area of Aviation and Aeronautical Engineering; and
- To enable students to apply their learned knowledge and skills to solve problems encountered in practice.

## Entrance Requirements

A Bachelor's degree with Honours in engineering, science or technology, or qualifications that satisfy the academic requirements for Corporate Membership of the Hong Kong Institution of Engineers (HKIE), or the equivalent.

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, they are expected to fulfil the following minimum English language requirement:

- A Test of English as a Foreign Language (TOEFL) score of 80 for the Internet-based test or 550 for the paper-based test; OR
- An overall Band Score of at least 6 in the International English Language Testing System (IELTS).



# Master of Science in Aviation Engineering

The global aviation industry was growing at a rapid pace before the pandemic, and it is forecast that it will continue its growth momentum when the world resumes normal activities. Asia, especially China is the key contributor and stakeholder in this growth. The worldwide demand for qualified manager, engineers and researcher in this industry is enormous. This programme provides advanced education and training for students who intend to upgrade their knowledge and to seek a higher-level career in Aviation and Aeronautical Engineering.

## Enquiries

Application and Admission  
Email: [ar.tpg@polyu.edu.hk](mailto:ar.tpg@polyu.edu.hk)  
Website: [www.polyu.edu.hk/study](http://www.polyu.edu.hk/study) (Study@PolyU)

## Programme Information

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

# Master of Science in Aviation Engineering

## Award Requirements

**For MSc in Aviation Engineering**, students must complete:

- a) 7 taught subjects, including at least 4 AAE Core Subjects, and a Dissertation; OR
- b) 10 taught subjects, including at least 6 AAE Core Subjects.

**For MSc in Aviation Engineering (Aviation Operations and Management)**, students must complete:

- a) 7 taught subjects, including at least 4 AAE Core Subjects in the Specialism of Aviation Operations and Management, and a Dissertation; OR
- b) 10 taught subjects, including at least 6 AAE Core Subjects in the Specialism of Aviation Operations and Management.

**For MSc in Aviation Engineering (Aeronautical Engineering)**, students must complete:

- a) 7 taught subjects, including at least 4 AAE Core Subjects in the Specialism of Aeronautical Engineering, and a Dissertation; OR
- b) 10 taught subjects, including at least 6 AAE Core Subjects in the Specialism of Aeronautical Engineering.

## Important Dates

Period of application: 22 September 2022 – 30 April 2023

Commencement of study: Early September 2023

## Financial Aid and Scholarships

Merit-based Scholarships\* are available.

*\*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.*



## Programme Characteristics

The programme is designed to give students the maximum degree of flexibility while ensuring reasonable cost-effectiveness in its running. After enrolling in the MSc in Aviation Engineering, students can select a wide range of subjects offered under the Postgraduate Scheme in Engineering.

Students can also select a combination of subjects that leads to graduation with a Specialism Award. The two specialisms in the proposed MSc programme, which focus on different aspects of aviation engineering, will provide students unique opportunities to become qualified and competitive professionals in aviation and aeronautical engineering, both locally and globally.



Each taught subject corresponds to three credits and the dissertation corresponds to nine credits.

Specialism	Core Subject
Aviation Operations and Management	Guidance, Navigation and Advanced Avionics System
	Human Factors, Accident Prevention and Aircraft Maintenance
	Next Generation Air Traffic Control and Air Traffic Flow Management
	Operations Research, Resource Planning and Engineering Management in Aviation
	Artificial Intelligence in Aviation Industry
	Aviation Technical Services and Aircraft Leasing Management
	Flight Standards and Airworthiness
Aeronautical Engineering	Fleet Management and Aviation Sustainability
	Guidance, Navigation and Advanced Avionics System
	Human Factors, Accident Prevention and Aircraft Maintenance
	Aerodynamics and Computational Fluid Dynamics
	Advanced Aircraft Structures and Materials
	Aircraft Design and Certification
	Autonomous Flight - Mechanics and Control
Aircraft Engine Systems and Combustion	



i. The subjects have been included in the list of reimbursable courses under the Continuing Education Fund (CEF) for the part-time Master of Science in Aviation Engineering programme.

ii. The Master of Science in Aviation Engineering programme is recognized under the Qualifications Framework (QF Level 6).