

## MC-AGSC Master of Agricultural Sciences

<b>Year and Campus:</b>	2015 - Parkville
<b>CRICOS Code:</b>	085097E
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Level:</b>	Graduate/Postgraduate
<b>Duration &amp; Credit Points:</b>	200 credit points taken over 24 months full time. This course is available as full or part time.
<b>Coordinator:</b>	Dr Ian Bland
<b>Contact:</b>	<p><b>Faculty of Veterinary and Agricultural Sciences</b>  The University of Melbourne  Victoria 3010 Australia  <a href="http://fvas.unimelb.edu.au/about/contact">http://fvas.unimelb.edu.au/about/contact</a> (<a href="http://fvas.unimelb.edu.au/about/contact">http://fvas.unimelb.edu.au/about/contact</a>)</p>
<b>Course Overview:</b>	<p>The Master of Agricultural Sciences provides a research-led national and international focused program directed at students who wish to build a professional career in a specialised area of Agriculture.</p> <p>Graduates from the Master of Agricultural Sciences will possess attributes that will ensure they can either find employment in the public or private sectors related to a wide range of agricultural production, environmental, economics, bioresearch and service industries, and community organisations concerned with public good, or continue onto further postgraduate programs of study.</p> <p>Students will choose between one of four major streams: Agribusiness, Animal Science, Crop Production, or Food Security. While specialising in one stream is designed to equip students with advanced skills in a particular area of the agricultural sciences, the program is designed to also deliver students with knowledge of the sector as a whole.</p> <p>On completion of the Master of Agricultural Sciences students will have gained a broad understanding of many of the issues underpinning the advances in food and fibre production within the Australian and International Agriculture sectors. You will also have completed at least a 25 point research project or internship subject and broadened your base knowledge through elective subjects. These subjects include those focused on animal and plant production, management of disease and pest incursions, on advanced breeding, the economic aspects of agriculture and spatial information capabilities</p>
<b>Learning Outcomes:</b>	<p>On completion of this course students will:</p> <ul style="list-style-type: none"> <li># be able to demonstrate advanced knowledge and skills in their chosen specialisation – Agribusiness, Animal Science, Crop Science or Food Security</li> <li># interpret, critically analyse and evaluate data generated through research activities in order to effectively understand and implement improved agricultural systems</li> <li># be exposed to advanced research topics and practical applications within the disciplines of agricultural science, and develop the skills necessary to plan and execute an independent piece of research and communicate the impact of this work</li> <li># develop an understanding of problem solving and research methodologies and demonstrate personal accountability by applying solutions to diverse challenges facing agricultural systems</li> <li># investigate and apply innovative approaches to the contemporary, interdisciplinary management of commercial agricultural systems</li> <li># demonstrate a critical understanding of environmental, economic, social and ethical factors related to plant and animal-derived food and fibre production in Australia and globally, with the cognitive, technical and creative skills necessary to communicate the information to a specialist and non-specialist audience</li> </ul>
<b>Course Structure &amp; Available Subjects:</b>	<p>The course structures for The Master of Agricultural Sciences are:</p> <p><b>200 Point Program:</b>  Duration: 2 years full-time / up to 4 years part-time</p>

- # Four compulsory 'course core' subjects (50 points)
- # Three compulsory 'specialisation core' subjects (37.5 points)
- # Minimum 25 points Capstone (25 points)
- # Elective subjects (up to 87.5 points)

#### **150 Point Program:**

Duration: 1.5 years full-time / up to 3 years part-time

- # Two compulsory 'course core' subjects (25 points)
- # Three compulsory 'specialisation core' subjects (37.5 points)
- # Minimum 25 points Capstone subject (25 points)
- # Elective subjects (up to 62.5 points)

#### **100 Point Program A - Honours Entry Pathway:**

Duration: 1 year full-time / up to 2 years part-time

- # Two compulsory 'course core' subjects (25 points)
- # Three compulsory 'specialisation core' subjects (37.5 points)
- # Elective Subjects (37.5 points)

#### **100 Point Program B - Graduate Diploma Entry Pathway:**

Duration: 1 year full-time / up to 2 years part-time

- # Two compulsory 'course core' subjects (25 points)
- # Three compulsory 'specialisation core' subjects (37.5 points)
- # Minimum 25 points Capstone subject (25 points)
- # Elective Subjects (12.5 points)

**NOTE:** If students have already completed specialisation core subjects when they studied the Graduate Diploma then extra elective subjects will be required to be taken.

#### **Majors/Minors/ Specialisations**

Four Key Specialisations

Students will choose between one of four major specialisations: Crop Production, Animal Science, Food Security or Agribusiness

#### **Agribusiness Specialisation**

The Agribusiness specialisation offered within the Master of Agricultural Sciences provides students with knowledge of the trends and underlying influences impacting the agribusiness value chain and the global environment. The specialisation focuses on the methods or tools relevant to business decision making under the influence of risk and uncertainty across the areas of economics, finance and management decision making in the agrifood and fibre context. Developing the capacity to lead, innovate, manage change and project manage are also strong themes.

#### **Animal Science Specialisation**

The Animal Science specialisation is offered within the Master of Agricultural Sciences providing multi-disciplinary education and research-led specialisation aimed at developing graduates who wish to engage in issues surrounding animal science. Graduates will be taught the issues surrounding animal nutrition covering the biological aspects and impacts animals have on the world.

#### **Crop Production Specialisation**

The Crop Production specialisation is offered within the Master of Agricultural Sciences providing multi-disciplinary education and research-led specialisation aimed at developing graduates who wish to engage in issues surrounding crop science in particular and in plant sciences in general. Graduates will be taught the issues surrounding plant health and nutrition covering the biological aspects and impacts plants have on the world.

#### **Food Security Specialisation**

The Food Security specialist specialisation offered within the Master of Agricultural Sciences is a multi-disciplinary training and research-led course, aimed at developing graduates who are fully informed and ready to aid in the global debates about how and where food is produced and consumed. Graduates will understand the complexity of food security and sustainability issues surrounding local and global food systems, including environmental and population demands,

and the policy, economic, political and nutritional dynamics of food production, distribution and consumption. The course will draw on global case studies to demonstrate the relationship with the land and the influences of that the environment, climate, natural and synthetic resources, cultural influences, governmental policies and other social factors have on the ability to produce and access sufficient and quality food.

### Entry Points

Choose your entry point based on the entry requirements below.

Major/Minor/Specialisation
200 Point Master of Agricultural Sciences
150 Point Master of Agricultural Sciences
100 Point (A) Master of Agricultural Sciences
100 Point (B) Master of Agricultural Sciences

### Entry Requirements:

**The Selection Committee will evaluate the applicant's ability to successfully pursue the course using the following criteria:**

#### For the 200 point program:

- an undergraduate degree in any discipline with a weighted average mark of least H3 (65%), or equivalent; or
- a graduate certificate or graduate diploma in any discipline

#### For the 150 point program:

- # Completion of a three year undergraduate Bachelor Degree in a cognate discipline, with a weighted average mark of at least 65% across all subjects; or
- # A Graduate Certificate in Agricultural Sciences.

#### For the 100 point program A:

- # An Honours degree (typically one year of study following a Bachelor's degree which includes an independent research project equivalent to at least 25 points) in a cognate discipline with at least H3 (65%) weighted average across all subjects, or equivalent.

#### For the 100 point program B:

- # A Graduate diploma in Agricultural Sciences.

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 ([http://about.unimelb.edu.au/\\_data/assets/pdf\\_file/0007/1413727/Use-of-Selection-Instruments-Rules-of-the-Acdemic-Board-23-March-2015.pdf](http://about.unimelb.edu.au/_data/assets/pdf_file/0007/1413727/Use-of-Selection-Instruments-Rules-of-the-Acdemic-Board-23-March-2015.pdf))** on the use of selection instruments.
4. The minimum English language requirements for this course are Band 6.5.

**Note.** Successful applicants whose undergraduate degree is in a cognate discipline, or who have completed the Graduate Certificate in Agricultural Science may receive up to 50 points credit. Successful applicants with an honours degree in a cognate discipline, or with a postgraduate degree of at least 100 points in a cognate, may receive up to 100 points credit.

### Core Participation Requirements:

The Faculty of Veterinary and Agricultural Sciences (FVAS) welcomes applications from students with disabilities. It is University and Faculty policy to take reasonable steps to make reasonable adjustments so as to enable the student's participation in the Faculty's programs. FVAS contributes to the New Generation degrees and offers a broad range of programs across undergraduate and post-graduate levels many of which adopt a multi-disciplinary approach. Students of the Faculty's courses must possess intellectual, ethical, and emotional capabilities required to participate in the full curriculum and to achieve the levels of competence required by the School. Candidates must have abilities and skills in observation; motor in relevant areas; communication; in conceptual, integrative, and quantitative dimensions; and in behavioural and social dimensions. Adjustments can be provided to minimise the impact of a disability, however students need to be able to participate in the program in an independent manner and with regard to their safety and the safety of others. I. Observation: In some contexts, the

	<p>student must be able to observe demonstrations and experiments in the basic and applied sciences. More broadly, observation requires reading text, diagrams, maps, drawings and numerical data. The candidate should be able to observe details at a number of scales and record useful observations in discipline dependant contexts. II. Communication: A candidate should be able to communicate with fellow students, professional and academic staff, members of relevant professions and the public. A candidate must be able to communicate effectively and sensitively. Communication includes not only speech but also reading and writing. III. Motor: Candidates should have sufficient motor function necessary for participation in the inherent discipline-related activities. The practical work, design work, field work, diagnostic procedures, laboratory tests, require varying motor movement abilities. Off campus investigations may include visits to construction sites, urban, rural and/or remote environments. IV. Intellectual-Conceptual, Integrative and Quantitative Abilities: These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of professionals in land and environment industries, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. V. Behavioural and Social Attributes: A candidate must possess behavioural and social attributes that enable them to participate in a complex learning environment. Students are required to take responsibility for their own participation and learning. They also contribute to the learning of other students in collaborative learning environments, demonstrating interpersonal skills and an understanding of the needs of other students. Assessment may include the outcomes of tasks completed in collaboration with other students. Students who feel their disability will prevent them from meeting the above academic requirements are encouraged to contact the Disability Liaison Unit.</p>
<b>Graduate Attributes:</b>	<p>The graduates from the Master of Agricultural Sciences (coursework) will have achieved academic excellence in their chosen field(s) of study. They will possess in-depth knowledge in those fields(s) and have been equipped with all necessary tools and skills to become leaders at both national and global levels.</p>
<b>Generic Skills:</b>	<p>On completion of the subject, students will have completed and reported on a course-related project in a workplace. Students should be able to:</p> <ul style="list-style-type: none"> <li># Identify and articulate their knowledge and skills and apply them to relevant organisational contexts and work-settings; as well as linking them to specific professions and career pathways.</li> <li># Produce original work in an appropriate format which demonstrates analytical, research and problem-solving skills;</li> <li># Review and reflect on the process and output of a work project/placement to articulate their academic and career development learning from the experience;</li> <li># Understand the value of industry and professional networks and their importance to self-reliance, lifelong learning and career progression.</li> </ul>
<b>Links to further information:</b>	<p><a href="http://fvas.unimelb.edu.au/study/courses/master-of-agricultural-sciences/overview">http://fvas.unimelb.edu.au/study/courses/master-of-agricultural-sciences/overview</a></p>
<b>Notes:</b>	<p>In accordance with the University's <b>Assessment Procedure (<a href="http://policy.unimelb.edu.au/MPF1026">http://policy.unimelb.edu.au/MPF1026</a>)</b> (MPF1026), Examiners may offer reassessment (as a second attempt at passing a subject for a borderline failure in a single subject) to a student enrolled in this course. A borderline failure is defined as a mark of 45% or more.</p>