MC-AGSCI Master of Agricultural Science

Year and Campus:	2012 - Parkville
CRICOS Code:	061207B
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.
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Course Overview:	The Master of Agricultural Science course provides a research-led national and international focused program directed at students who wish to build a professional career in a specialised area of the Agricultural Sciences. Graduates in the Master programme 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 into further postgraduate programmes of study. On completion of the Master of Agricultural Science you 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 one 25 point research project and/or possibly a 50 point research project, and have broadened your base knowledge through elective subjects. This includes subjects focused on animal and plant production, management of disease and pest incursions and on advanced breeding and spatial information capabilities
Objectives:	# to enable students to explore the interdisciplinary nature of agricultural crop, food and fibre production and markets at an advanced level # To provide students with a sound foundation in the scientific principles and analytical skills behind improved agricultural production systems and their sustainability, # to introduce students to advanced research topics and practical applications within the disciplines of agricultural science; # to develop competence in the design, conduct and analysis of experimental work; # to introduce students to industrial applications of agricultural science and the commercial outcomes; # to develop a critical understanding of environmental, economic, social and ethical factors related to plant and animal-derived food and fibre production in Australia and globally.
Course Structure & Available Subjects:	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 AGRICULTURAL SCIENCE**
Subject Options:	**Core Subjects** Students must complete all of the following subjects

Subject	Study Period Commencement:	Credit Points:
DASC90008 Monogastric Science	March	12.50

AGRI90066 Soil Science and Management	Semester 1	12.50
FOOD90024 Securing Sufficient and Healthy Food	Semester 2	12.50
AGRI90058 Agronomy & Cropping Systems	Semester 2	12.50
AGRI90057 Climate Change:Agric.Impacts&Adaptation	June, September	12.50
HORT90040 Advanced Plant Breeding and Improvement	Semester 1	12.50

Professional Toolbox

Students must complete 25 points of Professional Toolbox subjects (12.5 points from Science Tools and 12.5 points from Business Tools)

Science Tools

Students must complete one of the following:

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

Students must complete one of the following:

Subject	Study Period Commencement:	Credit Points:
NRMT90017 Leadership	February	12.50
MGMT90018 Psychology of HR Practice	Semester 1, Semester 2	12.50
NRMT90021 Project Management	June	12.50
AGRI90013 Financial Management for Agribusiness	September	12.50
NRMT90019 Business Strategy	February	12.50
AGRI30011 Innovation Change & Knowledge Transfer	July	12.50

Research Project

Students must complete a minimum of 25 points of the following:

Subject	Study Period Commencement:	Credit Points:
AGRI90064 Project A	Semester 1, Semester 2	12.50
AGRI90070 Project A	Semester 1, Semester 2	25
AGRI90065 Project B	Semester 1, Semester 2	25
AGRI90072 Project B	Semester 1, Semester 2	50

Discipline Electives

Students must complete a minimum of 25 points from the following:

Subject	Study Period Commencement:	Credit Points:
EVSC90001 Global Environment and Sustainability	February	12.50
DASC90011 Genetics and Animal Breeding	Not offered 2012	12.50

GEOG90006 Fundamentals & Management of GIS	Not offered 2012	12.50
FOOD90012 Current Issues in Dairy Science	Semester 1	12.50
NRMT90002 Management of Plant and Animal Invasions	Semester 2	12.50
FOOD90010 Meat and Meat ProductsTechnology	Not offered 2012	12.50
FOOD90009 Cereal, Legume and Oilseed Technology	Semester 1	12.50
DASC90006 Nutrition and Feed Science	August	12.50
DASC90010 Dairy Systems	October	12.50
AGRI90019 Fruit and Vegetable Technology	Not offered 2012	12.50

Other Electives

Subject	Study Period Commencement:	Credit Points:
AGRI90014 Managing Markets	June	12.50
FOOD90011 Food Biotechnology	Semester 1	12.50
AGRI90012 Agribusiness Management Economics	April	12.50
NRMT90018 Human Resource Management	April	12.50
AGRI90017 Operations and Decision-making	September	12.50
AGRI90039 Australian Wine - A World Perspective	Not offered 2012	12.50
AGRI90030 Concepts in Viticulture and Wine Science	February	12.50
FRST90033 Farm Trees & Agroforestry	November	12.50

Entry Requirements:

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

- an undergraduate degree with at least H3 (65%) average in the final year, or
- a graduate or postgraduate certificate in any discipline with at least H3 (65%) average, or
- a graduate or postgraduate diploma in any discipline, with at least H3 (65%) average, or
- an honours degree in any discipline, or equivalent; and
- a curriculum vitae or resume; and
- two academic referee reports; and
- personal statement of up to 500 words.

2. The Selection Committee may conduct interviews and tests and may call for further referee reports or employer references to elucidate any of the matters referred to above.

Note. Up to 100 points of advanced standing in Master of Agricultural Science may be awarded for the completion of a relevant honours degree or a Postgraduate Diploma in Agricultural Science or equivalent.

Core Participation Requirements:

The Melbourne School of Land and Environment (MSLE) welcomes applications from students with disabilities. It is University and School policy to take reasonable steps to make reasonable adjustments so as to enable the student's participation in the School's programs. MSLE 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 School'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.
Graduate Attributes:	The Melbourne Experience enables our Graduates to become: Academically excellent Our Graduates will be expected to: have strong sense of intellectual integrity and the ethics of scholarship have in-depth knowledge of their specialist discipline(s) reach a high level of achievement in writing, generic research activities, problem-solving and communication be critical and creative thinkers, with an aptitude for continued self directed learning be adept at learning in a range of ways, including through information and communication technologies Knowledgeable across disciplines Our graduates will be expected to: examine critically, synthesise and evaluate knowledge across a broad range of disciplines expand their analytical and cognitive skills through learning experinces in diverse subjects have the capacity to participate fully in collaborative learning and to confront unfamiliar problems have a a set of flexible and transferable skills for different types of employment. Leaders in communities Our graduates will be expected to: initiate and implement constructive change in their communities, including professions and workplaces have excellent interpersonal and decision-making skills, including an awareness of personal strengths and limitations mentor future generations of learners engage in meaningful public discourse, with a profound awareness of community needs Attuned to cultural diversity Our graduates will be expected to : Value different cultures be well-informed citizens able to contibute to their communities wherever they choose to live and work have an understanding of the social and cultural diversity in our community respect Indigenous knowledge, cultures and values Active global citizens Our graduates will be expected to: accept social and civic responsiblities be advocates for improving the sustainability of the environment have a broard global understanding, with a high regard for human rights, equality and ethics.
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
Links to further information:	http://www.land-environment.unimelb.edu.au/agscience/