Resolutions of the Academic Board

These resolutions contain the minimum entry requirements for consideration for selection into courses of the University.

These resolutions are published in accordance with Statute 4.1 – The Academic Board, clause 4.1.6 - Publication of Board resolutions:

‘The university secretary must make available to all students, in a form approved by the Board accessible throughout the University, all Board resolutions containing information which directly affects students.’

FACULTY OF SCIENCE &
MELBOURNE GRADUATE SCHOOL OF SCIENCE

<table>
<thead>
<tr>
<th>Faculty of Science</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Name</strong></td>
</tr>
<tr>
<td><strong>Associate Degree in Urban Horticulture</strong> (200 credit points)</td>
</tr>
<tr>
<td>1. In order to be considered for entry, applicants must have completed: one of</td>
</tr>
<tr>
<td>(a) the Victorian Certificate of Education including</td>
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<tr>
<td>• VCE Units 3 and 4 – either a study score of at least 25 in one</td>
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<tr>
<td>of English, English Language or Literature or a study score of at least 30 in</td>
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<tr>
<td>English as an Additional Language;</td>
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<tr>
<td>(b) the International Baccalaureate Diploma including</td>
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<tr>
<td>• at least Grade 4 in English or English B (Standard Level or Higher Level);</td>
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<tr>
<td>(c) a senior secondary program, foundation studies program or equivalent approved by the Academic Board including appropriate English language studies.</td>
</tr>
<tr>
<td>Meeting these requirements does not guarantee selection.</td>
</tr>
<tr>
<td>2. In ranking applications, the Selection Committee will consider:</td>
</tr>
<tr>
<td>• prior academic performance.</td>
</tr>
<tr>
<td>3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.</td>
</tr>
<tr>
<td>4. For applicants who have not completed the Victorian Certificate of Education or the International Baccalaureate Diploma, the undergraduate English language requirements must be met.</td>
</tr>
<tr>
<td>Note. For applications through the Victorian Tertiary Admission Centre, “middle-band” selection adjustments are made only on the basis of eligibility for Access Melbourne.</td>
</tr>
</tbody>
</table>
### Diploma in Mathematical Sciences
(100 credit points)

1. In order to be considered for entry, applicants must have completed:
   - concurrent enrolment in a University of Melbourne undergraduate degree; and
   - a study score of 30 in VCE Specialist Mathematics Units 3 and 4 or equivalent, or successful completion of university-level studies equivalent to VCE Specialist Mathematics Units 3 and 4.

Meeting this requirement does not guarantee selection.

2. In ranking applications, the Selection Committee will consider:
   - prior academic performance.

The Academic Board may determine levels of prior academic performance which guarantee selection.

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants will satisfy the University’s English language requirements for the Diploma by meeting the English language requirements for the Bachelor degree in which they are enrolled concurrently.

Note.
- Students are permitted to enter the diploma at the start of any semester before the completion of the companion undergraduate degree.
- Up to 50 points of advanced standing into the Diploma in Mathematical Sciences may be granted on request to students who complete appropriate first year and second year mathematics or statistics subjects within the degree. At the commencement of each individual mathematics or statistics subject, the subject is assigned to one of the degree or the diploma, according to the student’s approved enrolment for the semester in which the subject is taken. Once the subject has been successfully completed, credit points for the subject cannot be moved between the degree and the diploma to allow additional subjects to be taken in the degree.
- The Diploma in Mathematical Sciences cannot be awarded until all requirements of both the diploma and the undergraduate degree have been met.

### Bachelor of Science
(300 credit points)

1. In order to be considered for entry, applicants must have completed: one of
   (a) the Victorian Certificate of Education including
      - VCE Units 3 and 4 – either a study score of at least 25 in one of English, English Language or Literature or a study score of at least 30 in English as an Additional Language, and
      - VCE Units 3 and 4 – a study score of at least 25 in either one of Mathematical Methods or Specialist Mathematics and one of Biology, Chemistry or Physics; or
      - both of Mathematical Methods and Specialist Mathematics;
   (b) the International Baccalaureate Diploma including
• at least Grade 4 in English or English B (Standard Level or Higher Level), Mathematics and one of Biology, Chemistry or Physics;
  (c) a senior secondary program, foundation studies program or equivalent approved by the Academic Board including appropriate studies in English and Mathematics, and in at least one of Biology, Chemistry or Physics.

Except for applicants eligible for Access Melbourne, **minimum ATAR or equivalent overall performance rankings apply**

Meeting these requirements does not guarantee selection.

2. In ranking applications, the Selection Committee will consider:
   • prior academic performance.

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. For applicants who have not completed the Victorian Certificate of Education or the International Baccalaureate Diploma, the undergraduate **English language requirements** must be met.

**Note.**
- For applications through the Victorian Tertiary Admission Centre, “middle-band” selection adjustments are made only on the basis of eligibility for Access Melbourne.
- An alternative pathway is available for applicants eligible for advanced standing of a least 100 points towards the science component of the B.Sc. including at least 25 points at second year level in a discipline area available in the BSc as a major study area. To be considered under this pathway, applicants must meet the University's undergraduate **English language standards** and have completed VCE Mathematical Methods (CAS) Units 3 and 4 with a study score of at least 25, or equivalent.

**Bachelor of Science Extended**

(400 credit points)

1. In order to be considered for entry, applicants must have completed: one of
   (a) the Victorian Certificate of Education including
      • VCE Units 1 and 2 – satisfactory completion of one of Biology, Chemistry, General Mathematics, Mathematical Methods (CAS), Physics, or equivalent
      • VCE Units 3 and 4 – a study score of at least 25 in one of English, English Language or Literature or English as an Additional Language;
   (b) a senior secondary program, foundation studies program or equivalent approved by the Academic Board including appropriate English language studies and studies in one of Mathematics, Biology, Chemistry or Physics.

To be considered, applicants must also be recognized as Indigenous Australians or Torres Strait Islanders. **Minimum ATAR or equivalent overall performance rankings apply.**
Meeting these requirements does not guarantee selection.

2. In ranking applications, the Selection Committee will consider:
   • prior academic performance
   • academic capacity relevant to science study, assessed by interview and/or referee reports.

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. For applicants who have not completed the Victorian Certificate of Education or the International Baccalaureate Diploma, the undergraduate English language requirements must be met.

Note. This specialised degree is for talented Indigenous Australians who may not meet the regular Bachelor of Science entry requirements. It includes integrated support and academic skills subjects.

**Bachelor of Science (Honours)**
(100 credit points)

1. In order to be considered for entry, applicants must have completed:
   • a Bachelor of Science with a weighted average mark of at least H3 (65%), or equivalent, with a major relevant to the discipline stream within the Bachelor of Science (Degree with Honours) that they seek to enter; or
   • an undergraduate degree, of which at least the equivalent of two full years comprises science or technology areas of study, with a weighted average mark of at least H3 (65%), or equivalent, and containing at least 50 points of study at third year level in science or technology areas of study.

   Applicants are also required to meet any specific subject prerequisites and prior academic performance requirements associated with the discipline stream that they seek to enter.

Meeting these requirements does not guarantee selection.

2. In ranking applications, the Selection Committee will consider:
   • prior academic performance, and
   • the availability of supervision and resources in suitable project areas.

   Quotas may be applied to the degree as a whole or to individual discipline streams and preference may be given to applicants with evidence of appropriate preparation or potential to undertake research.

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.
4. For applicants who have not completed the Victorian Certificate of Education or the International Baccalaureate Diploma, the undergraduate English language requirements must be met.

Bachelor of Science (Honours): Schedule of Discipline Streams (approved by the Academic Board on 4 December 2014). This schedule shows available discipline streams and additional conditions applicants must meet to be eligible for (but not automatically guaranteed) selection into Honours within that stream.

Agricultural Science: a major in a discipline relevant to the proposed project

Anatomy and Neuroscience: a major in a discipline relevant to the proposed project

Animal Science and Management: a major in a discipline relevant to the proposed project

Biochemistry and Molecular Biology: a major in Biochemistry and Molecular Biology or in a discipline relevant to the proposed project. Students must have completed a minimum of two third-year subjects in Biochemistry and Molecular Biology

Botany: a major study in a biological science, or in a discipline relevant to the proposed project

Chemistry: a major in Chemistry. Applications from otherwise qualified graduates who have not completed a Chemistry major will be considered on a case-by-case basis by the Selection Committee.

Earth Sciences: a major in Earth Sciences, or in a discipline relevant to the proposed project

Food Science: a major in a discipline relevant to the proposed project

Forest Science: a major in a discipline relevant to the proposed project

Genetics: a major in Genetics or equivalent, including an appropriate (normally Genetics) third-year practical subject.

Geography: a major in Geography with an average of at least H2B (70%) in second and third-year subjects in Geography, or equivalent

Health Informatics: a major in Informatics, with at least 25 points at third-year level in a biomedical discipline e.g. Anatomy, Biochemistry, Genetics, Microbiology, Molecular Biology, Immunology, Neuroscience, Pathology, Pharmacology, Physiology.
<table>
<thead>
<tr>
<th>Applications from other graduates and applicants from other courses and institutions will be considered on a case-by-case basis by the Honours coordinator.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Biology: a major in a discipline relevant to the proposed project</td>
</tr>
<tr>
<td>Medicine (Austin Health): a major in a discipline relevant to the proposed project</td>
</tr>
<tr>
<td>Medicine (Royal Melbourne Hospital): a major in a discipline relevant to the proposed project</td>
</tr>
<tr>
<td>Medicine (St Vincent’s Hospital): a major in a discipline relevant to the proposed project</td>
</tr>
<tr>
<td>Microbiology and Immunology: a major in a discipline relevant to the proposed project</td>
</tr>
<tr>
<td>Oral Health Science: a major in a discipline relevant to the proposed project</td>
</tr>
<tr>
<td>Otolaryngology: a major in a discipline relevant to hearing sciences</td>
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<tr>
<td>Paediatrics: a major in a discipline relevant to the proposed project</td>
</tr>
<tr>
<td>Pathology: a major in Pathology, or a major in a discipline relevant to the proposed project together with PATH30001 and PATH30002, or equivalent. Applications from otherwise qualified graduates who have not completed the above but have practical experience in another biomedical science discipline will be considered on a case-by-case basis by the Selection Committee</td>
</tr>
<tr>
<td>Pharmacology: 37.5 points of third-year Pharmacology</td>
</tr>
<tr>
<td>Physiology: a major in a biomedical science discipline relevant to the proposed project</td>
</tr>
<tr>
<td>Primary Care (General Practice): a major in a discipline relevant to the proposed project</td>
</tr>
<tr>
<td>Psychopharmacology (Psychiatry (Austin Health)): a major in pharmacology, psychology or chemistry</td>
</tr>
<tr>
<td>Surgery (Austin Health): a major in a discipline relevant to the proposed project</td>
</tr>
<tr>
<td>Veterinary Bioscience: a major in a biological sciences discipline</td>
</tr>
<tr>
<td>Zoology: a major in Zoology, or in a biological sciences discipline relevant to the proposed project</td>
</tr>
</tbody>
</table>
**Bachelor of Science (Honours)**  
*(Psychology specialisation)*  
*(100 credit points)*

1. In order to be considered for entry, applicants must have completed:
   - all the requirements for the Bachelor of Arts or Bachelor of Science and an Australian Psychology Accreditation Council (APAC) accredited major in Psychology with a weighted average of at least 70% (H2B) in second and third-year subjects, or equivalent. In computing the weighted average, the average of the third year Psychology subjects is assigned twice the weight of the average of the second year Psychology subjects.  

Meeting these requirements does not guarantee selection.

2. In ranking applications, the Selection Committee will consider:
   - prior academic performance, and
   - the availability of supervision and resources in suitable project areas.

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. For applicants who have not completed the Victorian Certificate of Education or the International Baccalaureate Diploma, the undergraduate English language requirements must be met.

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**Graduate School of Science**

**Master of Science**  
*(200 credit points)*

1. In order to be considered for entry, applicants must have completed:
   - an undergraduate degree in a discipline appropriate to the stream of the Master of Science into which entry is sought, with a weighted average mark of at least H3 (65%) in the best 50 points in appropriate discipline studies at third year; and
   - appropriate prerequisite studies for the stream into which entry is sought.

Meeting these requirements does not guarantee selection.

2. In ranking applications, the Selection Committee will consider:
   - prior academic performance.

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the university’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

Note:
- Quotas may be applied to the degree as a whole, or to an individual stream, and preference may be given to applicants with evidence of appropriate preparation or potential to undertake research.
- Entry into a stream of the Master of Science is subject to the capacity of the department(s) or school(s) offering the program stream to provide adequate supervision in a research project appropriate to the interests and preparation of the individual student and may be subject to the agreement of a member of academic staff to supervise the project module.

**Master of Science: Schedule of Available Streams and their Requirements (approved by the Academic Board on 4 September 2014)**

- The following are the available streams, listed with their stream-specific requirements for appropriate disciplines for the undergraduate degree or major within the undergraduate degree, and any stream-specific subject prerequisites.

**Master of Science (Bioinformatics) MC-SCIBIF**
- Appropriate disciplines – Biology and Biomedicine; Mathematics and Statistics; or Computer Science
- Subject prerequisites – students must also have completed MAST10005 Calculus 1 or equivalent.

**Master of Science (Biosciences) MC-SCIBIOSCI**
- Appropriate disciplines – Biomedicine, Computational Biology, Ecology, Evolutionary Biology, Environmental Science, Genetics, Physiology, Plant Science, Veterinary Science, Zoology

**Master of Science (Botany) MC-SCIBOT**
- Appropriate disciplines – any science discipline

**Master of Science (Chemistry) MC-SCICHE**
- Appropriate disciplines – Chemistry or equivalent discipline
- Subject prerequisites – at least 25 points of third-year university-level Chemistry (of which 12.5 points must be practical-based subjects)

**Master of Science (Computer Science) MC-SCICMP**
- Appropriate discipline – Computer Science or equivalent
- Subject prerequisites – at least 25 points of university-level Mathematics or Statistics subjects (in addition, some knowledge of formal logic and discrete mathematics, and second-year University-level Mathematics/Statistics are recommended).

**Master of Science (Earth Sciences) MC-SCIEAR**
- Appropriate disciplines – Agricultural Science, Atmospheric and Ocean Sciences, Biochemistry, Botany, Chemistry, Engineering, Environmental Science, Food Science, Genetics, Geography, Geology, Mathematics, Microbiology, Physics, Plant Science or Zoology

**Master of Science – (Ecosystem Science) MC-SCIECO**
- Appropriate disciplines – Agricultural Science, Botany, Ecology, Environmental Science, Environmental Management, Environmental Studies, Environmental Engineering, Environmental Economics, Forest Science, Genetics,
<table>
<thead>
<tr>
<th>Program</th>
<th>Discipline(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Science (Epidemiology) MC-SCIEPI</td>
<td>Geography, Geology, Hydrology, Environmental Psychology, Soil Science, Zoology</td>
</tr>
<tr>
<td>Master of Science (Genetics) MC-SCIGEN</td>
<td>Appropriate discipline – any life science</td>
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<tr>
<td></td>
<td>Subject prerequisites – at least 25 points of second-year university-level genetics.</td>
</tr>
<tr>
<td>Master of Science (Geography) MC-SCIGEO</td>
<td>Appropriate disciplines – Geography or a related discipline.</td>
</tr>
<tr>
<td>Master of Science (Mathematics and Statistics) MC-SCIMAT</td>
<td>Appropriate disciplines – Mathematics, Statistics or Mathematical Physics</td>
</tr>
<tr>
<td>Master of Science (Physics) MC-SCIPHY</td>
<td>Appropriate disciplines - Physics, Mathematical Physics, Chemical Physics, Mathematics, Statistics, or Engineering</td>
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<tr>
<td></td>
<td>Subject prerequisites – Quantum Mechanics at both second-year and third-year university-level (in addition, Electrodynamics and Statistical Physics at third-year university-level are recommended)</td>
</tr>
<tr>
<td>Master of Science (Vision Sciences) MC-SCIVIS</td>
<td>Appropriate disciplines – Anatomy, Cell Biology, Immunology, Neuroscience, Ophthalmology, Pharmacology, Psychology, Zoology, Biochemistry &amp; Molecular Biology, Computer Science, Mathematics &amp; Statistics, Optics, Orthoptics, Physics, Veterinary Science, Biotechnology, Genetics, Microbiology, Optometry, Pathology, Physiology, or Vision Science</td>
</tr>
<tr>
<td>Master of Science (Zoology) MC-SCIZOO</td>
<td>Appropriate disciplines – Zoology, Biomedicine, Ecology and Evolutionary Biology, Environmental Science, Genetics, Physiology, Veterinary Science</td>
</tr>
</tbody>
</table>

**Advanced Graduate Certificate in Science**

(50 credit points)

**Advanced Graduate Diploma in Science**

(100 credit points)

1. In order to be considered for entry, applicants must have completed:
   - an undergraduate degree with a major in an appropriate discipline, or equivalent; and
   - appropriate prerequisite studies for the stream into which entry is sought

Meeting this requirement does not guarantee selection.

2. In ranking applications, the Selection Committee will consider:
   - prior academic performance.

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the university’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance **band 6.5** is required.
Advanced Graduate Certificate in Science: Schedule of Available Streams and their Requirements (approved by the Academic Board on 4 September 2014)

The following are the available streams, listed with their stream-specific requirements for appropriate disciplines for the undergraduate degree or major within the undergraduate degree, and any stream-specific subject prerequisites. Not all streams offered under the Diploma are available in the Certificate.

Earth Science
  • Appropriate disciplines – Agricultural Science, Atmospheric and Ocean Sciences, Biochemistry, Botany, Chemistry, Engineering, Environmental Science, Food Science, Genetics, Geography, Geology, Mathematics, Microbiology, Physics, Plant Science or Zoology

Botany
  • Appropriate disciplines – any science discipline

Chemistry
  • Appropriate discipline – Chemistry or equivalent

Computer Science
  • Appropriate discipline – Computer Science or equivalent, with a weighted average mark of at least H3 (65%) in the best 50 points in appropriate discipline studies at third year
  • Subject prerequisites – at least 25 points of university-level Mathematics or Statistics subjects (in addition, some knowledge of formal logic and discrete mathematics, and second-year University-level Mathematics/Statistics are recommended)

Earth Science
  • Appropriate disciplines – Agricultural Science, Atmospheric and Ocean Sciences, Biochemistry, Botany, Chemistry, Engineering, Environmental Science, Food Science, Genetics, Geography, Geology, Mathematics, Microbiology, Physics, Plant Science or Zoology

Genetics
  • Appropriate disciplines – biological sciences, with a weighted average mark of at least H3 (65%) in the best 50 points in appropriate discipline studies at third year

Mathematics and Statistics
  • Appropriate discipline – Mathematics and Statistics or equivalent, with a weighted average mark of at least H3 (65%) in the best 25 points in appropriate discipline studies at level 2 or above
  • Subject prerequisites - at least two level 1 or above and three level 2 or above Mathematics or Statistics subjects. If students have completed accelerated subjects then one fewer level 2 or above subject can be deemed appropriate.

Physics
Appropriate disciplines – Physics, Mathematical Physics, Chemical Physics, Mathematics, Statistics, or Engineering; or equivalent

Subject prerequisites – at least 50 points of level 2 or above Physics and both MAST20009 Vector Calculus and MAST20026 Real Analysis or equivalents

Zoology
Appropriate disciplines - Zoology, Biomedicine, Ecology and Evolutionary Biology, Environmental Science, Genetics, Physiology, Veterinary Science

Graduate Certificate in Science
(62.5 credit points)
1. In order to be considered for entry, applicants must have completed:
   • an undergraduate degree, or equivalent; and
   • at least 37.5 points of specific prerequisite subjects at level 2 or above for the stream into which entry is sought.

Meeting these requirements does not guarantee selection.
2. In ranking applications, the Selection Committee will consider:
   • prior academic performance.
3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.
4. Applicants are required to satisfy the university's English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

Note.
The Graduate Certificate in Science is not a nested program within the Graduate Diploma in Science, but can be used as a pathway into the Master of Science.

Students who have completed the undergraduate component (50 points) of the Graduate Certificate in Science are eligible to apply for entry to the Master of Science (in the same discipline stream) and if admitted to the Master of Science will be able to have one AQF level 9 subject cross-credited from their Master of Science back to their Graduate Certificate in Science in order to complete the Certificate.

Graduate Certificate in Science: Schedule of Available Streams and their Requirements (approved by the Academic Board on 4 September 2014)
The following are the available streams, listed with their stream-specific requirements for appropriate disciplines for the undergraduate degree or major within the undergraduate degree, and any stream-specific subject prerequisites.

Applied Mathematics
• Subject prerequisites – all three of MAST20009 Vector Calculus and MAST20026 Real Analysis and MAST20030 Differential Equations, or equivalent

Botany
<table>
<thead>
<tr>
<th>Subject</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>Animal Science, Biology, Botany, Anatomy, Physiology, Biochemistry</td>
<td>at least three level 2 or above Animal Science, Biology, Botany, Anatomy, Physiology, Biochemistry</td>
</tr>
<tr>
<td>and Molecular Biology, Ecology, Genetics subjects, or equivalent</td>
<td>equivalent</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Subject prerequisites – all three of CHEM20018 Reactions and Synthesis and CHEM20019 Practical Chemistry 2 and CHEM20020 Structure and Properties, or equivalents</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Subject prerequisites – COMP20003 Algorithms and Data Structures and two of COMP20004 Discrete Structures, COMP20005 Engineering Computation, COMP20006 Programming the Machine, COMP20007 Design of Algorithms or SWEN20003 Object Oriented Software Development, or equivalents plus 25 points of level 1 or above mathematics or statistics subjects, or equivalent</td>
</tr>
<tr>
<td>Discrete Mathematics / Operations Research</td>
<td>Subject prerequisites – both of MAST20018 Discrete Mathematics and Operations Research and MAST20026 Real Analysis plus one of MAST20004 Probability or MAST20006 Probability for Statistics, or equivalents</td>
</tr>
<tr>
<td>Genetics</td>
<td>Subject prerequisites – both GENE20001 Principles of Genetics and GENE20003 Experiments in Genetics and one of GENE20002 Genes and Genomes or BIOM20001 Molecular and Cellular Biomedicine, or equivalents</td>
</tr>
<tr>
<td>Geology</td>
<td>Subject prerequisites – all three of GEOL20001 Geology of Southeast Australia, GEOL20002 Structural and Metamorphic Geology and GEOL20004 Field Mapping and Sedimentary Geology, or equivalents</td>
</tr>
<tr>
<td>Human Geography</td>
<td>Subject prerequisites – three of GEOG20001 Society and Environments, GEOG20003 Environmental Politics and Management, GEOG20010 China in Transition, or GEOG20008 Inside the City of Diversity, or equivalents</td>
</tr>
<tr>
<td>Integrated Geography</td>
<td>Subject prerequisites – three of GEOG20001 Society and Environments, GEOG20003 Environmental Politics and Management, GEOG20010 China in Transition, GEOG20008 Inside the City of Diversity, GEOG20002 Global Landforms, GEOG20009 Geography and Biodiversity of Landscapes, ENST20002 Environmental Change Field Class, ERTH20001 Dangerous Earth, EVSC20003 Forests in a Global Context, or UNIB20001 Climate Change II, or equivalents</td>
</tr>
<tr>
<td>Medicinal Chemistry</td>
<td>Subject prerequisites – CHEM20019 Practical Chemistry 2 plus BIOM20002 Human Structure and Function or PHRM20001 Pharmacology: How Drugs Work and CHEM20018 Reactions and Synthesis Genetics, or equivalents</td>
</tr>
<tr>
<td>Physical Geography</td>
<td>Subject prerequisites – three of GEOG20002 Global Landforms, GEOG20009 Geography and Biodiversity of Landscapes, ENST20002 Environmental Change Field Class, ERTH20001</td>
</tr>
</tbody>
</table>
### Dangerous Earth, EVSC20003 Forests in a Global Context, or UNIB20001 Climate Change II, or equivalents

**Physics**
- Subject prerequisites – all six of PHYC20005 Quantum Mechanics & Thermal Physics, PHYC20009 Thermal and Classical Physics, PHYC20010 Quantum Mechanics and Special Relativity, PHYC20011 Electromagnetism and Optics, MAST20009 Vector Calculus and MAST20026 Real Analysis, or equivalents

**Pure Mathematics**
- Subject prerequisites – all three of MAST20009 Vector Calculus and MAST20022 Group Theory and Linear Algebra and MAST20026 Real Analysis, or equivalents

**Statistics / Stochastic Processes**
- Subject prerequisites – both of MAST20005 Statistics and MAST20026 Real Analysis plus one of MAST20004 Probability or MAST20006 Probability for Statistics, or equivalents

**Zoology**
- Subject prerequisites – one of ZOOL20005 Animal Structure and Function or ZOOL20006 Comparative Animal Physiology or ECOL20003 Ecology, or equivalents plus at least two further level 2 life sciences subjects, or equivalents

### Graduate Diploma in Science
(125 credit points)
1. In order to be considered for entry, applicants must have completed:
   - an undergraduate degree, or equivalent; and
   - at least 25 points of specific prerequisite subjects at level 1 or above for the stream into which entry is sought.

Meeting these requirements does not guarantee selection.

2. In ranking applications, the Selection Committee will consider:
   - prior academic performance.

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the university’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

**Note.**
Students who have completed the undergraduate component (100 points) of the Graduate Diploma in Science are eligible to apply for entry to the Master of Science (in the same discipline stream) and if admitted to the Master of Science will be able to have two AQF level 9 subject cross-credited from their Master of Science back to their Graduate Diploma in Science in order to complete the Diploma.

Graduate Diploma in Science: Schedule of Available Streams and their Requirements (approved by the Academic Board on 4 September 2014)

The following are the available streams, listed with their stream-specific requirements for appropriate disciplines for the undergraduate degree.
or major within the undergraduate degree, and any stream-specific subject prerequisites.

Applied Mathematics
- Subject prerequisites – both of MAST10006 Calculus 2 and MAST10007 Linear Algebra, or both of MAST10008 Accelerated Mathematics 1 and MAST10009 Accelerated Mathematics 2, or equivalents

Botany
- Subject prerequisites – 25 points of level 1 or above biological sciences subjects

Chemistry
- Subject prerequisites – CHEM10004 Chemistry 2 or CHEM10006 for Biomedicine, or equivalents and a further 12.5 points of level 1 science

Computer Science
- Subject prerequisites – at least 25 points of level 1 or above Computer Science subjects, or equivalent and 25 points of level 1 or above mathematics or statistics subjects, or equivalent

Discrete Mathematics / Operations Research
- Subject prerequisites – both of MAST10006 Calculus 2 and MAST10007 Linear Algebra, or both of MAST10008 Accelerated Mathematics 1 and MAST10009 Accelerated Mathematics 2, or equivalents

Genetics
- Subject prerequisites – at least 25 points of level 1 or above biological sciences subject

Geology
- Subject prerequisites – ERTH10002 Understanding Planet Earth, or equivalent plus one other level 1 or above subject in Geology or Chemistry

Human Geography
- Subject prerequisites – GEOG10001 Famine in the Modern World, or equivalents plus 12.5 points of level 1 or above science subjects

Integrated Geography
- Subject prerequisites – two of ENVS10001 Natural Environments, GEOG10001 Famine in the Modern World, ERTH10001 The Global Environment or UNIB10003 An Ecological History of Humanity, or equivalents

Medicinal Chemistry
- Subject prerequisites – CHEM10004 Chemistry 2 or CHEM10006 for Biomedicine, or equivalents and a further 12.5 points of level 1 biological science subjects.

Physical Geography
- Subject prerequisites – two of ENVS10001 Natural Environments, GEOG10001 Famine in the Modern World, ERTH10001 The Global Environment or UNIB10003 An Ecological History of Humanity, or equivalents

Physics
- Subject prerequisites – 25 points of level 1 Physics and 25 points of level 1 Mathematics, or equivalent, plus two of PHYC20005 Quantum Mechanics & Thermal Physics and PHYC20009 Thermal and Classical Physics and PHYC20010 Quantum Mechanics and Special Relativity and PHYC20011
**Electromagnetism and Optics, MAST20009 Vector Calculus and MAST20026 Real Analysis, or equivalents**

**Pure Mathematics:**
- Subject prerequisites – both of MAST10006 Calculus 2 and MAST10007 Linear Algebra, or both of MAST10008 Accelerated Mathematics 1 and MAST10009 Accelerated Mathematics 2, or equivalents

**Statistics / Stochastic Processes**
- Subject prerequisites – both of MAST10006 Calculus 2 and MAST10007 Linear Algebra, or both of MAST10008 Accelerated Mathematics 1 and MAST10009 Accelerated Mathematics 2, or equivalents

**Zoology**
- Subject prerequisites – 25 points of level 1 or above Life Sciences

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**Master of Biotechnology**
(200 credit points)

1. In order to be considered for entry, applicants must have completed:
   - an undergraduate degree with a major in a Life Science or Chemistry, with a weighted average mark of at least H3 (65%), including an appropriate sequence of at least 25 points of second-year genetics or biochemistry or equivalent subjects, and completion of either GENE30002, BTCH30002 or equivalent studies in molecular biology, molecular genetics, genomics and or bioinformatics in the final year of undergraduate study.

Meeting this requirement does not guarantee selection.

2. In ranking applications, the Selection Committee will consider:
   - prior academic performance

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the university's English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

Note.
Applicants with an Honours degree in a Life Science or Chemistry, including an appropriate sequence of at least 25 points of second-year genetics or biochemistry or equivalent subjects, and completion of either GENE30002, BTCH30002 or equivalent studies in molecular biology, molecular genetics, genomics and or bioinformatics in the final year of undergraduate study may be awarded up to 100 points of credit.

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07/2015 MC-SCIBIT
Graduate Certificate in Environment
(50 credit points)

Graduate Diploma in Environment
(100 credit points)

1. In order to be considered for entry, applicants must have completed:

   either
   an undergraduate degree in a cognate discipline with at least an H3 (65%) weighted average, or equivalent;
   or
   an undergraduate degree in any discipline with at least an H3 (65%) weighted average, or equivalent; and
   two years of documented relevant professional work experience since graduation.

Meeting these requirements does not guarantee selection.

2. In ranking applications, the Selection Committee will consider:
   • prior academic performance; and, if relevant
   • professional experience.

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the university’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

Notes:
Advanced standing in the Master of Environment:
Applicants with the following may be awarded up to 100 points of credit (advanced standing):

   • an honours degree in a cognate discipline (typically one year of study following a Bachelors degree and including an independent research project equivalent to at least 25 points), with a weighted average mark of at least H3 (65%), or equivalent; or
   • an undergraduate degree in a cognate discipline, with a weighted average mark of at least H3 (65%), or equivalent, and at least two years of documented, relevant work experience.
   • a Graduate Diploma in Environment

Applicants with the following may be awarded up to 50 points of credit (advanced standing):

   • a Graduate Certificate in Environment

Applicants seeking credit for relevant work experience must document their experience with a brief curriculum vitae detailing the experience, contact details of two referees who can confirm the authenticity and nature of the
experience claimed, and a covering letter that explains how the experience is relevant to the program and prepares them for it.

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Code</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Master of Urban Horticulture</strong></td>
<td></td>
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<tr>
<td>(200 credit points)</td>
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<tr>
<td><strong>Graduate Diploma in Urban Horticulture</strong></td>
<td></td>
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<tr>
<td>(100 credit points)</td>
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<tr>
<td>1. In order to be considered for entry, applicants must have completed either:</td>
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<tr>
<td>an undergraduate degree or a graduate certificate in any discipline with a weighted average mark of at least H3 (65%), or equivalent; or</td>
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<tr>
<td>an honours degree or graduate diploma in any discipline, or equivalent.</td>
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<tr>
<td>Meeting these requirements does not guarantee selection.</td>
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<tr>
<td>2. In ranking applications, the Selection Committee will consider:</td>
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<tr>
<td>prior academic performance.</td>
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<td>3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.</td>
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<tr>
<td>4. Applicants are required to satisfy the university’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.</td>
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<tr>
<td>Note. Students completing the Graduate Diploma in Urban Horticulture will be eligible for 100 points of credit into the Master of Urban Horticulture. Students who have completed an undergraduate degree in Plant Science or Horticulture will be eligible for entry into the 150 point program.</td>
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</table>

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<tr>
<th>Course Description</th>
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<th>Notes</th>
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</thead>
<tbody>
<tr>
<td><strong>Graduate Certificate in Bushfire Planning and Management</strong></td>
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<td></td>
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<tr>
<td>(50 credit points)</td>
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<tr>
<td><strong>Graduate Diploma in Bushfire Planning and Management</strong></td>
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<tr>
<td>(100 credit points)</td>
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<tr>
<td><strong>Master of Forest Ecosystem Science</strong></td>
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<tr>
<td>(200 credit points)</td>
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<tr>
<td>1. In order to be considered for entry, applicants must have completed:</td>
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<td><strong>either</strong></td>
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<tr>
<td>• an undergraduate degree in a cognate discipline with a weighted average mark of at least H3 (65%), or equivalent, or</td>
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<tr>
<td>• an undergraduate degree in any area including at least 25 points in one or more of Chemistry, Biology, Mathematics or Statistics, or equivalent, and with a weighted average mark of at least H3 (65%), or equivalent, or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• an undergraduate degree in any area and a Graduate Certificate in Environment with a weighted average</td>
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</tbody>
</table>
In order to be considered for entry, applicants must have completed:

- an undergraduate degree in a cognate discipline with a weighted average mark of at least H3 (65%), or equivalent, or
- an undergraduate degree in any area including at least 25 points in one or more of Chemistry, Biology, Mathematics or Statistics, or equivalent, and with a weighted average mark of at least H3 (65%), or equivalent, or
- an undergraduate degree in any area and a Graduate Certificate in Environment with a weighted average mark of at least H3 (65%) in the Certificate, or equivalent, or
- a two-year associate degree or diploma in a relevant discipline, or equivalent, and five years of documented, relevant professional experience, and an appropriate level of performance on a test conducted by the Selection Committee to confirm generic skills necessary for successful study in the program.

The requirement for a weighted average mark of at least H3 (65%) in each case may be waived where the applicant can demonstrate significant professional development in a relevant area since graduation.

Meeting these requirements does not guarantee selection.

2. In ranking applications, the Selection Committee will consider:

- prior academic performance; and where required
- professional experience; and where required
- the test conducted by the Selection Committee.

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the university's English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.
2. In ranking applications, the Selection Committee will consider:
   • prior academic performance; and where required
   • professional experience; and where required
   • the test conducted by the Selection Committee.
3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.
4. Applicants are required to satisfy the university’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

<table>
<thead>
<tr>
<th>Master of Science (Genetics)</th>
<th>AB 04/2014</th>
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<tbody>
<tr>
<td>(200 credit points)</td>
<td>MC-SCIGEN</td>
</tr>
<tr>
<td>1. In order to be considered for entry, applicants must have completed:</td>
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<tr>
<td>• an undergraduate degree with a major in a Life Science with a weighted average mark of at least H3 (65%) in the best 50 points in appropriate discipline studies at third year</td>
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<tr>
<td>Meeting these requirements does not guarantee selection.</td>
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</tbody>
</table>

2. In ranking applications, the Selection Committee will consider:
   • prior academic performance
3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.
4. Applicants are required to satisfy the university’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

Master of Biostatistics
(150 credit points)

Graduate Diploma in Biostatistics
(100 credit points)

1. In order to be considered for entry, applicants must have completed:
   • an undergraduate degree in a cognate field such as statistics, mathematics, biomedicine, psychology, science, pharmacy, health sciences, or economics with a weighted average mark of at least H2B (70%) over the degree; and
   • at least one mathematics subject, including elements of multivariable calculus and linear algebra at tertiary level, with a grade of at least H3 (65%)
2. In ranking applications, the Selection Committee will consider
   • prior academic performance.
3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the university’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

**Master of Geoscience**  
(200 credit points)

**Advanced Graduate Diploma of Geoscience**  
(100 credit points)

**Advanced Graduate Certificate of Geoscience**  
(50 credit points)

1. In order to be considered for entry, applicants must have completed:
   - an undergraduate degree in Science with a major in Geology/Earth Science, with a weighted average mark of at least H3 (65%) in the best 50 points in appropriate discipline studies at third year.

Meeting these requirements does not guarantee selection.

2. In ranking applicants, the Selection Committee will consider:
   - prior academic performance.

3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the university’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

**Graduate Certificate in Professional Skills for Scientists**  
(50 credit points)

1. In order to be considered for entry, applicants must have:
   - Completed an undergraduate science degree; or
   - Completed, or be concurrently enrolled in a graduate degree in any scientific discipline.

Meeting these requirements does not guarantee selection.

2. In ranking applications, the Selection committee will consider:
   - prior academic performance.

3. The Selection committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the university’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.
<table>
<thead>
<tr>
<th>Master of Data Science</th>
<th>AB 04/2016</th>
<th>MC-DATASC</th>
</tr>
</thead>
<tbody>
<tr>
<td>(200 credit points)</td>
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<tr>
<td>1. In order to be considered for entry, applicants must have completed:</td>
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<tr>
<td>• any undergraduate degree with a major in Computer Science, Data Science or Statistics with a weighted average mark of at least H3 (65%), or equivalent; and</td>
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<tr>
<td>• a 12.5 point subject from computer science or related disciplines whose content is focused on computer programming (taken at any tertiary year level); and</td>
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<tr>
<td>• 25 points of first-year tertiary Mathematics and Statistics subjects including MAST10006 Calculus 2 or equivalent.</td>
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<tr>
<td>Meeting these requirements does not guarantee selection.</td>
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</tr>
</tbody>
</table>

2. In ranking applications, the selection committee will consider:

• prior academic performance.

3. The selection committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the University’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

<table>
<thead>
<tr>
<th>Master of Environmental Science</th>
<th>AB 04/2016</th>
<th>MC-ENVSC</th>
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</thead>
<tbody>
<tr>
<td>(200 credit points)</td>
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<tr>
<td>1. In order to be considered for entry, applicants must have completed:</td>
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<tr>
<td>• an undergraduate degree in an appropriate scientific discipline, with a weighted average mark of at least H3 (65%), or equivalent.</td>
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<tr>
<td>Meeting these requirements does not guarantee selection.</td>
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</tbody>
</table>

2. In ranking applications, the selection committee will consider:

• prior academic performance.

3. The selection committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the University’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

Note:
Appropriate scientific disciplines are any of Biological Science, Chemistry, Earth Science, Forest Science, Geography, Statistics and Agricultural Science.

Students who have completed an undergraduate degree in another science discipline may be considered for entry if they have completed at least 100 points of study up to second year level in any combination of Biological Science, Chemistry, Earth Science, Forest Science, Geography, Statistics and Agricultural Science.

**Master of Geography**  
(200 credit points)  
1. In order to be considered for entry, applicants must have completed:  
   • An undergraduate degree with a course weighted average mark of at least H2B (70%) or above, with a major in Geography or any of the following related disciplines: Ecology and Evolutionary Biology; Environmental Science; Earth, Ocean and/or Atmospheric Science; Zoology; Anthropology; Urban Studies; Social Science; Economics; Political Science

Meeting these requirements does not guarantee selection.

2. In ranking applications, the selection committee will consider:  
   • prior academic performance

3. The selection committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the University’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 7 is required.

**Master of Environment**  
(200 credit points)  
1. In order to be considered for entry, applicants must have completed:  
   • an undergraduate degree in a cognate discipline with at least an H3 (65%) weighted average, or equivalent; or  
   • an undergraduate degree in any discipline with at least an H3 (65%) weighted average, or equivalent; and five years of documented relevant professional work experience since graduation.

Meeting these requirements does not guarantee selection.

2. In ranking applications, the selection committee will consider:  
   • prior academic performance; and, if relevant  
   • professional experience.
3. The selection committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules on the use of selection instruments.

4. Applicants are required to satisfy the University’s English language requirements for graduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

Notes: Advanced standing in the Master of Environment:
Applicants with the following may be awarded up to 100 points of credit (advanced standing):
• an honours degree in a cognate discipline (typically one year of study following a Bachelor degree and including an independent research project equivalent to at least 25 points), with a weighted mark of at least H3 (65%), or equivalent; or
• an undergraduate degree in a cognate discipline, with a weighted average mark of at least H3 (65%), or equivalent, and at least five years of documented, relevant work experience.

Advanced standing in the Graduate Diploma in Environment:
• Applicants with the following may be awarded up to 50 points of credit (advanced standing) where they have:
• A Graduate Certificate in Environment Applicants seeking credit for relevant work experience must document their experience with a brief curriculum vitae detailing the experience, contact details of two referees who can confirm the authenticity and nature of the experience claimed, and a covering letter that explains how the experience is relevant to the program and prepares them for it.