

## MC-SCICHE Master of Science (Chemistry)

<b>Year and Campus:</b>	2016 - 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>	Dr Alessandro Soncini <a href="mailto:asoncini@unimelb.edu.au">asoncini@unimelb.edu.au</a>																				
<b>Contact:</b>	<p>Currently enrolled students:</p> <ul style="list-style-type: none"> <li># General information: <a href="https://ask.unimelb.edu.au">https://ask.unimelb.edu.au</a> (<a href="https://ask.unimelb.edu.au">https://ask.unimelb.edu.au</a>)</li> <li># <b>Contact Stop 1</b> (<a href="http://students.unimelb.edu.au/stop1">http://students.unimelb.edu.au/stop1</a>)</li> </ul> <p>Future students:</p> <ul style="list-style-type: none"> <li># Further information: <a href="http://science.unimelb.edu.au/">http://science.unimelb.edu.au/</a> (<a href="http://science.unimelb.edu.au/">http://science.unimelb.edu.au/</a>)</li> </ul>																				
<b>Course Overview:</b>	<p>The Master of Science (Chemistry) 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>Learning Outcomes:</b>	<p>The objectives of this course are to:</p> <ul style="list-style-type: none"> <li># develop the process and practice of chemical research;</li> <li># increase the student's knowledge and understanding of chemical science;</li> <li># encourage the development of individual investigative skills, critical thought and the ability to evaluate information and to analyse experimental data.</li> </ul>																				
<b>Course Structure &amp; Available Subjects:</b>	<p>All students must complete 200 points including:</p> <ul style="list-style-type: none"> <li># Discipline Core subjects (12.5 points);</li> <li># Discipline Elective subjects (25 - 50 points);</li> <li># Professional Skills subjects (12.5 - 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"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>CHEM90008 Advanced Spectroscopy</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> <p><b>Discipline Elective</b></p> <p>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 &amp; Characterisation 1</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>CHEM90010 Advanced Chemical Applications 1</td> <td>July</td> <td>12.50</td> </tr> <tr> <td>CHEM90017 Chemical Synthesis &amp; Characterisation 2</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	CHEM90008 Advanced Spectroscopy	Semester 1	12.50	Subject	Study Period Commencement:	Credit Points:	CHEM90009 Chemical Synthesis & Characterisation 1	Semester 1	12.50	CHEM90010 Advanced Chemical Applications 1	July	12.50	CHEM90017 Chemical Synthesis & Characterisation 2	Semester 1	12.50
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CHEM90017 Chemical Synthesis & Characterisation 2	Semester 1	12.50																			

CHEM90018 Advanced Chemical Applications 2	July	12.50
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and up to 25 points from the Professional Skills subjects, 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	Semester 1	12.50
SCIE90005 Ethics and Responsibility in Science	Semester 1	12.50
MAST90007 Statistics for Research Workers	July	12.50
MULT90012 Industry Project in Science	Not offered 2016	12.50
SCIE90017 Science and Technology Internship	Summer Term, Semester 1, Semester 2	12.5

#### Communication Skills

Subject	Study Period Commencement:	Credit Points:
SCIE90013 Communication for Research Scientists	Semester 1	12.50
SCIE90012 Science Communication	Semester 2	12.5

#### Education Skills

Subject	Study Period Commencement:	Credit Points:
EDUC90839 Science in Schools	Semester 1, Semester 2	12.5

### 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) 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 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 *Chemistry Masters Research Project* subjects of the same points value.

Subject	Study Period Commencement:	Credit Points:
CHEM90013 Chemistry Masters Research Project	Semester 1, Semester 2	12.50
CHEM90014 Chemistry Masters Research Project	Semester 1, Semester 2	25
CHEM90015 Chemistry Masters Research Project	Semester 1, Semester 2	37.50
CHEM90016 Chemistry Masters Research Project	Semester 1, Semester 2	50

**Entry Requirements:****In order to be considered for entry, applicants must have completed:**

- an undergraduate degree in a discipline appropriate to the stream of the Master of Science into which entry is sought, with a weighted average mark of at least H3 (65%) in the best 50 points in appropriate discipline studies at third year; and
- appropriate prerequisite studies for the stream into which entry is sought

For stream specific requirements please [click here \(http://science.unimelb.edu.au/available-stream-requirements\)](http://science.unimelb.edu.au/available-stream-requirements) .

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Meeting these requirements does not guarantee selection.

In ranking applications, the Selection Committee will consider prior academic performance.

The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board [rules \(http://about.unimelb.edu.au/academicboard/resolutions\)](http://about.unimelb.edu.au/academicboard/resolutions) on the use of selection instruments.

Applicants are required to satisfy the university's [English language requirements for postgraduate courses \(http://www.policy.unimelb.edu.au/schedules/MPF1035-ScheduleA.pdf\)](http://www.policy.unimelb.edu.au/schedules/MPF1035-ScheduleA.pdf) . For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 is required.

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**Notes:**

- Quotas may be applied to the degree as a whole, or to an individual stream, and preference may be given to applicants with evidence of appropriate preparation or potential to undertake research.
- Entry into a stream of the Master of Science is subject to the capacity of the department(s) or schools(s) offering the program stream to provide adequate supervision in 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.

**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

	<p>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: <a href="http://services.unimelb.edu.au/disability">http://services.unimelb.edu.au/disability</a></p>
<b>Further Study:</b>	The Master of Science offers a pathway to a PhD.
<b>Links to further information:</b>	<a href="http://science.unimelb.edu.au/">http://science.unimelb.edu.au/</a>