

MC-BMEDSC Master of Biomedical Science

Year and Campus:	2014 - Parkville						
CRICOS Code:	079405D						
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:	Professor Lea Delbridge						
Contact:	<p>Ms Anna Foundling Students and Programs Coordinator Melbourne Medical School md-enquiries@unimelb.edu.au (mailto:md-enquiries@unimelb.edu.au)</p> <p>Web:</p>						
Course Overview:	The Master of Biomedical Science is a coursework masters degree incorporating a substantial research project. The Master of Biomedical 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.						
Learning Outcomes:	<p>The objectives of this course are to provide students with skills in:</p> <ul style="list-style-type: none"> • conducting research in biomedical and health sciences; • designing experiments; • taking responsibility for managing a research project; • preparing and giving an oral and written presentation of the results; • expressing intellectual, scientific arguments; and • assimilating and critically evaluating existing knowledge within a scientific paradigm. 						
Course Structure & Available Subjects:	<p>All students must complete 200 points comprising:</p> <ul style="list-style-type: none"> # Discipline Core subjects (50 points); # Professional Skills subjects (25 points); # A 125 point research project 						
Subject Options:	<p>Discipline Core Subjects</p> <p>Students must complete 50 points of discipline subjects. These comprise required introductory biomedical research subject/s and approved discipline core subjects.</p> <p>Introductory biomedical subjects</p> <p>Students that are enrolled in the program must take an introductory biomedical research subject/s that forms part of the discipline core subject requirements. Students must take the following subject in their first semester (or second semester for mid-year intake) as part of their discipline core subjects:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>BIOM40001 Introduction To Biomedical Research</td> <td>February</td> <td>12.50</td> </tr> </tbody> </table> <p>An exception may apply for students of the Department of Biochemistry and Molecular Biology (see below)</p> <p>-</p> <p>Note for students undertaking a research project within the Department of Biochemistry and Molecular Biology.</p>	Subject	Study Period Commencement:	Credit Points:	BIOM40001 Introduction To Biomedical Research	February	12.50
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BIOM40001 Introduction To Biomedical Research	February	12.50					

Students that undertake a research project within the Department of Biochemistry and Molecular Biology (or an affiliated institute of that department) **may** be able to substitute **BIOM40001 Introduction to Biomedical Research** for **one or both** of the following subjects at the approval or discretion of the Department academic coordinator, Associate Professor Marie Bogoyevitch (marieb@unimelb.edu.au (<mailto:marieb@unimelb.edu.au>)). This approval or direction will be based on the assessment made as to the nature of the research project. These subjects will form part of the discipline core requirement of the program.

Subject	Study Period Commencement:	Credit Points:
BCMB40002 Advanced Studies in Biochemistry A	Semester 1	12.50
BCMB40007 Advanced Studies in Biochemistry B	Semester 1	12.50

Remaining discipline core subjects

For their remaining discipline core subjects, students may select approved subjects relevant to the proposed research project from those within cognate Masters by coursework programs offered by the Faculty of Medicine, Dentistry and Health Sciences and Faculty of Science [in particular the Master of Biotechnology, Master of Science (Genetics), Master of Science (Zoology)].

A maximum of two discipline subjects may be taken at 3rd year level.

Professional Skills subjects

Students must complete 25 points from the following subjects

Subject	Study Period Commencement:	Credit Points:
BUSA90471 Business Tools: The Market Environment	Semester 1	12.50
MAST90044 Thinking and Reasoning with Data	Semester 1	12.50
MAST90045 Systems Modelling and Simulation	Semester 1	12.50
MAST90007 Statistics for Research Workers	June	12.50
BUSA90403 Business Tools: Money People & Processes	September	12.50
SCIE90005 Ethics and Responsibility in Science	Semester 1	12.50
SCIE90012 Science Communication	Semester 2	12.50
SCIE90013 Communication for Research Scientists	Semester 1	12.50
SCIE90007 E-Science	Not offered 2014	12.50

Research Project

Students must complete a research project under the supervision of a staff member in an academic unit (a Department or an affiliated Institute) of the Melbourne Medical School within the Faculty of Medicine, Dentistry and Health Sciences. Depending on supervisor and project availability, research is undertaken in a range of locations/discipline areas including: Anatomy and Cell Biology, Biochemistry & Molecular Biology (Bio21), Medicine (Royal Melbourne Hospital/Western Hospital and St Vincent's Hospital), Microbiology and Immunology, Neurosciences (Centre for Neurosciences/Florey Institutes), Otolaryngology (Hearing Sciences), Ophthalmology (Eye Research), Paediatrics (Murdoch Childrens Research Institute), Pharmacology, Psychiatry, Physiology, Radiology and Surgery (Austin Hospital, Royal Melbourne Hospital/Western Hospital and St Vincent's Hospital)

Students are entitled to a total of 4 weeks leave each year, the timing of which is to be negotiated with the supervisor. In non-semester time, your project work will be your full-time commitment. During semester time, your allocation of time to your project will depend on the subject coursework load you have committed to.

Students may enrol in a combination of research project subjects and coursework subjects as long as once the Research Project is commenced, the consecutive enrolment requirement is

met and to ensure they have completed a total of 125 points for the research project by the end of their course.

Your study plan must be approved by your supervisor and the Melbourne Medical School.

Subject	Study Period Commencement:	Credit Points:
BIOM90001 Project in Biomedical & Health Sciences	Semester 1, Semester 2	12.50
BIOM90003 Project in Biomedical & Health Sciences	Semester 1, Semester 2	25
BIOM90004 Project in Biomedical & Health Sciences	Semester 1, Semester 2	37.50
BIOM90005 Project in Biomedical & Health Sciences	Semester 1, Semester 2	50

Entry Requirements:

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

- an undergraduate degree with a major in a relevant discipline with a weighted average of at least 65% in the final year major subjects, or equivalent.

Quotas may be applied to the degree as a whole, or to individual disciplines, and preference may be given to applicants with evidence of appropriate preparation or potential to undertake research. Entry is subject to the capacity of a participating department to provide adequate supervision in a research project appropriate to the interests and preparation of the individual student and is subject to the agreement of an academic staff member to supervise the project.

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

Core Participation Requirements:

<p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.</p> <p>It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability</p>

Further Study:

The Master of Biomedical Science offers a pathway to a PhD.

Graduate Attributes:

Knowledge Graduates of the Master of Biomedical Science Degree will have acquired:

1. a body of knowledge that includes the understanding of recent developments in the discipline of biomedical science
2. knowledge of research principles and methods applicable to the field of biomedical science

Skills Graduates of the Master of Biomedical Science Degree will have developed:

1. cognitive skills to demonstrate mastery of theoretical knowledge and to reflect critically on theory and scholarship
2. cognitive, technical and creative skills to investigate, analyse and synthesise complex information, problems, concepts and theories and to apply established theories to different bodies of knowledge or practice
3. cognitive, technical and creative skills to generate and evaluate complex ideas concepts at an abstract level
4. communication and technical research skills to justify and interpret theoretical propositions, methodologies, conclusions and scientific professional decisions to specialist and non-specialist audiences
5. technical and communication skills to design, evaluate, implement, analyse, theorise about developments that contribute to scientific professional practice or scholarship

Application of knowledge and skills Graduates of the Master of Biomedical Science Degree will demonstrate the application of knowledge & skills:

1. with creativity and initiative to new situations in professional scientific practice and/or for further learning
2. with high level personal autonomy and accountability
3. to plan and execute a substantial research-based project,