

## BMEN90018 Research/Industry Project

<b>Credit Points:</b>	25															
<b>Level:</b>	9 (Graduate/Postgraduate)															
<b>Dates &amp; Locations:</b>	This subject is not offered in 2011.															
<b>Time Commitment:</b>	Contact Hours: 48 hours Total Time Commitment: 240 hours															
<b>Prerequisites:</b>	Prerequisites for this subjects are: <b>BMEN 90020 Biomedical Design and Regulation</b> ( <a href="http://handbook.unimelb.edu.au/view/2011/BMEN90020">../view/2011/BMEN90020</a> ) ( this subject may be taken concurrently) and At least four 9-level Master of Engineering (Biomedical) electives															
<b>Corequisites:</b>	None															
<b>Recommended Background Knowledge:</b>	None															
<b>Non Allowed Subjects:</b>	433-464 Project Work <table border="1" data-bbox="387 835 1485 1155"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>BMEN40001 Biocellular Engineering Research Proj 1</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> <tr> <td>BMEN40002 Biocellular Engineering Research Proj 2</td> <td>Semester 1, Semester 2</td> <td>25</td> </tr> <tr> <td>ELEN40001 Project Work</td> <td>Not offered 2011</td> <td>25</td> </tr> <tr> <td>MCEN40020 Major Project and Professional Practice</td> <td>Year Long</td> <td>25</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	BMEN40001 Biocellular Engineering Research Proj 1	Semester 1, Semester 2	12.50	BMEN40002 Biocellular Engineering Research Proj 2	Semester 1, Semester 2	25	ELEN40001 Project Work	Not offered 2011	25	MCEN40020 Major Project and Professional Practice	Year Long	25
Subject	Study Period Commencement:	Credit Points:														
BMEN40001 Biocellular Engineering Research Proj 1	Semester 1, Semester 2	12.50														
BMEN40002 Biocellular Engineering Research Proj 2	Semester 1, Semester 2	25														
ELEN40001 Project Work	Not offered 2011	25														
MCEN40020 Major Project and Professional Practice	Year Long	25														
<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>Contact:</b>	Dr. David Grayden Email: <a href="mailto:grayden@unimelb.edu.au">grayden@unimelb.edu.au</a> ( <a href="mailto:grayden@unimelb.edu.au">mailto:grayden@unimelb.edu.au</a> )															
<b>Subject Overview:</b>	This subject involves undertaking a major research or advanced innovative design project requiring an independent investigation and the preparation of reports on an approved topic. Students will present their findings in a conference presentation format, held at the end of the project cycle in the latter half of semester two. The emphasis of the project can be associated with either: <ul style="list-style-type: none"> <li># Explorative approach, where students will pursue outcomes associated with new knowledge or understanding within the biomedical engineering or science disciplines, often as an adjunct to existing academic research initiatives.</li> <li># A well-defined innovative project, usually based on a research and development required by an external industrial client. Students will be tutored in the synthesis of practical solutions to complex technical problems within a structured working environment, as if they were research and development professional engineers.</li> </ul>															
<b>Objectives:</b>	At the end of this subject, students should be able to: <ul style="list-style-type: none"> <li># Search, analyse and document engineering science and other relevant literature in order to determine the need for further research in a chosen area;</li> <li># Devise a methodology of investigation to improve knowledge or understanding of a chosen topic;</li> </ul>															

	<ul style="list-style-type: none"> <li># Collect and analyse a range of data (both qualitative and quantitative) to improve our collective understanding of a chosen topic;</li> <li># Write a project report that follows good engineering science practice;</li> <li># Present an oral presentation of the findings of an investigation to an audience of peers or lay people.</li> </ul>
<b>Assessment:</b>	<p>The Major Project (100% of the overall mark) is made up of: One interim report (5%) Continuous assessment, identifying effort, progress and contributions over the entire project cycle (10%). A professional engineering research report (Final Report) of no more than 15,000 words (60 pages); excluding appendices of supporting material that can include diagrams, tables, computations and computer code/output (50%) A summary of the important findings contained in the Final Report. The format of the summary will follow a specified research paper template (5%) There will be a technical oral examination of no more than one half hour duration. Technical oral examination includes a formal presentation followed by questions from an academic supervisor and academic examiner (15%). Major Project Exhibition: Lay person oral examination of no more than 15 minutes duration (5%), Static display materials (e.g. poster, computer demonstration, prototype) (10%).</p>
<b>Prescribed Texts:</b>	None
<b>Recommended Texts:</b>	None
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<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>Related Majors/Minors/Specialisations:</b>	Master of Engineering (Biomedical)