

## ELEN90033 Advanced Topics in Photonics

<b>Credit Points:</b>	12.50
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	2012, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 24 hours; Non-contact time commitment: 96 hours Total Time Commitment: 120 hours
<b>Prerequisites:</b>	Enrolment in a research higher degree(Masters or PhD) in Engineering
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<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>	Email: <a href="mailto:elen-subjectenquiry@unimelb.edu.au">elen-subjectenquiry@unimelb.edu.au</a> ( <a href="mailto:elen-subjectenquiry@unimelb.edu.au">mailto:elen-subjectenquiry@unimelb.edu.au</a> )
<b>Subject Overview:</b>	The subject will cover the relevant fundamentals from optical communications theory, and the way these fundamentals are applied in the design of modern optical communication systems.
<b>Objectives:</b>	The aim of this subject is to provide students with exposure to a current research topic in the broad area of photonics.
<b>Assessment:</b>	Continuous assessment of homework assignments, not exceeding 30 pages in total over the semester, worth 40%; Final examination at the end of semester, worth 60%. Students must pass the final exam in order to pass the subject.
<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 apply knowledge of basic science and engineering fundamentals;</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># Expectation of the need to undertake lifelong learning, capacity to do so;</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> <li># Profound respect for truth and intellectual integrity, and for the ethics of scholarship</li> </ul>
<b>Related Course(s):</b>	Master of Philosophy - Engineering Ph.D.- Engineering