

# ELEN90067 Electrical Engineering Capstone Project

<b>Credit Points:</b>	25											
<b>Level:</b>	9 (Graduate/Postgraduate)											
<b>Dates &amp; Locations:</b>	2012, Parkville This subject commences in the following study period/s: Year Long, Parkville - Taught on campus. Semester 1, Parkville - Taught on campus.											
<b>Time Commitment:</b>	Contact Hours: 12 one-hour lectures in semester 1 Total Time Commitment: 300 hours											
<b>Prerequisites:</b>	Prerequisites for students enrolled in BE degree are: <b>ELEN30013 Electronic System Implementation</b> ( <a href="#">../view/2011/ELEN30013</a> ) AND ANY three other study-level 3 Electrical Engineering subjects Prerequisites for students enrolled in ME degree are: <b>ELEN 90066 Embedded System Design</b> ( <a href="#">../view/2011/ELEN90066</a> ) AND ANY three other study-level 9 Electrical Engineering subjects											
<b>Corequisites:</b>	None											
<b>Recommended Background Knowledge:</b>	None											
<b>Non Allowed Subjects:</b>	Anti-requisites for this subject are:											
	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ELEN40001 Project Work</td> <td>Not offered 2012</td> <td>25</td> </tr> <tr> <td>ELEN40012 Project Work</td> <td>Not offered 2012</td> <td>25</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	ELEN40001 Project Work	Not offered 2012	25	ELEN40012 Project Work	Not offered 2012	25
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ELEN40001 Project Work	Not offered 2012	25										
ELEN40012 Project Work	Not offered 2012	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>Coordinator:</b>	Assoc Prof Erik Weyer											
<b>Contact:</b>	Assoc Prof Erik Weyer Email: <a href="mailto:ewey@unimelb.edu.au">ewey@unimelb.edu.au</a> ( <a href="mailto:ewey@unimelb.edu.au">mailto:ewey@unimelb.edu.au</a> )											
<b>Subject Overview:</b>	This subject provides students with the opportunity to integrate technical knowledge and generic skills gained in earlier years. This is to be achieved within the context of an engineering project conducted in a small team (typically two or three students) under the supervision of either a member of academic staff or an industry partner. The project component of this subject is supplemented by a lecture course dealing with project management tools and practices, organisational structures, engineering standards and the social and environmental responsibility of professional engineers.											
<b>Objectives:</b>	On completing this subject the student should be able to: <ul style="list-style-type: none"> <li># Conduct an electrical engineering project;</li> <li># Effectively communicate the outcomes of various stages of an engineering project;</li> <li># Apply standard engineering project management tools;</li> </ul>											

	<ul style="list-style-type: none"> <li># Identify standard organisational structures and the relative merits of different approaches;</li> <li># Describe the role of standards in engineering projects.</li> </ul>
<b>Assessment:</b>	<p>For project carried out in the first semester(25 points in Semester 1) the final project mark will be determined using the following assessment components:Individual continuous assessment of the lecture component of the subject, comprising submitted work not exceeding 25 pages over the semester, worth 25%; Individual oral assessment of project progress and outcomes towards the end of semester, worth 10%; A group oral presentation of the project outcomes towards the end of semester, worth 10%; A preliminary report not exceeding 40 pages due two weeks before the oral presentation, worth 5%, A group report not exceeding 50 pages (excluding appendices) due at the end of semester, worth 50%. In order to pass the subject the students must receive a mark of at least 37.5 out of 75 for the components related to the individual projects (i.e. the individual oral assessment, the group oral presentation, the preliminary report and the final report).For project carried out in a year( 25 points yearlong) the final project mark will be determined using the following assessment components:Individual continuous assessment of the lecture component of the subject, comprising submitted work not exceeding 25 pages over semester 1, worth 25%; Individual oral assessment of project progress and outcomes towards the end of semester 2, worth 10%; A group oral presentation and public display of project outcomes towards the end of semester 2, worth 10%; A preliminary report not exceeding 40 pages due two weeks before the oral presentation, worth 5%, A group report not exceeding 50 pages (excluding appendices) due at the end of semester 2, worth 50%. In order to pass the subject the students must receive a mark of at least 37.5 out of 75 for the components related to the individual projects (i.e. the individual oral assessment, the group oral presentation and public display, the preliminary report and the final report).</p>
<b>Prescribed 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>Generic Skills:</b>	<ul style="list-style-type: none"> <li># Ability to communicate effectively, not only with engineers but also with the community at large</li> <li># In-depth technical competence in at least one engineering discipline</li> <li># Ability to undertake problem identification, formulation and solution</li> <li># Ability to utilise a systems approach to design and operational performance</li> <li># Ability to function effectively as an individual and in multidisciplinary and multi-cultural teams, with the capacity to be a leader or manager as well as an effective team member</li> <li># Understanding of the social, cultural, global and environmental responsibilities of the professional engineer, and the need for sustainable development</li> <li># Capacity for independent critical thought, rational inquiry and self-directed learning</li> <li># Intellectual curiosity and creativity, including understanding of the philosophical and methodological bases of research activity</li> <li># Openness to new ideas and unconventional critiques of received wisdom</li> </ul>
<b>Related Course(s):</b>	Bachelor of Engineering (Biomedical)Biosignals Bachelor of Engineering (Computer Engineering) Bachelor of Engineering (Electrical Engineering) Bachelor of Engineering (Electrical) and Bachelor of Arts Bachelor of Engineering (Electrical) and Bachelor of Commerce Bachelor of Engineering (EngineeringManagement) Electrical
<b>Related Majors/Minors/ Specialisations:</b>	B-ENG Electrical Engineering stream Master of Engineering (Electrical)