

## MC-SCIGEN Master of Science (Genetics)

<b>Year and Campus:</b>	2012 - Parkville											
<b>CRICOS Code:</b>	062189B											
<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>	Professor James Camakaris Email: <a href="mailto:j.camakaris@unimelb.edu.au">j.camakaris@unimelb.edu.au</a>											
<b>Contact:</b>	<p><b>Melbourne Graduate School of Science</b>  Faculty of Science  The University of Melbourne</p> <p>Tel: + 61 3 8344 6128  Fax: +61 3 8344 3351  Web: <a href="http://graduate.science.unimelb.edu.au">http://graduate.science.unimelb.edu.au</a> (<a href="http://graduate.science.unimelb.edu.au/">http://graduate.science.unimelb.edu.au/</a>)</p>											
<b>Course Overview:</b>	<p>The Master of Science (Genetics) is a coursework masters degree incorporating a substantial research project.</p> <p>The Master of Science gives students the opportunity to undertake a substantive research project in a field of choice as well as a broad range of coursework subjects including a professional skills component, as a pathway to PhD study or to the workforce.</p>											
<b>Objectives:</b>	<p>Course objectives include:</p> <ul style="list-style-type: none"> <li># extending students' abilities in oral and written scientific communication;</li> <li># understanding the way in which experiments in genetics are designed, communicated and interpreted;</li> <li># acquiring experience in planning and executing laboratory or field-based experimental research; and</li> <li># developing effective skills in data collection and analysis and postulating testable hypotheses based on this data.</li> </ul>											
<b>Course Structure &amp; Available Subjects:</b>	<p>Students must complete 200 pts including:</p> <ul style="list-style-type: none"> <li># Discipline Core subjects (25 points);</li> <li># Discipline Elective subjects (25 points);</li> <li># Professional Skills subjects (25 points);</li> <li># Research Project (125 points).</li> </ul>											
<b>Subject Options:</b>	<p><b>Discipline Core</b></p> <p>Students must take:</p> <table border="1" data-bbox="387 1641 1485 1845"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>GENE90012 Advanced Topics in Genetics A</td> <td>Not offered 2012</td> <td>12.50</td> </tr> <tr> <td>GENE90018 Advanced Topics in Genetics B</td> <td>March, May</td> <td>12.50</td> </tr> </tbody> </table> <p>*Students need not complete Advanced Topics in Genetics A prior to enrolling in Advanced Topics in Genetics B.</p> <p><b>Discipline Elective</b></p> <p>Students must choose 2 of the following subjects:</p>			Subject	Study Period Commencement:	Credit Points:	GENE90012 Advanced Topics in Genetics A	Not offered 2012	12.50	GENE90018 Advanced Topics in Genetics B	March, May	12.50
Subject	Study Period Commencement:	Credit Points:										
GENE90012 Advanced Topics in Genetics A	Not offered 2012	12.50										
GENE90018 Advanced Topics in Genetics B	March, May	12.50										

Subject	Study Period Commencement:	Credit Points:
BTCH90005 Advanced Molecular Biology Techniques	Semester 2	12.50
BTCH90009 Genomics and Bioinformatics	Semester 1	12.50
BIOL90001 Microscopy for Biological Sciences	Semester 1	12.50

OR 12.5 or 25 points of other approved subjects.

### Professional Skills

Students must take:

Subject	Study Period Commencement:	Credit Points:
SCIE90013 Communication for Research Scientists	Not offered 2012	12.50

and 12.5 points of another approved subject:

### Research Project

The project will be taken over four consecutive semesters and will begin on the first Monday of semester 1 (indicative for 2012: Monday 27th February or Monday 23rd July) and continue for up to 88 weeks until the end of the fourth semester, minus recreation leave of between 4 and 8 weeks (22 weeks per semester over the four semesters). For how long and at what time within the enrolment the actual period of leave is to be taken needs to be negotiated with a student's supervisor.

The major thesis will be due for submission by the end of the formal examination period of the fourth semester of enrolment if an earlier date is not specified.

Students may enrol in a combination of research project subjects and coursework subjects over their two years of full-time to ensure they have completed a total of 125 points for the research project by the end of their course. Students cannot enrol in the same subject more than once.

- # 50 points of the research project is taken in the first year, and the assessment consists of a research proposal(30%) and minor thesis (70%).
- # 75 points of the research project is taken in the second year, and the assessment consists of a major thesis (90%); and an oral presentation (10%).

An enrolment example is provided on the Melbourne Graduate School website -

<http://graduate.science.unimelb.edu.au/programs/msc/genetics.php> (<http://graduate.science.unimelb.edu.au/programs/msc/genetics.php>) . Students are encouraged to review this example to inform their ISIS enrolment.

Subject	Study Period Commencement:	Credit Points:
GENE90013 Advanced Genetic Research	Semester 1, Semester 2	12.50
GENE90015 Advanced Genetic Research	Semester 1, Semester 2	25
GENE90016 Advanced Genetic Research	Semester 1, Semester 2	37.50
GENE90017 Advanced Genetic Research	Semester 1, Semester 2	50

### Entry Requirements:

An undergraduate degree with a major in Genetics, with at least an H3 (65%) in the major, or equivalent.

Quotas may be applied and preference may be given to applicants with evidence of appropriate preparation or potential to undertake research. Entry is subject to the capacity of the department to provide adequate supervision in, and resources for, 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. Selection is not automatic and, in particular, is subject to competition.

<b>Core Participation Requirements:</b>	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>
<b>Further Study:</b>	The Master of Science offers a pathway to a PhD.
<b>Graduate Attributes:</b>	Graduates will: have the ability to demonstrate advanced independent critical enquiry, analysis and reflection; have a 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, research or project activities, problem-solving and communication; be critical and creative thinkers, with an aptitude for continued self-directed learning; be able to examine critically, synthesise and evaluate knowledge across a broad range of disciplines; have a set of flexible and transferable skills for different types of employment; and be able to initiate and implement constructive change in their communities, including professions and workplaces.
<b>Links to further information:</b>	<a href="http://graduate.science.unimelb.edu.au">http://graduate.science.unimelb.edu.au</a>