Bachelor of Engineering (Aerospace Engineering)(Honours)/ Bachelor of Business (Management)

2019
Undergraduate

Combine aerospace engineering with business skills to prepare for leadership roles in an exciting global industry.

Many engineers quickly move into positions of management within organisations. This double degree will give you an advantage, allowing you to progress into positions of responsibility and influence. A business degree will prepare you to operate in a complex financial system – something often associated with large engineering projects.

Aerospace engineering is concerned with the analysis, design and operation of sophisticated aerospace hardware and software systems. The term 'aerospace' encompasses both atmospheric and space flight. The industry is complex and demanding, and requires talented, creative and motivated people.

The management program is concerned with organisational planning, coordination and resource direction.

Managers draw on technical skills ranging from accounting to organisational behaviour, and they are reliant on analysis and leadership skills.

To succeed in this program, you'll need well-developed skills in mathematics and physical sciences, as well as good communication skills.

Industry connections

In the final year of your studies you'll undertake a major project that is either industry-based or simulates an industrial situation. Combining and further developing the key theoretical and practical knowledge necessary for your field - as defined by Engineers Australia - you'll work with industry leaders to solve a project challenge.

Before graduating from this program, you are strongly encouraged to complete a minimum 12 weeks of engineering industry experience. This allows you to gain first-hand experience in an engineering practice environment under the supervision of a practising professional engineer. The nature and timing of this engineering experience can take a range of forms.

Opportunities exist for an overseas work placement of between six and 12 months. These placements are normally taken during a one-year break in the middle or at the end of the third year of the degree.

Career outlook

Aerospace engineers gain skills in various fields of advanced technology that are in high demand in non-aerospace organisations, including the automotive industry, power generation industry, software support companies and research organisations.

Likely destinations for graduates include:

- design and manufacturing companies such as Boeing Australia, Airbus, BAE Systems Australia and Australian Aerospace
- defence forces like the as Royal Australian Navy, Australian Army and Royal Australian Air Force
- Defence Science and Technology Group and the Capability Acquisition and Sustainment Group
- Australian and international airlines
- airworthiness organisations such as Civil Aviation Safety Authority and Department of Defence
- general aviation

Professional recognition

This program is fully accredited by Engineers Australia. Graduates of the program are eligible for graduate membership of Engineers Australia. Full membership as a professional engineer may be obtained after an appropriate period of professional practice.

Australia is one of 15 countries that are signatories to the International Engineering Alliance, also known as the Washington Accord, for professional engineers. The qualification of graduates from this degree is recognised in all countries that are signatories to the Accord.

By selecting appropriate studies, graduates of the business program may be able to obtain professional membership of the Australian Human Resources Institute or CPA Australia.

RMIT UNIVERSITY

Program snapshot

Program code: BH082

Duration

Full-time: 5 years
Part-time may be available

Location

City and Bundoora campuses

Years 1, 2 and 3 are conducted on the City campus and years 4 and 5 are shared between the City and Bundoora campuses. The management component is studied on the City campus for all five years.

Selection mode

ATAR (2018: 89.65)

How to apply

Semester 1: VTAC
vtac.edu.au

Semester 2: Direct to RMIT
rmit.edu.au/programs/apply/direct

Fees

For local fee information:
rmit.edu.au/programs/fees

Contact

Info Corner
330 Swanston Street
(cnr La Trobe Street)
Melbourne VIC 3000
Tel. +61 3 9925 2260

rmit.edu.au/programs/bh082

International opportunities

RMIT encourages you to aspire to a global career, not just a local one, and as an engineering student you'll have a range of global opportunities.

RMIT has an international exchange program agreement with Nanjing University of Aeronautics and Astronautics (NUAA), China . Second year students are selected to attend this from early September to the middle of January.

You'll gain credit points for your studies, which will include elementary Chinese, aerodynamics, design of aircraft and structural design and optimisation.

There are also opportunities to study abroad through Education Abroad.

Program structure

Years 1 and 2

You'll gain a core understanding of engineering, with a specific focus on aerospace engineering starting from the first semester. You'll also gain an introduction into management.

Years 3, 4 and 5

You'll deepen your knowledge in the field of aerospace engineering, with options for electives so you can tailor your degree.

You'll broaden your studies in business while investigating management skills, business skills, professional specialisations and business experience.

Your final year (capstone) project will develop and reinforce the skills and knowledge you need - as defined by Engineers Australia - to commence your professional engineering career.

You'll also complete a work-integrated learning (industry experience) elective in Year 2, 3 or 4.

Year 1	Introduction to Professional Engineering Practice	Introduction to Aircraft	Engineering Mathematics C	Mechanics and Materials 1	
	Applied Thermodynamics	Fluid Mechanics of Mechanical Systems	Computer Aided Design	Further Engineering Mathematics C	Introduction to Management
Year 2	Mechanics and Materials 2	Dynamics	Maths and Stats for Aero, Mech and Auto	Principles of Aerodynamics	
	Systems Engineering	Design for Manufacture and Assembly	Flight Mechanics	Accounting in Organisations and Society	Organisational Analysis
Year 3	Ethics and Governance	Leadership and Decision Making	Prices and Markets	Marketing Principles	
	Commercial Law	Macroeconomics 1	Work in Global Society	Contemporary Management: Issues and Challenges	Creativity, Innovation and Design
Year 4	Aerospace Dynamics and control	Advanced Aerodynamics	Aerospace Propulsion	Computational Engineering Analysis	
	Aerospace Structures	Research Methods for Engineers	Aerospace Design Principles	Strategic Management	Aerospace elective
Year 5	Engineering Capstone Project Part A	Aerospace Finite Element Methods	Aerospace Design Project	University elective	
	Engineering Capstone Project Part B	Management in Practice	Advanced Aerospace Structures	Business elective	

Compulsory courses | Program electives | University electives

Please note: This is an example of the program structure. Courses may change and may not be available each semester.

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