This program is designed for engineers seeking specialist knowledge and skills in the field of airworthiness engineering and management.

The field of airworthiness encompasses all engineering disciplines required to develop, design, manufacture, certify, operate and maintain aircraft, both civil and military.

This program will provide you with specialised knowledge and expertise in the areas of initial and continuing airworthiness engineering and management.

The objectives of this program are to educate you as an airworthiness engineering professional who is able to:

- analyse complex engineering assets in the initial and continuing airworthiness engineering environment, and develop engineering, scientific and technological solutions to ensure problem-free operations
- find innovative solutions from an array of possibilities through systematic problem-solving and engineering/technological systems design methodologies operating in the aircraft design, engineering, certification and maintenance industry
- analyse and implement novel solutions for the design, engineering, certification and maintenance of aircraft and aeronautical systems for challenging problems and opportunities
- communicate with a wide range of key airworthiness engineering and engineering management stakeholders in a professional and effective manner
- build, lead and work in teams with trust and respect
- achieve results in an industry characterised by global competition and driven by rapidly changing market forces.

Learning and teaching

Lectures, tutorial and laboratory sessions run during the afternoon and evening to fit in with the work commitments of part-time students.

Several learning and teaching approaches are used within this program to develop your capabilities and to assist you in developing skills as an independent and lifelong learner.

These approaches may include classroom teaching and/or online sessions, laboratory sessions, problem-based learning, assignments and projects.

RMIT University is committed to providing you with an education that strongly links formal learning with professional practice. You’ll undertake and be assessed on structured activities that allow you to learn, apply and demonstrate your professional practice. You will complete these activities in real-work contexts or situations; any or all of these aspects of a work-integrated learning (WIL) experience may be simulated.

Career outlook

Graduate career paths include:

- airworthiness engineering in design, engineering and manufacturing organisations
- airworthiness policy and regulations formulation and administration in aviation regulating authorities
- aircraft and aeronautical product design and certification in design and engineering organisations
- aircraft maintenance management in airlines, continuing airworthiness management organisations and maintenance organisations.

Industry connections

The School of Engineering has research and educational partnerships with the following airworthiness industry bodies/organisations:

- civil and military aviation regulators: Australian Civil Aviation Safety Authority (CASA), The Directorate General Technical Airworthiness of the Australian Defence Force (DGTA-ADF)
- aircraft design organisations: BAE Systems Australia, Thales Australia, Boeing Australia, Mahindra Aerospace
- aircraft maintenance organisations: Qantas Engineering, Boeing Defence Australia
- aircraft operators: Qantas, Tigerair
- research and development organisations: Defence Science and Technology Group (DSTG) of the Australian Department of Defence, Advanced Composite Structures Australia.

Program structure

The Master consists of 96 credit points.

The program includes the Master’s Minor Research Project, which constitutes a capstone experience. This is relevant to the different airworthiness engineering and management aspects taught during the program. It also provides realistic work situations either in an industry project environment or in a simulated industry setting with operational constraints. In either case, you’ll be jointly supervised by an academic and a qualified industry professional.

www.rmit.edu.au/programs/mc238
Master of Engineering (Airworthiness)

Program structure (continued)

Engineering Risk Management in Aviation
You will gain a comprehensive understanding of the risk management process and its application to the aviation environment. You will learn to apply the risk management process and assessment tools to examples and case studies set in an aviation context.

Aircraft Maintenance
You will cover key areas of study including aircraft maintenance concepts, aircraft maintenance in practice, continuing airworthiness regulations, maintenance programs and planning and ageing aircraft.

Master's Minor Research Project
The course involves a major experimental and/or analytical research project. You will work on your project individually or in small groups. The course requires you to demonstrate in-depth technical and research skills. The project can be completed in conjunction with industry or in a simulated engineering work environment.

And one of the following:
– Human Factors in Aviation
– Aircraft Structural Integrity.

How to apply

Direct to RMIT University:
rmit.edu.au/programs/apply/direct

Semester 1, 2017
– Applications open 14 August 2016
– Timely applications close 10 November 2016

Semester 2, 2017
– Applications open 1 May 2017
– Timely applications close 31 May 2017

Late applications will continue to be accepted after this date if places are still available.

Entry requirements

To be eligible for entry, you must have successfully completed one of the following combinations of qualification and relevant work experience. For all qualifications, a minimum Grade Point Average (GPA) of 2.0 out of 4.0, or a minimum of 60% average, is required.

– Bachelor Honours (AQF level 8) in aerospace engineering or aviation
OR
– Bachelor (AQF level 7) in aerospace engineering or aviation and two years of relevant work experience
OR
– Bachelor Honours (AQF level 8) in a non-cognate area and five years of relevant work experience including one year at manager level
OR
– Bachelor (AQF level 7) in a non-cognate area and seven years of relevant work experience including one year at manager level
OR
– A minimum of 10 years of relevant work experience.

Please note: Qualifications in aerospace engineering and equivalent areas (aeronautical engineering, avionics engineering, etc.) and aviation and equivalent areas (aviation management, air transport management, etc.) are considered as a cognate area.

Qualifications are provided with the corresponding Australian Qualifications Framework (AQF) level, and international qualifications are assessed according to this framework. Equivalent qualifications to those stated will also be considered. For example, if you have been certified by Engineers Australia as a Chartered Professional Engineer (CPEng), this is considered equivalent to a Bachelor Honours (AQF level 8) in Engineering. Similarly, if you have been certified by Engineers Australia as a Chartered Engineering Technologist (CEngT), this is considered equivalent to a Bachelor (AQF level 7) in Engineering.

Relevant work experience is considered to be in aviation or a related industry. In some cases it is required that work experience is at manager level. Applicants applying on the basis of any work experience must provide a letter from their employer(s) (or equivalent) verifying their roles and the duration of these. Years of work experience are considered in terms of full-time equivalence.

Fees

2017 indicative fees
– Commonwealth supported places (CSPs) range from AU$6,349 to AU$10,596
– Full-fee: AU$29,760 per annum

How much you’ll pay will depend on whether you’re offered a Commonwealth supported place (CSP) or a full-fee place. Entry for this program is primarily through CSPs. Government financial assistance is available to eligible students regardless of the type of place you enrol in.

Fees shown above apply to 2017 only and are based on an annual full-time study load of 96 credit points unless otherwise noted. A proportionate fee applies for more or less than the full-time study load. Tuition fees are adjusted on an annual basis and these fees should only be used as a guide.

For more information and to learn how to calculate your exact tuition fees see:
rmit.edu.au/programs/fees/postgraduate

Pathways

You may be eligible for exemptions on a case-by-case basis for previous study in a qualification at AQF level 8 or above, such as a graduate certificate, graduate diploma, or bachelor honours degree in aerospace, aeronautical or avionics engineering or other relevant engineering field.

Upon successful completion of the Master of Engineering (Airworthiness) you may be eligible to undertake further studies in related programs such as postgraduate research programs.

This information is designed for Australian and New Zealand citizens and permanent residents of Australia.

Disclaimer: Every effort has been made to ensure the information contained in this publication is accurate and current at the date of printing. For the most up-to-date information, please refer to the RMIT University website before lodging your application. Visit www.rmit.edu.au