That Moment
Aviation
Impacts
The World, Aotearoa and You
MASSEY’S SCHOOL OF AVIATION WAS ESTABLISHED IN 1987 TO MEET THE AVIATION INDUSTRY’S NEEDS FOR GRADUATES WITH A WIDE INDUSTRY PERSPECTIVE.

**Rankings & Accreditation**

**QS (QUACQUARELLI SYMONDS) WORLD UNIVERSITY RANKINGS**
Business Management Studies Massey University is ranked by QS (Quacquarelli Symonds) as one of the top 350 universities for business and management.

**SHANGHAI RANKING**
Business Administration Massey University is ranked #2 in New Zealand for business administration by Shanghai Ranking.

**ASSOCIATION TO ADVANCE COLLEGIATE SCHOOLS OF BUSINESS (AACSB)**
Massey Business School is rated in the top 5% of global business colleges by AACSB International.

**NEW ZEALAND CIVIL AVIATION AUTHORITY (CAA)**
The Bachelor of Aviation has equivalence approval from the New Zealand Civil Aviation Authority.

**AIR NEW ZEALAND ACADEMY OF LEARNING**
Massey University School of Aviation is the only Air New Zealand Preferred Flight Training Organisation (PFTO) that offers an integrated aviation degree, and one of only four PFTOs selected by the academy to provide airline-informed ab initio flight training.

**ROYAL AERONAUTICAL SOCIETY ACCREDITATION**
The Royal Aeronautical Society accredits all aviation qualifications at Massey University, certifying that they meet the RAeS’s international professional standards.

**SINGAPORE AVIATION ACADEMY**
Massey’s School of Aviation offers the Bachelor of Aviation Management and Master of Aviation via distance learning to international students through a partnership with Singapore Aviation Academy. The academy is an ICAO TRAINAIR PLUS Full Member, ICAO endorsed Government Safety Inspector Training Centre and ICAO Aviation Security Training Centre.

**TRAINING ARTICULATION AGREEMENTS**
The school has articulation arrangements with the following institutions and organisations whose graduates will be eligible to be awarded credits into the Bachelor of Aviation Management.
- Singapore Polytechnics (Republic Polytechnic, Nanyang Polytechnic, Singapore Polytechnic and Temasek Polytechnic)
- Sri Lanka Airport and Aviation Academy
- Kuala Lumpur Malaysian Institute of Aviation Technology
- New Zealand Defence Force and Royal New Zealand Air Force
- Airways New Zealand
Aviation

DEGREES
3 Bachelor of Aviation
8 Bachelor of Aviation Management
11 Master of Aviation
13 Doctor of Philosophy (Aviation)

OTHER QUALIFICATIONS
14 Graduate Diploma in Aviation
15 Contract Flight Training

OTHER COURSES
16 Remotely Piloted Aircraft Systems

UPDATED MARCH 2024
The information contained in this publication is indicative of the offerings available in 2024 and subsequent years. This information may be subject to change. While all reasonable efforts will be made to ensure listed qualifications are offered and regulations are up to date, the University reserves the right to change the content or method of presentation, or to withdraw any qualification or part thereof, or impose limitations on enrolments. For the most up to date information please go to massey.ac.nz
Become part of a new generation of pilots, and learn how to fly in Massey’s state-of-the-art training fleet, while gaining a qualification that sets you up for the aviation industry of the future.

Massey’s Bachelor Of Aviation (Air Transport Pilot) is a university undergraduate qualification intended for career pilots. It will not just train you to be a competent pilot, but to become a ‘flight deck manager’ with a university education, and an in-depth understanding of the aviation industry.

WHY ARE WE DIFFERENT?
We lead the field in flight training in New Zealand.

The only professional aviation degree in New Zealand
integrating the Professional Pilot licensing requirements of the Civil Aviation Authority of New Zealand. Graduates are issued with a Commercial Pilot’s Licence and a Multi-Engine Instrument Rating.

Equivalence Approval from the NZCAA
BAv students’ examination results are accepted in lieu of CAA examinations, and flight examiners from the School are approved for conducting Flight Examinations for issue of licences.

State of the art technology
Including a full fleet of technologically advanced aircraft fitted with Garmin 1000 cockpit displays. Flight Simulation Training devices include DA 40 and DA 42 simulators.

Real-world problem solving
Scenario-based flight training methodology builds the ‘soft skills’ required to produce professional aviators (decision making, communication, judgement, conflict resolution, workload management, threat and error, management, ‘single pilot resource management’ (SRM).

Required Navigation Performance (RNP)
The School of Aviation became the first flight-training organisation in New Zealand to receive approval from the Civil Aviation Authority of New Zealand to carry out Required Navigation Performance (RNP) operations on its 12 Diamond DA 40 single-engine aircraft.

Electronic Flight Bags (EFBs)
Massey reflects airline practices, including the move to a mostly digital (paperless) cockpit via the use of EFBs. As a new Bachelor of Aviation student pilot you will be issued with an Apple iPad to be used as your EFB for the duration of your flight training practicum period.

Industry alliances
In recognition of the quality of training delivered in the BAv qualification, Air NZ selected the School of Aviation as an ‘Air NZ Preferred Flight Training Organisation’.

Purpose-built aviation centre
The state-of-the-art 2200 square metre Massey University Aviation Centre was officially opened on 18 October 2019. Designed to house both Bachelor of Aviation students and Aviation Management students under one roof, the facility has become a nucleus for the development and delivery of research-led aviation education and training.

MAJORS INCLUDE
- Air Transport Pilot

CAREERS
A career as a pilot is exciting and highly sought-after, offering global opportunity. The Bachelor of Aviation (Air Transport Pilot) opens up opportunities to become airline pilots or any other potential career within the aviation industry.

Many graduates work as flight instructors in New Zealand or Australia, enabling them to build on their instructional techniques expertise which is a valuable skill for those who eventually decide to take up a role as an Airline Training Captain.

You may wish to progress to key management or training positions for an airline or with international bodies such as the International Air Transport Association (IATA) or the International Civil Aviation Organisation (ICAO). Postgraduate study in aviation would be worth considering if you intend to follow this path.

GRADUATE PATHWAYS
- Massey University Assistant Flight Instructor Scheme (by selection).
- Massey Flight Instructor graduates have direct pathways to roles with other NZ domestic flight training organisations and international training schools in Australia (e.g., Basair and Soar Aviation) as per demand from these organisations.
Entry requirements

There are two intakes per year into the Bachelor of Aviation qualification

A  Semester One (January)
B  Semester Two (July)

All applicants wishing to enrol in the Bachelor of Aviation are required to meet the undergraduate admission requirements.

APPLICATION FOR THE BAV
All academic entry requirements are detailed on the web page.

STAGE ONE

1  ADAPT TEST
All prospective candidates must complete the ‘ADAPT’ assessment.
Candidates will receive a code to complete the ADAPT assessment three months prior to their Stage Two assessments. Payment for the assessment must be made in advance through the Massey University student portal.
You are required to meet a satisfactory standard in this test in order to be invited to the next stage of the selection process. Required results to progress are:
– Average,
– Above Average, or
– Good.
Candidates submitting a ‘Below Average’ result may attempt the ADAPT test assessment. Those submitting a ‘Poor’ result will not proceed to stage two.

Before you will be considered by selection board in stage two, you will have:

2  TRIAL FLIGHT
You are required to have taken at least one trial (experience) flight before your selection board appointment is confirmed. This is to give you an understanding of what it is like to fly in a small aircraft. Trial flight experiences can be flexible (e.g., taken at any flight training organisation), with pilot friends, or at the annual Massey University Aviation Open Day.

3  MEDICAL AND VISION ASSESSMENTS
Pre-book your medical appointments with a CAANZ approved medical examiner and optometrist. Provide evidence of either a current CAANZ Class One Medical Certificate, or the date of the medical appointment for confirmation of stage two.
**STAGE TWO**

### 4 SELECTION BOARD
Your application will be assessed, and you may then be invited to the “selection board.” This is usually held in Palmerston North (in person 8, 9, 10 October and 3 December 2024) at the Massey University Aviation Centre. Semester two selection will be scheduled for a date TBC in late May / early June 2025. An online selection may be scheduled for international students. This involves:

### A PILOT APITUDE ASSESSMENT TESTS
Including a flight simulator aptitude test, psychometric and physics tests. 2 hours.

### B A SELECTION INTERVIEW
Taking part in a panel interview. 45 minutes.

### C TWO WRITING TASKS
English language tests
- Short essay and vocabulary assessment. 30 minutes.

### OTHER REQUIREMENTS

#### English language communication
As per the CAA Advisory Circular AC61-2 Rev 4 “Pilot Licences and Ratings—Student Pilots” 14 February 2012, Rule 61.105(a)(3) requires a person to have sufficient ability in reading, speaking, understanding and communicating in the English language to enable them to adequately carry out the responsibilities of a pilot-in-command of an aircraft before a flight instructor can authorise the person to fly solo as a student pilot. Students must have gained the literacy credits at NCEA Level 2 required for University Entrance.

In addition Massey University requires that prospective domestic students successfully attain a minimum of 14 credits (or equivalent) in a language-rich subject such as (but not limited to) English, history, art history, geography, biology. This is to demonstrate evidence of a student’s ability to write an extended formal essay. International students must gain an IELTS score of 6.5 with no band lower than 6.0 – or pass an alternative approved English language test to an equivalent standard.

#### Fit and proper person
In simple terms, anyone holding or applying for an aviation document, or anyone who has control over the exercise of the privileges of an aviation document, must satisfy the Director of Civil Aviation that they are a fit and proper person to do so. This is a requirement of the Civil Aviation Act 1990, Section 9. An aviation document includes, for example, a licence, a rating, an air operator certificate. This process will be undertaken in your second semester. Your instructor will advise you as to when to commence your application.

You will be required to apply for an up-to-date Criminal Convictions Report showing:
- A conviction-free period of at least three years prior to the date on which training will commence; and
- No more than one conviction for drink driving
- An up-to-date Demerit Points and Suspension History Report (Traffic Offence History) showing a maximum of 65 demerit points* (or equivalent for international students) within the three years immediately prior to the date on which training will commence

* Equivalent to two minor speeding offences (20 demerit points each) and a restricted driver carrying an unauthorised passenger (25 demerit points)

Note: A conviction for drink driving or drug offences (or other serious offence or serial offending) while you are on the course breaches the Fit and Proper Person criteria, and your training may be terminated.

#### Maths assessment
Multi-choice / short answer assessment. 30 minutes.

Once you are successful in gaining a place in the Bachelor of Aviation qualification you will also need to complete further tasks. These include:

#### 5 ‘FIT AND PROPER PERSON’ DECLARATION
Completing a declaration that you know of no barrier to being issued a ‘Fit and Proper Person’ clearance by the CAANZ.

#### 6 CAANZ CLASS ONE MEDICAL CERTIFICATE
You must obtain a CAANZ Class One Medical Certificate before being confirmed into the Bachelor of Aviation. Allow enough time to complete before your degree commences. See stage one, step 3. You must maintain a CAANZ Class One Medical Certificate for the duration of the degree.

### Enrolment for the first time in January 2025
Students enrolling in the degree for the first time in January 2025 will be enrolled in the compulsory courses as listed on page 7. The qualification structure of 480 credits delivered in three calendar years will remain unchanged.

Please contact Massey for more information.

Note: If you are interested in applying for Semester 2, 2025 (July 2025) please contact Massey University on 0800 627739 well before 01 May 2025 for information on courses in which to enrol and selection board dates etc.

#### Assistant Instructor scheme
- Bachelor of Aviation Air Transport Pilot
- FIC Graduates: Performance based selection and interview.
- Employment: fixed-term position
- Upgrade to B Cat

#### IN PERSON SELECTION
Domestic candidates are required to attend their Selection Board in person at: Massey University, Aviation Centre 47 Airport Drive, Palmerston North, New Zealand.

#### ONLINE SELECTION
In the interest of equity, students with a valid inability to visit NZ to undergo selection board testing may be offered an online selection board instead. This will be assessed on an individual basis.
# Dates and Study Plan

## JANUARY START

<table>
<thead>
<tr>
<th>Domestic Students</th>
<th>International Students</th>
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<tbody>
<tr>
<td><strong>Apply Online</strong></td>
<td>Due 1 November</td>
</tr>
<tr>
<td><strong>Selection Board</strong></td>
<td>Due 1 October</td>
</tr>
<tr>
<td><strong>NZCAA Class 1 Medical Certificate</strong></td>
<td>Early October (and December if required)</td>
</tr>
<tr>
<td><strong>University Entrance</strong></td>
<td>October</td>
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<tr>
<td><strong>Orientation</strong></td>
<td>Due by 15 December</td>
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## JULY START

<table>
<thead>
<tr>
<th>Domestic Students</th>
<th>International Students</th>
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</thead>
<tbody>
<tr>
<td><strong>Apply Online</strong></td>
<td>Due 1 May</td>
</tr>
<tr>
<td><strong>Selection Board</strong></td>
<td>Due 1 April</td>
</tr>
<tr>
<td><strong>NZCAA Class 1 Medical Certificate</strong></td>
<td>Late May / early June</td>
</tr>
<tr>
<td><strong>University Entrance</strong></td>
<td>Early June</td>
</tr>
<tr>
<td><strong>Orientation</strong></td>
<td>Due start of July</td>
</tr>
</tbody>
</table>

## ICE and IB results released in January.

NCEA results published early January.

Evidence of UE status must be submitted no later than 30 June.

## FIRST YEAR STUDY PLAN

### JANUARY START

**Semester One 2025**
- 190.104 Principles of Navigation
- 190.107 Human Performance
- 190.112 Introduction to Flying
- 190.113 Aviation Meteorology 1
- 190.114 Aircraft Systems 1
- 190.116 Introduction to Management in Aviation

**Semester Two 2025**
- 190.120 Aeronautical Legislation
- 190.123 Aircraft Systems 2
- 190.124 Aircraft Performance
- 190.154 Principles of Navigation
- 190.164 Aeroscience
- 190.220 Managing Airline Systems

### JULY START

**Semester Two 2025**
- 190.116 Introduction to Management in Aviation

**Semester One 2026**
- 190.116 Principles of Navigation
- 190.120 Aeronautical Legislation
- 190.121 Aviation Meteorology
- 190.123 Aircraft Systems
- 190.124 Aircraft Performance
- 190.154 Principles of Navigation
YEARS 1 AND 2

Parts 1–4
Courses include those that are designed to meet the required competencies to achieve the Commercial Pilot Licence, multi-engine instrument rating and Airline Transport Pilot Licence subject theory credits (i.e. integrated courses), plus Air Transport Pilot Subject Courses (30 credits) and Aviation Management Subject Courses (30 credits).

100 Level
190.104 Principles of Navigation I
190.107 Human Performance
190.112 Introduction to Flying
190.113 Aviation Meteorology 1
190.114 Aircraft Systems 1
190.116 Introduction to Management in Aviation
190.120 Aeronautical Legislation
190.121 Aviation Meteorology 2
190.123 Aircraft Systems 2
190.124 Aircraft Performance
190.154 Principles of Navigation II
190.164 Aerocence

200 Level
190.201 Aircraft Systems 3
190.203 Air Traffic Control (Aviation Law
190.206 Crew Resource Management
190.207 Aerodynamics 1
190.220 Managing Aircraft Systems
190.221 Climatology
190.237 Heavy Aircraft Performance
190.254 Flight Planning and Advanced Navigation (Part 2)
190.288 Advanced Aircraft Handling

300 Level
190.301 Flight Instructor Human Factors
190.315 Flight Instruction Fundamentals 1
190.335 Flight Instruction

YEAR 3 OPTIONS

1 Flight Instruction Course
By selection only. All courses are compulsory. Candidates completing the Flight Instruction Option must complete the necessary competencies to achieve a CAA NZ ‘C’ Category Flight Instructor Rating, and pass the following integrated courses.

200 Level
190.202 Introduction to Flight Instruction
190.205 Advanced Aircraft Handling

300 Level
190.301 Flight Instructor Human Factors
190.315 Flight Instruction Fundamentals 1
190.335 Flight Instruction

OR

2 Aviation Business Management
At least 60 credits including 190.288 (Advanced Aircraft Handling) must be selected from the 190 prefix (Aviation) and up to 60 credits may be selected from the following prefixes

Selected courses

110___ Accountancy
114___ Human Resource Management
115___ Business
125___ Finance
152___ Management
153___ Dispute Resolution
155___ Business Law
156___ Marketing
157___ Information Systems
178___ Economics
219___ Business Communication

Note: At least 30 credits must be at 300 level.
We focus on human factors and aviation management competencies.

This qualification is aimed at those candidates entering the aviation industry or for those already employed in aviation (with or without a professional licence) but with no previous tertiary qualifications.

The BAvMan evolved from the aviation management major in the Bachelor of Aviation and was first introduced in 2002.

QUALIFICATION OVERVIEW
A specialised aviation qualification, preparing you for a management role. If you’re already employed in the industry this qualification is a great way to qualify yourself for career advancement. Some professional aviation qualifications may be eligible for cross-credit into the degree. The Massey school of Aviation also has relationships with the Singapore Aviation Academy and the Sri Lanka Airport and Aviation Academy.

STRUCTURE
Candidates for the Degree of Bachelor of Aviation Management follow a flexible programme of study, which consists of courses totalling at least 360 credits, comprising:

- not more than 135 credits at 100 level;
- at least 75 credits at 300 level,
- at least 270 credits from Schedule A or B,
- all compulsory courses in the Schedule to the Degree,
- up to 90 credits from the schedules of other undergraduate degrees.

Requirements

Schedule A
Compulsory Courses
150 credits
190.109 Aviation Studies 15 credits
190.115 Introduction to Aeronautics 15 credits
190.116 Introduction to Management in Aviation 15 credits
190.117 Introduction to Human Factors 15 credits
190.216 Aviation Human Factors 15 credits
190.220 Managing Aviation Systems 15 credits
190.224 Environmental Impacts of Aviation 15 credits
190.225 Introduction to Research Methods in Aviation 15 credits
190.327 Managing Cultures in Aviation 15 credits
190.340 Contemporary Issues in Aviation Security 15 credits

Schedule B
Aviation Management Courses
Select 120 credits
190.210 Aviation Safety Management 15 credits
190.211 Aviation Strategic Management 15 credits
190.222 Basic Air Safety Investigation 15 credits
190.240 Air Power 15 credits
190.299 Aviation Special Topic 15 credits
190.306 Airline Strategic Management 15 credits
190.307 Airport Planning 15 credits
190.308 Airport Operational Management 15 credits
190.309 Design of Airways and Air Traffic Systems 15 credits
190.313 Advanced Aviation Human Factors 15 credits
190.314 Legal Issues in Aviation 15 credits
190.318 Air Transport Economics 15 credits
190.328 Aviation Management Practicum 15 credits
190.398 Aviation Internship Project 15 credits
190.399 Special Topic 15 credits

Not all courses are offered every year

Note: This is a guide only, for comprehensive up-to-date information on each course including offerings, requirements and restrictions please scan the above QR code.
AVIATION MANAGEMENT PRACTICUM / AVIATION SPECIAL TOPIC

During your final year, BAvMan students enrolled in these ‘internship’ courses have the opportunity to engage in real-world projects under supervision for aviation related organisations in New Zealand or internationally. The School of Aviation strongly encourages students to consider integrating real world experience into the BAvMan degree wherever possible. Students will receive credit for successfully working in an approved aviation organisation for a specified project and/or duration, and completing suitable work reports. This opportunity lets BAvMan students apply theories learned in class to a variety of aviation scenarios.

DELIVERY

Most courses for the Bachelor of Aviation Management are available internally at the Manawatu campus or by distance. International students may enrol for distance study via the Singapore Aviation Academy in conjunction with Massey.

Suggestions for your first year

<table>
<thead>
<tr>
<th>Semester One</th>
<th>February to June</th>
</tr>
</thead>
<tbody>
<tr>
<td>190.118</td>
<td>Introduction to Management in Aviation</td>
</tr>
<tr>
<td>190.117</td>
<td>Introduction to Human Factors</td>
</tr>
<tr>
<td>100-level Elective course (Business or other)</td>
<td>X2</td>
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<table>
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<tr>
<th>Semester Two</th>
<th>July to November</th>
</tr>
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<tbody>
<tr>
<td><strong>Option 1</strong></td>
<td>Four core courses</td>
</tr>
<tr>
<td>190.109</td>
<td>190.109</td>
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<tr>
<td>190.115</td>
<td>190.115</td>
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<tr>
<td>190.216</td>
<td>190.216</td>
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<tr>
<td>190.220</td>
<td>190.220</td>
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<tr>
<td><strong>Plus</strong></td>
<td>A BAvMan elective course (e.g. 190.210 or 190.240)</td>
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<tr>
<th><strong>Option 2</strong></th>
<th>Any two of the following core courses</th>
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</table>

Overseas exchange

Gaining international experience during your study will strengthen your CV and benefit you throughout your career. Businesses and companies increasingly look to employ applicants who demonstrate a global perspective to work with their culturally diverse employees and overseas clients. Studying overseas on exchange for a semester as part of your degree can propel you along your path toward an exciting career in the aviation industry. Courses successfully completed during the exchange period are credited back to your degree. You will pay the usual tuition fees for 60 credits for your studies at the host university. Tuition fees can continue to be paid to Massey by StudyLink if you qualify for StudyLink assistance. We encourage our students to consider applying for an international student exchange opportunity to increase their understanding of the exciting and dynamic global aviation industry. Previous exchange students have leveraged their experiences as exchange students at universities such as Embry Riddle Aeronautical University, (USA), European Business School (Germany) and in the UK to secure exciting roles upon graduation.

Scholarships

The Fuji Xerox Global Student Exchange Scholarship are available to assist students meet their travel and study costs while on exchange. Application deadline is 20 August each year.
Massey University’s Master of Aviation is a 180-credit Master’s qualification and offers a rigorous programme of learning yet can be achieved in three semesters (one-and-a-half years). Students should have achieved a B-grade Average in the highest level courses in their undergraduate degree.

You may choose from two pathways: research or professional practice. The Master of Aviation may be studied by distance learning.

Turn your passion into a career
Massey University is the only place in New Zealand where you can turn your passion for aviation into a tertiary qualification. We are an internationally-recognised pilot training facility, but we also give you a broad knowledge of the global aviation industry. You will learn communication, management and administrative skills that will broaden the range of careers open to you in the aviation industry.

Research-led learning
Massey teaching is research-led and our academics are internationally-ranked and among the best in the world. Our teaching staff are widely published and are in demand as keynote speakers on topical global issues. International visitors regularly seek out visits to our facilities to learn more about what we do.

World-leading lecturers and supervisors
We work to help you succeed. Massey University offers smaller classes and more personalised learning than many other tertiary institutions, giving you greater access to lecturers and the help you need to succeed and thrive during your master’s study.

Massey’s aviation staff are internationally-renowned for their research and teaching and learning methods. You will be working with internationally-recognised specialists.

RESEARCH PATHWAY
If you choose this pathway your study will include at least 60 credits of taught courses including a compulsory Research Methods course. Part Two will incorporate a minimum of 60 credits of research.

Part One
At least 60 credits
Compulsory courses
190.704 Research Methods in Aviation 30 credits
Subject courses
190.701 Human Factors for Professional Aviation 30 credits
190.703 Management in Aviation Systems 30 credits
190.720 Aviation Strategic Management 30 credits
190.721 Design and Management of Airports 30 credits
190.790 Special Topic 30 credits

Part Two
At least 60 credits
Courses
190.890 Thesis (Part 1) 45 credits
190.891 Thesis (Part 2) (Prerequisite 190.890) 45 credits
190.892 Thesis (Part 1) 60 credits
190.893 Thesis (Part 2) (Prerequisite 190.892) 60 credits
190.895 Research Report 60 credits
190.898 Thesis 90 credits
190.899 Thesis 120 credits

PROFESSIONAL PATHWAY
Those wanting a more practice-based qualification which reflects their industry experience should enrol in the Professional Practice option.

This option includes two compulsory aviation management courses, elective aviation courses and culminates in a 60-credit ‘Professional Practice in Aviation’ course. Students who are already aviation professionals may wish to draw on their current aviation role for the purpose of a case study.

Part One
120 credits
Compulsory courses
60 Credits
190.703 Management in Aviation Systems 30 credits
190.720 Aviation Strategic Management 30 credits
Subject courses
60 Credits
190.701 Human Factors for Professional Aviation 30 credits
190.721 Design and Management of Airports 30 credits
190.790 Special Topic (Permission HoS) 30 credits
190.791 Special Topic (Permission HoS) 30 credits

Part Two
60 credits
Course
190.894 Professional Practice in Aviation 60 credits
LEARN ABOUT PHDs:
AND PROFESSIONAL
DOCTORATES
Discover how to apply
and find a supervisor, and
how we’ll support you
to succeed.

For information on
applications, requirements,
and visas for International
students
The ultimate achievement in aviation at tertiary level is the Doctor of Philosophy – Aviation.

The Doctor of Philosophy (PhD) is a prestigious research qualification which is essential for a career in any research institution or university.

The School of Aviation is active in research in several areas, including flight training devices, transference of learning, risk taking, accident legislation, call-sign confusion, crew resource management, and the effect of sleep deprivation. The School’s research outcomes contribute to enhancing safety and efficiency, and improving the body of aviation knowledge in this dynamic industry.

The School also has an active programme of postgraduate research, with a number of students currently enrolled. Postgraduate students are encouraged to disseminate their work by publishing it in relevant peer-reviewed journals or by presenting it at conferences. University scholarships may also be available for students wishing to undertake research at postgraduate level.

ENTRY REQUIREMENTS

The doctoral programme is open to academically able students who have achieved First Class Honours or Distinction or Second Class Honours (Division I) in a Master’s or Bachelor’s (Honours) qualification. A PhD is completed by thesis and is expected to take three years of full-time study or up to six years of part-time study.

Your initial research proposal needs to include sufficient information for your prospective supervisor to be able to assess your current knowledge around your research topic. It will also be used by the School of Aviation to gauge whether there is a current staff member within the School who is able to supervise your research. Our supervisors are active and well known in their fields of expertise. When you use the expertise search, use filters to narrow your search.

Students are enrolled provisionally in the first year of PhD study, during which time your research proposal is developed. You are then confirmed into the doctoral degree.

ENROLLING IN THE DOCTORAL PROGRAMME

You cannot enrol directly into a doctoral programme – you need to apply to the Doctoral Research Committee for admission.

If you’re a New Zealand citizen or hold New Zealand permanent residency, you can download a DRC 2 Application Form for Provisional Registration as a PhD candidate, which can be found on the Graduate Research School (GRS) website.
The Graduate Diploma in Aviation (GDipAv) is for those already working in the aviation industry who want to expand their knowledge in areas that may enhance their industry experience and opportunities. It has been developed from the Graduate Diploma in Business Studies.

In the GDipAv (Aviation Studies) option, two compulsory courses in aviation management systems and human factors provide the core, along with six elective courses – building a solid aviation qualification.

The GDipAv (Flight Instruction) option includes five integrated compulsory courses and two courses taken from the schedule to the Bachelor of Aviation Management degree.

ENTRY REQUIREMENTS

To qualify for entry into this qualification you need to hold a relevant undergraduate degree or be able to demonstrate relevant practical, professional or scholarly experience equivalent to that of a graduate. You’ll need to satisfy the School of Aviation that you have the background and experience to follow the programme with a reasonable chance of success.

Note: Candidates are deemed to have met the prerequisite requirements for the 200-level courses listed in the following schedule when they’ve been admitted to the qualification.

STRUCTURE

Students enrolling in this qualification must successfully complete 75 credits at 300 level. You will need to follow an approved course of study of 120 credits in one of the following endorsements as listed in the schedule.

Aviation Studies

<table>
<thead>
<tr>
<th>Compulsory courses</th>
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<tbody>
<tr>
<td>190.216 Aviation Human Factors</td>
</tr>
<tr>
<td>190.220 Managing Aviation Systems</td>
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</table>

Plus 90 credits with at least 75 credits at 300-level from the following:

<table>
<thead>
<tr>
<th>Courses</th>
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<tbody>
<tr>
<td>190.211 Aviation Strategic Management</td>
</tr>
<tr>
<td>190.222 Basic Air Safety Investigation</td>
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<tr>
<td>190.224 Environmental Impacts of Aviation</td>
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<td>190.225 Intro Reaser Methods in Aviation</td>
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<tr>
<td>190.240 Air Power</td>
</tr>
<tr>
<td>190.249 Aircraft Maintenance Management (30 Credits)</td>
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<tr>
<td>190.306 Airline Strategic Management</td>
</tr>
<tr>
<td>190.307 Airport Planning</td>
</tr>
<tr>
<td>190.308 Airport Operational Management</td>
</tr>
<tr>
<td>190.309 Design of Airways and Air Traffic systems</td>
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<td>190.313 Adv Aviation Human Factors</td>
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<td>190.314 Legal Issues in Aviation</td>
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<td>190.321 Adv Air Safety Investigation</td>
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<tr>
<td>190.322 Managing Cultures in Aviation</td>
</tr>
<tr>
<td>190.340 Contemporary Aviation Security</td>
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</tbody>
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Flight Instruction

A Commercial Pilot Licence (Aeroplane) is a prerequisite for this qualification. An application to the Flight Instruction Course is required. Please contact the School for details.

<table>
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<th>Compulsory courses</th>
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<tr>
<td>190.282 Flight Instruction Foundation Studies</td>
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<tr>
<td>190.285 Introduction to Aerobatic Principles</td>
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<tr>
<td>190.301 Flight Instruction Human Factors</td>
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<tr>
<td>190.315 Flight Instruction Fundamentals I</td>
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<td>190.335 Flight Instruction</td>
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</table>

Plus 30 credits at 200 or 300 level from 190-prefix courses.

Note: Not all courses are available every year.
In addition to degree qualifications Massey University School of Aviation offers contract flight training to airlines and international aviation training institutions wishing to train cohorts of prospective pilots.

Massey University School of Aviation, a NZ CAA Rule Part 141 certified flight training organisation, offers world class training and facilities with a fleet of technically enhanced G1000 (full glass cockpit) Diamond DA40 and DA42 training aircraft fully equipped and certified for PBN operations.

Flight simulation training devices include a new-generation Diamond DA-42 flight simulator, a Frasca Tru-Flite simulator plus part-task training devices and DA 40 Mentor. Training packages include training, accommodation and meals / laundry plus ‘operations support’ and all students have access to the University’s pastoral care and accommodation facilities. All students are issued with an iPad-based Electronic Flight Bag (EFB), and their uniforms, (except for strong black footwear and black socks which they must provide). International students must provide evidence of travel and medical insurance.

**FLIGHT TRAINING OPTIONS**

**Basic Training**
This training course is designed to prepare cadet pilots for entrance into an airline environment using scenario-based training methodologies (SBT), check-lists, SOPs and en-route guides. It includes PPL(A) and CPL (A) and Multi-Engine Instrument Rating (MEIR).

**Airline Cadetship**
69 weeks
- 216 hours in both single-engine and multi-engine aircraft, and multi-engine simulator:
  - 190 hours DA40 single-engine
  - 12 hours DA40 Simulator
  - 10 hours DA42 multi-engine
  - 4 hours DA42 multi-engine sim
- All relevant pre-flight and post-flight ground briefings
- PPL (A) and CPL (A) and IR theory
- CAA NZ subject examinations
- CAA NZ Licence / rating issues

**ADVANCED TRAINING OPTIONS**

**Airline Bridging Course (ABC)**
Two weeks
- Equivalent of EASA MCC
- Limited numbers per cohort
The rapidly developing unmanned aviation (RPAS) sector has seen the need for increased formalisation and professional oversight of the industry, resulting in a drive by UAVNZ to ensure the quality and integrity of training for all clients seeking to upskill themselves in operating this technology in New Zealand.

PROFESSIONAL TRAINING COURSES
Massey University School of Aviation is one of only five New Zealand RPAS training organisations to be officially recognised as a UAVNZ Recognised Training Provider. Signatories agree to abide by a set of professional standards which embed standards governing the quality of the training, peer reviews of the training, and a complaints process for clients who consider that their training failed to meet these professional standards. This recognition fits seamlessly with Massey’s continuing drive for best practice and ‘safety -first’ approach which governs both its Bachelor of Aviation degree and RPAS training courses.

As a CAANZ Part 141 training provider (fixed wing and RPAS) Massey offers two professional RPAS training courses:

1. Introduction to Regulations and Operator Conduct
2. Human factors for RPAS Operators
INTRODUCTION TO REGULATIONS AND OPERATOR CONDUCT

RPAS continue to prove their capabilities in the aviation marketplace as utility vehicles and, with increasing technology, have become a dominant force in many aviation sectors. This course encompasses an ever-widening cache of NZ RPAS operators. Massey has now graduated more than 1300 certified RPAS operators from this course since its inception.

Certified RPAS operators include:
- Dept. of Conservation
- NZDF
- Electricity lines companies
- NZUSAR
- Geospatial Analysts
- Professional beekeepers
- Higgins Roading and Infrastructure
- Regional Councils
- NZ Fire Service
- RNZAF
- NZ Police
- Stuff NZ

Industries RPAS operators are working within include:
- Aerial mapping
- Oil and gas
- Forestry
- Real estate
- Maintenance Facility
- Tourism
- Management companies

Course overview

The three-day course is designed to meet CAANZ requirements for people with little or no aviation experience who want to enter the industry, or to expand their RPAS operations further. Successful outcomes from this course meet the initial training requirements for CAA Rule Part 102. The School is a CAA Rule Part 141 certified provider for both piloted and non-piloted training.

Graduates of the course will be able to:
- Identify threats to your operation and develop methods of mitigation
- Interpret the various aviation documents and regulations and be able to apply these to your operation
- Practice and comprehend radio telephony procedures
- Submit as evidence of training from a Part 141-M6 training organisation for an RPAS Part 102 Operator Certificate.
- Understand the conduct required to operate an RPAS in accordance with aviation best practice

Course delivery and assessment: on-campus or online

The course is available as a three day on-campus training course comprising eleven modules. Alternatively, the theory modules may be undertaken online, followed by the practical assessment at a later date.

The course has 3 sections:
- Online assessment
- Theory course
- Practical flight examination

Successful completion of all three sections gains candidates the Massey University Certificate of Competency – Remotely Piloted Aircraft Systems, which complies with the initial training requirements for Part 102 operators.

The theory course covers

- Threats
- Regulations
- Visual navigation charts (VNC’s)
- Aeronautical information publications (AIP’s)
- Notice to Airmen (NOTAM)
- An introduction to the Airshare website
- Meteorology
- Basic radio wave propagation
- Transceivers
- Procedures and phraseology
- Call signs
- Making and interpreting radio calls
- Introduction to safety management systems
- Operation planning

Note: The final elective module can be tailored for a particular organisation or industry (e.g. forestry, NZ Defence Force, agricultural operations, regional councils, etc.). A practical demonstration of pre-flight planning, regulations, and operator conduct is included.

The flight examination covers

- Pre-flight test briefing
- Field work
- An RPAS flight test examination. (Multi Rotor Manual Reversion)

Note: For those organisations holding NZCAA Part 102 Certificates, the School is authorised to conduct annual "Part 102 MultiRotor Annual Operational Competency Assessments (OCAs) - including night-rated OCA assessments where required.”

HUMAN FACTORS FOR RPAS OPERATORS COURSE

Developed by Massey’s in-house RPAS consultant and the RPAS team leader who observed that Human Factors principles applying to pilots of manned aircraft are also relevant to the operators in the unmanned aircraft industry. Consisting of 10 topics including the final assessment, it is particularly relevant to Part 102 operators and/or those engaging in multi-crew operations, night operations, and large, high-risk complex operations. Those applying for, or renewing, an OCA will find it particularly useful.

The course covers a wide variety of Human Factors pertaining to the operation of unmanned platforms in many different scenarios giving it international appeal and relevance. RPAS operators based in NZ or offshore are welcome to enrol.

Modules include

- Crew resource management and communication
- Discussion topic: Accidents (Manned and Unmanned)
- This is designed to get students to start applying their knowledge to various scenarios.
- Human information processing
- Introduction to Human Factors
- Judgement and decision making
- Safety culture and Just culture
- Stress anxiety and depression
- Sleep and fatigue
- Vision and visual illusions

Course delivery and assessment

The course is offered as an online course. Assessment is by way of a series of short answer questions. A grade of at least 50% will be required to pass the assessment.

RPAS CONSULTANCY SERVICE

The School of Aviation also offers an RPAS consultancy service for those preparing their PART 102 Exposition for submission to the CAANZ.

Contact the School of Aviation for more information on RPAS courses and the consultancy services. contact@massey.ac.nz
CONTACT US
If you’d rather speak to a real person, feel free to give our friendly contact centre staff a call on 0800 627 739.
If you’d like to actually see a real person, drop in to our campuses in Auckland, Palmerston North, or Wellington.
Email contact@massey.ac.nz

STUDENT ADVISERS
We understand it’s a big decision. We have heaps of people available to answer any questions you may have about studying with us. Dedicated international, Māori and Pacific student advisers are also available.

EVENTS
We host a variety of exciting events. Please visit massey.ac.nz/events for details. We also have stands at various career and tertiary education expos held all over New Zealand (and beyond). Feel free to contact us if you want to find out when and where.

INTERNATIONAL STUDENTS
The International Recruitment team is the first point of contact for prospective students. If you are considering studying at Massey we welcome your enquiry, and look forward to helping you join us.
Phone +64 6 350 5701
Email international@massey.ac.nz
Web massey.ac.nz/international

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