

Advanced Diploma of Engineering (Aeronautical)

2019

Vocational Education

This program provides you with the advanced technical and managerial skills needed for technicians and engineers working in aerospace manufacturing, design and maintenance at a paraprofessional level.

You'll be equipped to work in small, medium and large enterprises as well as the defence forces.

Aircraft maintenance engineers install, maintain and repair aircraft engines, airframes, airframe systems, electrics, instruments, radio systems and aircraft sheet metalwork.

Specialist areas in this program include:

- aircraft design and layout
- mechanical (fault diagnosis of airframe and engine systems)
- structures (producing, maintaining and repairing sheet metal, bonded and non-metallic composite materials and components on aircraft)

Note: Programs may change as training packages are updated.

Professional recognition

This program is provisionally accredited by Engineers Australia. Full accreditation will be sought for this program as soon as it is feasible to do so within the accreditation time lines set by Engineers Australia.

Once the program is fully accredited, graduates of the program will be eligible for graduate membership of Engineers Australia at the Engineering Associate level.

Australia is a signatory to the International Engineering Alliance, also known as the Dublin Accord, for engineering technicians. Graduates of the program will be recognised in all countries that are signatories to the accord.

Industry connections

This program has a strong Industry Advisory Committee (IAC) which links the program and real-life industry developments. The IAC comprises staff from local aeronautical engineering and aviation management organisations. It provides regular feedback on the programs and the changing needs of industry.

Career outlook

Graduates of this program will be eligible for work in a wide range of roles including:

- production supervisor/planner
- maintenance supervisor/planner
- technical R&D officer
- systems technician
- design supervisor
- quality supervisor
- drafting supervisor

Pathways

Graduates with a grade point average (GPA) of at least 3.0 out of 4.0 may be eligible to apply for credit of up to one-and-a-half years (equivalent to 144 credit points) for the Bachelor of Engineering (Aerospace Engineering)(Honours) program, if successful in gaining a place.

Program snapshot

Program code: C6131
National code: MEM60112

Duration

Full-time: 2 years

Location

City campus

Selection mode

ATAR: Not published

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/c6131

Program structure

This qualification requires the completion of the following.

Organise and communicate information (MEM16006A)	Interpret occupational health and safety practices in aviation maintenance (MEA101B)	Apply basic aircraft power plant design characteristics (MEA342A)	Select and apply aeronautical engineering methods, processes and construction techniques (MEM23073A)
Interact with computing technology (MEM16008A)	Apply quality standards applicable to aviation maintenance processes (MEA105C)	Apply basic scientific principles and techniques in aeronautical engineering situations (MEA349B)	Apply scientific principles and techniques in aeronautical engineering situations (MEM23084A)
Perform engineering activities (MEM22001A)	Interpret and use aviation maintenance industry manuals and specifications (MEA107B)	Select and test aeronautical engineering materials (MEA350A)	Apply aeronautical system design principles and techniques in aeronautical engineering situations (MEM23095A)
Manage self in the engineering environment (MEM22002A)	Complete aviation maintenance industry documentation (MEA108B)	Represent aeronautical engineering designs (MEM09143A)	Apply automated systems principles and techniques in aeronautical engineering situations (MEM23097A)
Select common engineering materials (MEM30007A)	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance (MEA109B)	Apply computer aided modelling and data management techniques to aeronautical engineering designs (MEM09153A)	Apply technical mathematics (MEM23004A)
Apply mathematical techniques in a manufacturing engineering or related environment (MEM30012A)	Lay out and set up aircraft systems (MEA340A)	Plan and design aeronautical engineering projects (MEM14065A)	Apply calculus to engineering tasks (MEM23007A)
Participate in environmentally sustainable work practices (MSAENV272B)	Apply basic aircraft design characteristics (MEA341A)	Apply aeronautical engineering fundamentals to support design and development of engineering project (MEM14083A)	Operate and program computers and/or controllers in engineering situations (MEM23003A)
	Operate computer-aided design (CAD) system to produce basic drawing elements (MEM30031A)	Apply basic electro and control scientific principles and techniques in aeronautical engineering sit (MEM23052A)	

Core Units
 - Select all 7

Group A General Elective
 Units - Select 8

Group B Specialist
 Elective Units - Select 15

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