

MC-SCICHE Master of Science (Chemistry)

Year and Campus:	2013 - Parkville																							
CRICOS Code:	062189B																							
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 Craig Hutton Email: chutton@unimelb.edu.au																							
Contact:	<p>Melbourne Graduate School of Science Faculty of Science The University of Melbourne Tel: + 61 3 8344 6128 Fax: +61 3 8344 3351 Web: http://graduate.science.unimelb.edu.au (http://graduate.science.unimelb.edu.au/)</p>																							
Course Overview:	<p>The Master of Science (Chemistry) is a coursework masters degree incorporating a substantial research project. 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>																							
Objectives:	<p>The objectives of this course are to:</p> <ul style="list-style-type: none"> # develop the process and practice of chemical research; # increase the student's knowledge and understanding of chemical science; # encourage the development of individual investigative skills, critical thought and the ability to evaluate information and to analyse experimental data. 																							
Course Structure & Available Subjects:	<p>All students must complete 200 points including:</p> <ul style="list-style-type: none"> # Discipline Core subjects (12.5 points); # Discipline Elective subjects (25 - 50 points); # Professional Skills subjects (12.5 - 25 points); # Research Project (125 points). 																							
Subject Options:	<p>Discipline Core Students must take:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>CHEM90008 Advanced Spectroscopy</td> <td>Not offered 2013</td> <td>12.50</td> </tr> </tbody> </table> <p>Discipline Elective Students must take two to four of the following subjects:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>CHEM90009 Chemical Synthesis & Characterisation 1</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>CHEM90010 Advanced Chemical Applications 1</td> <td>Not offered 2013</td> <td>12.50</td> </tr> <tr> <td>CHEM90017 Chemical Synthesis & Characterisation 2</td> <td>Not offered 2013</td> <td>12.50</td> </tr> <tr> <td>CHEM90018 Advanced Chemical Applications 2</td> <td>July</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	CHEM90008 Advanced Spectroscopy	Not offered 2013	12.50	Subject	Study Period Commencement:	Credit Points:	CHEM90009 Chemical Synthesis & Characterisation 1	Semester 1	12.50	CHEM90010 Advanced Chemical Applications 1	Not offered 2013	12.50	CHEM90017 Chemical Synthesis & Characterisation 2	Not offered 2013	12.50	CHEM90018 Advanced Chemical Applications 2	July	12.50
Subject	Study Period Commencement:	Credit Points:																						
CHEM90008 Advanced Spectroscopy	Not offered 2013	12.50																						
Subject	Study Period Commencement:	Credit Points:																						
CHEM90009 Chemical Synthesis & Characterisation 1	Semester 1	12.50																						
CHEM90010 Advanced Chemical Applications 1	Not offered 2013	12.50																						
CHEM90017 Chemical Synthesis & Characterisation 2	Not offered 2013	12.50																						
CHEM90018 Advanced Chemical Applications 2	July	12.50																						

and up/or to 25 points from the Professional Entry MSc Discipline Core subjects (with the approval of the course coordinator), and/or up to 12.5 points of approved 300-level subjects.

Professional Skills

Students must select one or two subjects from the following list:

Business Skills

Subject	Study Period Commencement:	Credit Points:
BUSA90403 Business Tools: Money People & Processes	Semester 2	12.50
BUSA90471 Business Tools: The Market Environment	Semester 1	12.50

Science Skills

Subject	Study Period Commencement:	Credit Points:
MAST90045 Systems Modelling and Simulation	Not offered 2013	12.50
SCIE90005 Ethics and Responsibility in Science	Not offered 2013	12.50
MAST90007 Statistics for Research Workers	Not offered 2013	12.50

Communication Skills

Subject	Study Period Commencement:	Credit Points:
SCIE90012 Science Communication	Not offered 2013	12.50
SCIE90013 Communication for Research Scientists	Semester 1	12.50

Research Project

Students enrolled in the Master of Science (Chemistry) program are required to complete a 125 point Research Project.

The project will be taken over four consecutive semesters and will begin on the Monday of semester of entry (semesters 1 or 2) (indicative for 2013: March 4 and July 29) 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 Research Project 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.

The assessment requirements below are applicable to the entire 125 point Research Project:

- # attendance at a safety and induction program with at least a 65% result in a 60 minute safety examination held during the first week (pass/fail);
- # a preliminary literature survey and research plan (up to 10 pages of mixed text, diagrams and formulas) due at the end of the first semester of enrolment or after the student has enrolled in 25 points of Research project (pass/fail);
- # a project-related oral presentation (up to 25 min), given at the end of the second semester (pass/fail);
- # a project-related oral presentation (up to 30 min), given at the end of the fourth semester (10%);
- # a major thesis, page limit of 60 pages, due at the end of the fourth semester (35%);
- # an oral exam (viva) on the content of the thesis (35%);
- # assessment of research performance based on attendance, application, initiative and demonstrated skills (20%);
- # attendance at a seminar series providing advanced theoretical and/or practical training (hurdle).

Students may enrol in a combination of research project subjects and coursework subjects over their two years of full-time study or over their four years of part-time study as long as once the

	<p>Research Project is commenced (which may not be the first semester in the case of part-time course enrolments), 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. Students may need to enrol in a subject of the same credit point value more than once which is why there are multiple <i>Chemistry Masters Research Project</i> subjects of the same points value.</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>CHEM90013 Chemistry Masters Research Project</td> <td>Not offered 2013</td> <td>12.50</td> </tr> <tr> <td>CHEM90014 Chemistry Masters Research Project</td> <td>Not offered 2013</td> <td>25</td> </tr> <tr> <td>CHEM90015 Chemistry Masters Research Project</td> <td>Not offered 2013</td> <td>37.50</td> </tr> <tr> <td>CHEM90016 Chemistry Masters Research Project</td> <td>Not offered 2013</td> <td>50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	CHEM90013 Chemistry Masters Research Project	Not offered 2013	12.50	CHEM90014 Chemistry Masters Research Project	Not offered 2013	25	CHEM90015 Chemistry Masters Research Project	Not offered 2013	37.50	CHEM90016 Chemistry Masters Research Project	Not offered 2013	50
Subject	Study Period Commencement:	Credit Points:														
CHEM90013 Chemistry Masters Research Project	Not offered 2013	12.50														
CHEM90014 Chemistry Masters Research Project	Not offered 2013	25														
CHEM90015 Chemistry Masters Research Project	Not offered 2013	37.50														
CHEM90016 Chemistry Masters Research Project	Not offered 2013	50														
Entry Requirements:	<p>An undergraduate degree with a major in Chemistry, or equivalent discipline, with at least an H3 (65%) in the major, or equivalent, including at least 25 points of third-year university-level Chemistry subjects of which 12.5 points must be practical-based subjects.</p> <p>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.</p>															
Core Participation Requirements:	<p>It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact upon their active and safe participation in a subject are encouraged to discuss this with the relevant subject coordinator and the Disability Liaison Unit.</p>															
Further Study:	<p>The Master of Science offers a pathway to a PhD.</p>															
Links to further information:	<p>http://graduate.science.unimelb.edu.au</p>															