Program

Aviation (Flying)

3980 | 144 Units of Credit

Overview

The degree of Bachelor of Aviation is offered by the School of Aviation in the Faculty of Science.

The aim of this program is to prepare students for a career in the aviation industry, primarily as a pilot but also as a future manager/pilot. The program prepares the students for the role of professional pilot working either as a single pilot in a general aviation organisation, or as a multi-crew team in an airline. In addition, the student undertakes academic courses in aviation management (including safety) so that they may also take on the role of manager or the dual role of pilot/manager. The parallel program, the Bachelor of Aviation Management stream (Program 3981) prepares students more specifically for careers in the managerial sector of the aviation industry.

Both streams consist of core courses selected from the Faculties offering the program, together with a range of options. The Flying stream additionally includes flight training to a minimum level of Commercial Pilots Licence (CPL), Instrument Rating - Multi Engine Aeroplane and Air Transport Pilot Licence (ATPL) theory subjects.

Note: Due to the block training nature of the flight training program, teaching periods might not correspond to standard academic sessions, and students will need to undertake the Professional Pilot Program (flying training) on a full-time basis.
<table>
<thead>
<tr>
<th><strong>Faculty</strong></th>
<th>Faculty of Science</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campus</strong></td>
<td>Kensington</td>
</tr>
<tr>
<td><strong>Study Level</strong></td>
<td>Undergraduate</td>
</tr>
<tr>
<td><strong>Typical duration</strong></td>
<td>3 Years</td>
</tr>
<tr>
<td><strong>Delivery Mode</strong></td>
<td>Face-to-face</td>
</tr>
<tr>
<td><strong>Intake Period</strong></td>
<td>Term 1, Term 3</td>
</tr>
<tr>
<td><strong>Academic Calendar</strong></td>
<td>3+ Calendar</td>
</tr>
<tr>
<td><strong>Minimum Units of Credit</strong></td>
<td>144</td>
</tr>
<tr>
<td><strong>Award type</strong></td>
<td>Bachelors Pass</td>
</tr>
<tr>
<td><strong>Award(s)</strong></td>
<td>Bachelor of Aviation - BAv</td>
</tr>
<tr>
<td><strong>UAC Code</strong></td>
<td>429500</td>
</tr>
<tr>
<td><strong>CRICOS Code</strong></td>
<td>017227G</td>
</tr>
</tbody>
</table>
**Learning Outcomes**

1. Collaborate effectively with others and use effective communication skills in an aviation operational environment, including communications with co-pilots, air traffic controllers, and ground crew.

   Leaders  Scholars  Global Citizens

2. Demonstrate the ability to critically select and apply aviation management, airmanship and operations knowledge to situations in a local and global environment.

   Scholars  Global Citizens  Leaders

3. Analyse issues in aviation management and business situations and propose appropriate solutions based on academic insight.

   Scholars  Leaders  Professionals

4. Analyse and evaluate operational situations and problems related to commercial flying operations and apply appropriate procedures and create appropriate solutions to achieve safe, efficient and compliant outcomes.

   Scholars  Professionals

5. Demonstrate professional airmanship by applying single-pilot threat and error management, maintaining effective communication and relationships with key personnel, effectively making decisions and setting priorities in relation to commercial flying operations.

   Scholars  Professionals

6. Identify and assess cultural, ethical, environmental and/or sustainability considerations in the aviation operational environment and provide practical solutions.

   Leaders  Professionals  Global Citizens

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**Graduate Capabilities:**

For more information on Graduate Capabilities, please click on this [link](#).
Program Structure

Students must complete 144 UOC as a standalone program.

Level 1 Core Courses

Students must take 48 UOC of the following courses.

AVEN1920 | 6 UOC
Introduction to Aircraft Engineering

AVIA1111 | 12 UOC
Basic Aeronautical Knowledge

AVIA1901 | 6 UOC
Aviation Transport Economics

MATH1031 | 6 UOC
Mathematics for Life Sciences

MATH1041 | 6 UOC
Statistics for Life and Social Sciences

PHYS1149 | 6 UOC
Physics 1A (Aviation)

PHYS1211 | 6 UOC
Energy and Environmental Physics

Level 2 Core Courses

Students must take 42 UOC of the following courses.

AVIA2111 | 6 UOC
Commercial Navigation

AVIA2112 | 6 UOC
<table>
<thead>
<tr>
<th>Course Code</th>
<th>UOC</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVIA2113</td>
<td>6</td>
<td>Commercial Meteorology</td>
</tr>
<tr>
<td>AVIA2114</td>
<td>6</td>
<td>Commercial Human Factors, Flight Rules and Air Law</td>
</tr>
<tr>
<td>AVIA2115</td>
<td>6</td>
<td>Commercial Aircraft General Knowledge</td>
</tr>
<tr>
<td>AVIA2116</td>
<td>6</td>
<td>Commercial Aerodynamics</td>
</tr>
<tr>
<td>AVIA2117</td>
<td>6</td>
<td>Commercial Operation, Performance and Planning</td>
</tr>
<tr>
<td>AVIA3101</td>
<td>6</td>
<td>Instrument Rating</td>
</tr>
<tr>
<td>AVIA3111</td>
<td>6</td>
<td>Airline Management</td>
</tr>
<tr>
<td>AVIA3112</td>
<td>6</td>
<td>Air Transport Flight Planning</td>
</tr>
<tr>
<td>AVIA3113</td>
<td>6</td>
<td>Air Transport Aerodynamics and Aircraft Systems</td>
</tr>
<tr>
<td>AVIA3114</td>
<td>6</td>
<td>Air Transport Performance and Navigation</td>
</tr>
</tbody>
</table>

**Level 3 Core Courses**

Students must take 42 UOC of the following courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>UOC</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVIA3111</td>
<td>6</td>
<td>Air Transport Flight Planning</td>
</tr>
<tr>
<td>AVIA3112</td>
<td>6</td>
<td>Air Transport Aerodynamics and Aircraft Systems</td>
</tr>
<tr>
<td>AVIA3113</td>
<td>6</td>
<td>Air Transport Performance and Navigation</td>
</tr>
<tr>
<td>AVIA3114</td>
<td>6</td>
<td>Air Transport Air Law, Meteorology and Human Factors</td>
</tr>
</tbody>
</table>
AVIA3301 | 6 UOC  
Simulation Application and Air Traffic Management

AVIA3401 | 6 UOC  
Aviation Safety and Resource Management

**General Education**

Students must take 12 UOC of the following courses.

Any course defined as a Science course see Table 1 cannot be taken as General Education (GE). All other courses can be used to fulfil the GE requirement of this program, including GEN

any General Education course

**Excluded General Education Courses**

Students may not undertake any of the following excluded courses.

any Computer Science course

any Food Technology course

any course offered by School of Medical Sciences

any course offered by Faculty of Science

any General Education - Faculty of Science course

**Maximum Level 1 UOC**

A maximum of 48 UOC of Level I courses can be taken throughout the entire program, excluding any General Education or other mainstream Level I courses taken to fulfil the 12 UOC General Education requirement.

any level 1 course
General Education Maturity Requirements

Students must have completed 48 UOC before taking any of the following courses.

any General Education course

Level 2 Maturity Requirements

Students must have completed 48 UOC before taking any of the following courses.

any level 2 course

Level 3 Maturity Requirements

Students must have completed 96 UOC before taking any of the following courses.

any level 3 course

Enrolment Disclaimer

Unless advised otherwise by your program authority, you should follow the rules for the handbook for the year you commenced your program. You are also responsible for ensuring you enrol in courses according to your program requirements. myUNSW enrolment checks that you have met enrolment requirements such as pre-requisites for individual courses but not that a course will count towards your program requirements.
Related Programs

Bachelor of Aviation - BAv
3981 Aviation (Management)

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 144
Typical Duration: 3 Years

Read More

Graduate Diploma in Flying - GradDip(Flying)
5536 Aviation (Flying)

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 48
Typical Duration: 1 Years

Read More

Graduate Diploma in Advanced Flying - GradDipAdvFly
5545 Advanced Flying

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 48
Typical Duration: 1 Years

Read More
Admission Requirements

Special Admission Requirements

Additional selection criteria for admission to this program:

- Interview
- Other

Application Form

In addition to UAC or direct admission applications, all applicants must complete the application form available from the School website (http://www.aviation.unsw.edu.au/future/bavfly.html) or by requesting one from the Undergraduate Coordinator (aviab@unsw.edu.au or +61 2 9385 5756).

Interviews and aptitude tests will be arranged with applicants after receipt of the application form.

Interview

An interview must be undertaken with the Head of School, Director of Flying Operations, Head of Operations or another person nominated by the Head of School to ascertain potential student suitability for a career as a pilot, and also to determine the likelihood of the applicant possessing at least the minimum motivation and aptitude required to successfully undertake flying training.

The standardised interview is targeted to benchmarks in the areas of mental arithmetic, planning/initiative/independence, teamwork, motor skills, situation awareness, self-confidence, passion/motivation/interest, sense of entitlement, reaction to criticism and communication.

The interview also is required to advise the applicant on special requirements related to airborne flying training; in particular: medical certification, the scope and nature of the training at Bankstown Airport, financial arrangements and security clearance applications.
For more information about admission requirements for various UNSW programs, visit the following website(s):

Domestic Students
International Student
Program Requirements

Recognition of Prior Learning

UNSW Students may be granted Recognition for Prior Learning (RPL) which may or may not reduce the amount of learning required to achieve a degree at UNSW. Generally, RPL is only granted based on the completion of tertiary-level studies, but in exceptional circumstances may also include non-formal or informal learning such as professional experience. RPL will not be granted based on partly completed tertiary courses. All applications for RPL at UNSW are subject to UNSW Recognition of Prior Learning (Coursework Programs) Policy and Procedures. Students seeking credit for courses completed at another university are required to submit documentary evidence (course outlines, academic transcripts) to support their application, and to nominate the course(s) for which they seek credit. In addition, the following conditions apply for all UNSW Science programs (including the Science component of dual award programs): Specified course credit, i.e. credit granted for an exact or near exact equivalence to a course at UNSW, will not be granted when more than 7 years has elapsed from the successful completion of the course (or other learning) and the student’s commencement in the Science program. Where this time period is shorter it will be stipulated in the individual rules for the relevant program. Unspecified course credit (e.g. General Education or free electives) will not be granted when more than 10 years has elapsed from the successful completion of the course (or other learning) and the student’s commencement in the Science program. Students may only receive credit of up to a maximum of 50% of the coursework component of their Science program, excluding Honours. For most undergraduate programs this will be 72 UOC. For dual award programs that include a Science component, it will be a maximum of 50% of the Science component of the dual degree, excluding Honours. Credit for the other program will be assessed by the Faculty that administers that program. Applications for RPL will only be assessed for students who have accepted a place to study in a UNSW Science program. Students must formally apply for RPL unless they become a UNSW student as part of a formal Articulation Agreement. Applications for RPL should be made as early as possible in the student’s program. Students who are readmitted into a Science program after a period of unapproved absence or deferment, or after exclusion, will not necessarily retain credit for all units completed at UNSW prior to the absence if the date of completion of the units of study is greater than the 7 and 10-year rules outlined in points 1 and 2 above. In these cases, the credit retained will be decided by the Associate Dean (Academic Programs) in consultation (when necessary) with the Program and/or Course Authority.
Participation and Enrolment Requirements

Other

For this program, students will be required to have: Class 1 CASA medical certificate; Australian Aviation Security Identification Card; Aviation Reference Number; Passed the CASA English Language Proficiency Interview

Progression Requirements

Continued participation requirements: In order to commence flying training after enrolment, students must:

Obtain an Australian Aviation Reference Number issued by CASA;

Obtain a CASA Class 1 Aviation Medical Certificate. UNSW recommends the Class 1 medical is obtained as early as possible, preferably before an offer of enrolment is accepted;

Submit sufficient identity documentation and other personal information to apply for an Aviation Security Identity Card and qualify for the Card after the security checks;

Pass Flight Selection.

Students must pass Flight Selection to begin flying training. Flight selection occurs during and immediately after term 3 of first year, and includes Basic Aeronautical Knowledge theory (AVIA 1111); five hours of airborne and simulated flying training; an assessment of English language proficiency (mandated by legislation) and pilot aptitude testing.

Students must pass Flight Selection (including AVIA 1111) to enter core second year flying courses and also have performed satisfactorily in flying training. Students must pass the core second year flying courses to remain in the program and proceed to core third year flying courses, and also to have performed satisfactorily in flying training.

For more information on university policy on progression requirements please visit Academic Progression.
Pathways

Honours Programs

Bachelor of Science (Honours) - BSc(Hons)
4500 Science (Honours)

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 48
Typical Duration: 1 Years

Read More

Post Graduate

Graduate Diploma in Advanced Flying - GradDipAdvFly
5545 Advanced Flying

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 48
Typical Duration: 1 Years

Read More

Graduate Diploma in Aviation Management - GradDipAvMgmt
5741 Aviation Management

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 48
Typical Duration: 1 Years

Read More

Master of Aviation Management - MAvMgmt
8741 Aviation Management

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 96
Typical Duration: 2 Years

Read More
Professional Outcomes

Career Opportunities

Air Transport Professionals nec, Air Transport Professionals
Recognition of Achievement

University Medal

The University Medal is awarded to recognise outstanding academic performance by a bachelor degree student in line with the University Medal Policy and University Medal Procedure.

Award of Pass with Distinction

The Award of Pass with Distinction is awarded when a weighted average mark (WAM) of at least 75% has been achieved and at least 50% of the requirements of the award completed at UNSW. All eligible programs will award Pass with Distinction except in special circumstances where approval of Academic Board has been given for a program to opt out.

For more information, please visit:

Current Students Pass With Distinction
Additional Information

Participation and Enrolment Requirements

For continued participation in this program, students will be required to have:

- Obtained a Class 1 CASA medical certificate
- Obtained an Australian Aviation Security Identification Card
- Obtained an Aviation Reference Number
- Passed Flight Selection

Definition of 'Science' courses

Table 1

Science Handbook Rules and Editions

Students must follow the program rules and requirements in the UNSW Handbook published in the year they commence their studies with the Faculty of Science.

Students who transfer from another UNSW Faculty into Science (for example, from a Bachelor of Arts into a Bachelor of Science) must follow the program rules and requirements in the UNSW Handbook published in the year of their transfer.

Students, who are readmitted to UNSW after a period of unapproved absence or deferment, or after exclusion, must satisfy the program rules in the Handbook published in the year of their readmission. In addition, these students may be subject to restrictions on which courses taken at UNSW may be counted on their return. In some cases, students returning from an unapproved absence may be required to repeat courses. See the Recognition of Prior Learning (RPL) and Advanced Standing section below for more details. Students who take approved leave or deferment will follow the Handbook for the year of their original commencement unless otherwise approved by the Associate Dean (Academic Programs).

Faculty of Science Rules

The Faculty of Science has some rules that relate to all students enrolled in programs offered by the Faculty in relation to recognition for prior learning, general education, course exclusions, study load, and cross-institutional study. All students should read the information contained on the Faculty General Rules and Requirements page.
Program Fees

At UNSW fees are generally charged at course level and therefore dependent upon individual enrolment and other factors such as student's residency status. For generic information on fees and additional expenses of UNSW programs, click on one of the following:

Domestic Students
Commonwealth Supported Students
International Students

Additional Expenses

In addition to paying standard academic fees for the units of credit which they take, students must contribute additional funds to support the practical aspects of their flying training which is undertaken in the Professional Pilot Program.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179