MC-ANISCI Master of Animal Science

Year and Campus:	2015 - Parkville
CRICOS Code:	064717M
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Graduate/Postgraduate
Duration & Credit Points:	200 credit points taken over 24 months full time. This course is available as full or part time.
Coordinator:	Dr Ian Bland
Contact:	**Faculty of Veterinary and Agricultural Sciences** The University of Melbourne Victoria 3010 Australia **http://fvas.unimelb.edu.au/about/contact (http://fvas.unimelb.edu.au/about/contact)**
Course Overview:	**Please note that this course is no longer accepting enrolments. Students should consider enrolling into the Animal Science specialisation within the Master of Agricultural Sciences MC-AGSC** Candidates will graduate with an excellent understanding of the many factors underpinning animal systems and an awareness of methods for sustainable food and fibre production and their markets. The aims of the Masters of Animal Science (coursework) are to further develop an understanding of the biology of domestic and captive animals, their care, management and use as a resource for food, fibre, recreation and companionship; to develop an in-depth knowledge of the biology of animals, the complexities of the ethical and moral issues encompassing care, management and use as a resource will be examined in light of advances in human endeavour. The masters will allow a degree of specialisation based around analysis of animal systems management of a chosen species or classification of animals. The course design comprises theory and technology applications, with a focus on improving current cropping and animal production systems for increased product yields and qualities within Australian and International environments. Animal science masters also comprises many existing and novel emerging areas in the animal and associated sciences, aimed to create opportunities for advances in the manipulation of biological systems for increased productivity. The scientific tools and advances are evolving fast and are being directly applied to food and fibre industries worldwide.
Learning Outcomes:	*In this course, students will* # be able to demonstrate advanced knowledge and skills in the interdisciplinary field of animal science # interpret, critically analyse and evaluate data generated through research activities in order to effectively understand and implement improved animal systems (farm and other domesticated animals) # be exposed to advanced research topics and practical applications within the disciplines of animal science, and develop the skills necessary to plan and execute an independent piece of research and communicate the impact of this work # develop an understanding of problem solving and research methodologies and demonstrate personal accountability by applying solutions to diverse challenges facing animal systems # investigate and apply innovative approaches to the contemporary, interdisciplinary management of commercial animal systems # demonstrate a critical understanding of environmental, economic, social and ethical factors related to 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
Course Structure & Available Subjects:	The Master of Animal Science (coursework) consists of 200 credit points of study. The Master course may be undertaken as either full time study over two years or part time study over four

years and will be delivered at the Parkville campus. International students may only enrol in the course on a full time basis.

The program comprises of 75 credit points of Core subjects, 25 credit points of Professional Toolbox subjects, a minimum of 25 credit points of Research Project and a minimum of 25 credit points of discipline electives.

Majors/Minors/ Specialisations

Master of Animal Science

Subject Options:

Core Subjects

Students must complete all of the following six subjects (75 points):

Subject	Study Period Commencement:	Credit Points:
DASC90008 Monogastric Science	March	12.50
AGRI90057 Climate Change:Agric.Impacts&Adaptation	June, July	12.50
DASC90007 Stress Physiology	April	12.50
DASC90010 Dairy Systems	August	12.50
DASC90006 Nutrition and Feed Science	September	12.50
FOOD90024 Securing Sufficient and Healthy Food	Semester 1	12.50

Professional Toolbox

Students must complete two Professional Toolbox subjects (25 points) , one subject (12.5 points) from Science Tools and one subject (12.5 points) from Business Tools or Scientific Communication

Science Tools

Students must complete one of the following subjecs (12.5 points):

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

Business Tools/Scientific Communication

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

Subject	Study Period Commencement:	Credit Points:
NRMT90017 Leadership	February	12.50
NRMT90018 Human Resource Management	Semester 1	12.50
NRMT90021 Project Management	Semester 2	12.50
AGRI90013 Financial Management for Agribusiness	Semester 1	12.50
NRMT90019 Business Strategy	February	12.50
ENST90023 Managing Innovation and Change	Semester 2	12.50
SCIE90012 Science Communication	Not offered 2015	12.50
AGRI90076 Industry Internship	Summer Term, Semester 1, Semester 2	12.50

Research Project

Students must complete a minimum of two subjects (25 points) of the following:

Subject	Study Period Commencement:	Credit Points:
AGRI90064 Minor Research Project	Semester 1, Semester 2	12.50
AGRI90070 Minor Research Project	Semester 1, Semester 2	25
AGRI90065 Major Research Project	Semester 1, Semester 2	25
AGRI90072 Major Research Project	Semester 1, Semester 2	50

Discipline Electives

Students must complete a minimum of two subjects (25 points) of the following:

Subject	Study Period Commencement:	Credit Points:
DASC90009 Behaviour of Farm & Companion Animals	May	12.50
DASC90011 Genetics and Animal Breeding	August	12.50
DASC90012 Animal Welfare	May	12.50
FOOD90012 Current Issues in Dairy Science	Semester 1	12.50
FOOD90010 Meat and Meat Products	Semester 2	12.50
DASC90013 Adv Reproduction & Breeding Technology	July	12.50

Other Electives

Subject	Study Period Commencement:	Credit Points:
FOOD90011 Food Biotechnology	Semester 1	12.50
NRMT90002 Management of Plant and Animal Invasions	Semester 2	12.50
EVSC90001 Global Environment and Sustainability	February	12.50
AGRI90014 Managing Markets	Semester 2	12.50
AGRI90012 Agribusiness Management Economics	Semester 2	12.50
MGMT90018 Managerial Psychology	Semester 1, Semester 2	12.50
FOOD90025 Health Aspects in Functional Foods	Semester 2	12.50
FOOD90026 The Politics of Food	Semester 1	12.50
FOOD90028 Sensory Analysis and Practice	February	12.50
FOOD90027 Nutrition Politics and Policy	Semester 2	12.50
ENST90032 Sustainability and Behavioural Change	Semester 1	12.50

Entry Requirements:

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

• an undergraduate degree with at least an H3 (65%) weighted average, or equivalent; or
• a graduate or postgraduate certificate in any discipline with at least an H3 (65%) weighted average, or equivalent; or
• a graduate or postgraduate diploma in any discipline, with at least an H3 (65%) weighted average, or equivalent; or
• an honours degree in any discipline, or equivalent;
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 Admission and Selection into Course Policy. 4. The minimum English language requirements for this course are Band 6.5. Note. Up to 100 points of advanced standing in Master of Animal Science may be awarded for the completion of a relevant honours degree or a Postgraduate Diploma in Animal Science or equivalent
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 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.
Further Study:	There is a clear progression pathway from masters by coursework programme to PhD.
Graduate Attributes:	The graduates from the Master of Animal Science (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.
Generic Skills:	# A profound respect for truth, intellectual and professional integrity, and the ethics of scholarship # Capacity for independent critical thought, rational inquiry and self-directed learning and research # An ability to derive, interpret and analyse social, technical or economic information from primary and other sources # Awareness of and ability to utilise appropriate communication technology and methods for the storage, management and analysis of data # Capacity for creativity and innovation, through the application of skills and knowledge # Ability to integrate information across a relevant discipline to solve problems in applied situations

	# Highly developed computer - based skills to allow for effective on-line learning and communication. # Highly developed written communication skills to allow informed dialogue with individuals and groups from industry, government and the community # Highly developed oral communication skills to allow informed dialogue and liaison with individuals and groups from industry, government and the community. # Appreciation of social and cultural diversity from a regional to a global context # Ability to participate effectively as a member of a team # Ability to plan work, use time effectively and manage small projects