

# 100 Point (B) Master of Agricultural Sciences

<b>Year and Campus:</b>	2016
<b>Coordinator:</b>	Dr Ian Bland
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<b>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 Specialisations: Agribusiness, Animal Science, Crop Production, or Food Security. While these specialisations are 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>Structure &amp; Available Subjects:</b>	<p><b>100 Point Program B - Graduate Diploma Entry Pathway:</b></p> <p>Duration: 1 year full-time / up to 2 years part-time</p> <ul style="list-style-type: none"> <li># Three compulsory 'specialisation core' subjects (37.5 points)</li> <li># Two compulsory 'course core' subjects (25 points)</li> <li># 25 points Capstone subject (25 points)</li> <li># Elective subjects (12.5 points)</li> </ul>

**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**

**Specialisations**

The Master of Agricultural Sciences offers specialisations within Crop Production, Animal Science, Food Security or Agribusiness. Students are required to choose a specialisation and complete 3 subjects (37.5 points) of specialisation core subjects.

**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.

The Agribusiness specialisation core subjects are all run as **February intensive subjects**. Please be aware that you will be required to study prior to the standard Semester One commencement.

- # NRMT90017 Leadership (Year One)
- # NRMT90019 Business Strategy (Year Two) - this subject has a pre-requisite AGRI90014 Managing Markets which is studied in Year One
- # AGRI90016 Managing Risk (Year Two) - this subject has a pre-requisite of AGRI90013 Financial Management for Agribusiness which is studied in Year One

Please click the Agribusiness specialisation link below to view your three specialisation core subjects' complete handbook entries.

Major/Minor/Specialisation
Agribusiness Specialisation

**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.

You will be required to study the following three (37.5 points) of specialisation core subjects:

- # DASC90008 Monogastric Science
- # DASC90010 Dairy Science
- # DASC90006 Nutrition & Feed Science

Please click the Animal Science specialisation link below to view your three specialisation core subjects' complete handbook entries.

Major/Minor/Specialisation
Animal Science Specialisation

**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.

You will be required to study the following three (37.5 points) of specialisation core subjects:

- # AGRI90058 Agronomy & Crop Production
- # HORT90040 Advanced Plant Breeding & Improvement
- # AGRI90066 Soil Science & Management

Please click the Crop Production specialisation link below to view your three specialisation core subjects' complete handbook entries.

Major/Minor/Specialisation
Crop Production Specialisation

**Food Security Specialisation**

The Food Security 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.

You will be required to study the following three (37.5 points) of specialisation core subjects:

- # FOOD90026 The Politics of Food
- # FOOD90033 Sustainable Food: Policy & Practice
- # FOOD90034 Sustainable Food Production

Please click the Food Security specialisation link below to view your three specialisation core subjects' complete handbook entries

Major/Minor/Specialisation
Food Security Specialisation

**Subject Options:**

**Degree Core**

Students are required to select 25 points of degree core subjects including one statistics subject.

Students must select one of the following statistics subjects (12.5 points):

Subject	Study Period Commencement:	Credit Points:
NRMT90003 Social Research Methods	Semester 1	12.50
AGRI90075 Research Methods For Life Sciences	Semester 1	12.50
MAST90008 Research Philosophies & Statistics	Semester 1	12.50

Students must select one of the following subjects:

Subject	Study Period Commencement:	Credit Points:
MULT90060 Communicating Agricultural Sciences	Semester 2	12.5
SCIE90012 Science Communication	Semester 2	12.5

**Capstone Subject**

You should select 25 points of capstone subjects in year two. Students doing research or internship subjects that continue across two semesters should ensure that they are enrolled into the subject in both semesters, please see your student centre for assistance. Please note that students should select either a Minor Research Project or an Internship. Students cannot undertake a Research Project together with an Internship.

Subject	Study Period Commencement:	Credit Points:
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AGRI90064 Minor Research Project	Semester 1, Semester 2	12.50
AGRI90070 Minor Research Project	Semester 1, Semester 2	25
AGRI90078 Internship for Agricultural Sciences	Semester 1, Semester 2	25

### Electives

Students should make up the balance of their 100 points with electives from the list below:

Subject	Study Period Commencement:	Credit Points:
NRMT90017 Leadership	February	12.50
NRMT90019 Business Strategy	February	12.50
AGRI90016 Managing Risk	February	12.5
FOOD90028 Sensory Analysis and Practice	February	12.50
EVSC90001 Global Environment and Sustainability	Not offered 2016	12.5
AGRI90076 Industry Internship	Summer Term, Semester 1, Semester 2	12.50
HORT90040 Advanced Plant Breeding and Improvement	Semester 1	12.50
NRMT90018 Human Resource Management	Semester 1	12.50
DASC90012 Animal Welfare	Not offered 2016	12.5
DASC90009 Behaviour of Farm & Companion Animals	May	12.5
EVSC90011 Contemporary Environmental Issues	Not offered 2016	6.25
FOOD90012 Current Issues in Dairy Science	Semester 1	12.50
AGRI90013 Financial Management for Agribusiness	Semester 1	12.50
FOOD90011 Food Biotechnology	Semester 1	12.50
DASC90008 Monogastric Science	March	12.50
AGRI90066 Soil Science and Management	Semester 1	12.50
AGRI90077 Value Chain Analysis	Semester 1	12.50
FOOD90026 The Politics of Food	Semester 1	12.50
MGMT90018 Managerial Psychology	Semester 1, Semester 2	12.50
AGRI90012 Agribusiness Management Economics	Semester 2	12.50
AGRI90058 Agronomy & Cropping Systems	Semester 2	12.50
DASC90010 Dairy Systems	August	12.50
DASC90011 Genetics and Animal Breeding	August	12.50
NRMT90002 Management of Plant and Animal Invasions	Semester 2	12.50
ENST90023 Managing Innovation and Change	Semester 2	12.50
AGRI90014 Managing Markets	Semester 2	12.50
FOOD90010 Meat and Meat Products	Semester 2	12.50

	DASC90008 Monogastric Science	March	12.50
	FOOD90027 Nutrition Politics and Policy	Semester 2	12.50
	FOOD90034 Sustainable Food Production	Semester 2	12.50
	AGRI90074 Agricultural and Resource Economics	Semester 2	12.50
	NRMT90021 Project Management	Semester 2	12.50
	FRST90033 Farm Trees & Agroforestry	October	12.50
	FOOD90033 Sustainable Food: Policy and Practice	Semester 2	12.50
	FOOD90035 Plant Food Products	Semester 2	12.5
	DASC90013 Adv Reproduction & Breeding Technology	Not offered 2016	12.5
	FOOD90025 Health Aspects in Functional Foods	Not offered 2016	12.5
<b>Related Course(s):</b>	Master of Agricultural Sciences		