

ENGR90031 Energy Systems Project

Credit Points:	25																	
Level:	9 (Graduate/Postgraduate)																	
Dates & Locations:	This subject is not offered in 2012.																	
Time Commitment:	Contact Hours: 24 hours Total Time Commitment: 240 hours																	
Prerequisites:	All of the following subjects -																	
	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ENGR90030 Non-Renewable Energy</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>ECON90015 Managerial Economics</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> <tr> <td>SCIE90014 Renewable Energy</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>FNCE90060 Financial Management</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	ENGR90030 Non-Renewable Energy	Semester 2	12.50	ECON90015 Managerial Economics	Semester 1, Semester 2	12.50	SCIE90014 Renewable Energy	Semester 2	12.50	FNCE90060 Financial Management	Semester 1, Semester 2	12.50		
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Corequisites:	None																	
Recommended Background Knowledge:	None																	
Non Allowed Subjects:	None																	
Core Participation Requirements:	<p><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 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: http://services.unimelb.edu.au/disability</p> </p>																	
Contact:	mjbrear@unimelb.edu.au (mailto:mjbrear@unimelb.edu.au)																	
Subject Overview:	<p>This course teaches the science underpinning the operation of nuclear reactors, the generation of electrical power from light water reactors and the nuclear fuel cycle. The course also investigates the issues surrounding nuclear power including CO2 emissions from the nuclear cycle, nuclear waste, nuclear safety, licensing, nuclear weapons proliferation and the economics of nuclear power generation. Finally the course investigates advanced and alternative nuclear fuel cycles (such as the Thorium cycle), nuclear waste reprocessing and advanced reactor concepts including small modular reactors and fourth generation reactors.</p>																	
Objectives:	<p>On completion of this subject students should be able to -</p> <ul style="list-style-type: none"> # Undertake a cross-disciplinary analysis of energy system issues, in particular evaluating the social, environmental and economic costs and benefits of different forms of energy and energy technology # Make decisions/recommendations based on this cross-disciplinary analysis. 																	
Assessment:	<p>This project must be completed individually. Assessment will be One 20 minute oral presentation summarising progress mid-way through the project (20%) One 20 minute oral presentation followed by an oral examination summarising the project findings shortly after project submission One project report of no more than 50 pages in length to be submitted at the end of the project (60%).</p>																	
Prescribed Texts:	None																	

Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<ul style="list-style-type: none"># Ability to communicate effectively with the community at large# Understanding of the social, cultural, global and environmental responsibilities of a professional, and the need for sustainable development.
Related Course(s):	Master of Energy Systems