

MC-ENGYSYS Master of Energy Systems

Year and Campus:	2016 - Parkville
CRICOS Code:	075124A
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Graduate/Postgraduate
Duration & Credit Points:	150 credit points taken over 18 months full time. This course is available as full or part time.
Coordinator:	Dr Robert Gordon Email: robert.gordon@unimelb.edu.au
Contact:	<p>Melbourne School of Engineering</p> <p>Currently enrolled students:</p> <ul style="list-style-type: none"> # General information: https://ask.unimelb.edu.au (https://ask.unimelb.edu.au/) # Contact Stop 1 (http://students.unimelb.edu.au/stop1) <p>Future Students:</p> <ul style="list-style-type: none"> # Further Information: Enquiry Form # Visit Master of Energy Systems (http://www.eng.unimelb.edu.au/study/degrees/master-energy-systems/overview)
Course Overview:	<p>The Master of Energy Systems is a 150 point degree, including 112.50 points of core subjects and 37.50 points of electives. This degree is designed for graduates with at least a three-year degree in Engineering, Economics/Business or Science or related disciplines, with appropriate mathematics.</p> <p>The course aims to meet the educational needs of students ultimately seeking to work as energy specialists in government and industry, the latter including technical and business consulting and accounting/audit. Graduates will bridge the gap between technical and non-technical roles and will have an understanding of renewable and non-renewable energy as well as relevant business, policy and management.</p> <p>A key feature of this degree is its strong engagement with industry and the potential to undertake industry based work in the subject 'Energy Systems Project'. This is primarily through the degree's Advisory Panel, which is made up of energy sector specialists from a wide range of organisations. Subject prerequisites have also been sequenced to enable part time course plans.</p>
Learning Outcomes:	<p>This degree is offered as a response to the demand for professionals with a strong understanding of energy technology combined with relevant economics and business. By undertaking an integrated study of the technology and business of energy, graduates of the Master of Energy Systems will be able to -</p> <ul style="list-style-type: none"> • Analyse energy systems from technical and business standpoints • Understand key energy economics and finance • Critique renewable and non-renewable energy sources and systems • Integrate technical and business analysis to inform decision making
Course Structure & Available Subjects:	<p>This course will be delivered flexibly to meet the needs of local students. Emphasis is placed on after hours teaching to meet the needs of students in full-time employment.</p> <p>Degree structure is as follows -</p> <ul style="list-style-type: none"> • Semester 1: 4 compulsory subjects • Semester 2: 3 compulsory and 1 elective subjects • Semester 3: a 25 point Capstone subject and 2 electives, (either two elective subjects or a 25 point project Energy Systems Project. This project is available to students who achieve an average mark of 75% or more in preceding subjects). <p>Preferred course plan - full time</p> <p>Sem 1</p> <p>ENGR90028 Introduction to Energy Systems ENGR90029 Analysing Energy Systems ENGR90069 Electrical Power Systems</p>

One of FNCE90060 Financial Management, ECON90015 Managerial Economics or an elective
Sem 2
 ENGR90030 Non-renewable Energy
 SCIE90014 Renewable Energy
 Two of ECON90015 Managerial Economics, FNCE90060 Financial Management or an elective
Sem 3
 ENGR90032 Energy Supply & Value Chains (25 pt)
 2 electives

Preferred course plan - part time

Sem 1
 ENGR90028 Introduction to Energy Systems
 ENGR90029 Analysing Energy Systems

Sem 2
 FNCE90060 Financial Management
 ECON90015 Managerial Economics

Sem 3
 ENGR90032 Energy Supply & Value Chains (25pt)

Sem 4
 ENGR90030 Non-renewable Energy
 SCIE90014 Renewable Energy

Sem 5
 ELEN90069 Electrical Power Systems and 1 elective

Sem 6
 Two electives or ENGR90031 Energy Systems Project (25pt)

Subject Options:**Core subjects**

Students who have already completed a Bachelor of Electrical Engineering or equivalent may instead choose to take ELEN90074 Introduction to Power Engineering rather than ELEN90069 Electrical Power Systems, subject to approval from the ELEN90074 subject coordinator.

Subject	Study Period Commencement:	Credit Points:
ENGR90028 Introduction to Energy Systems	Semester 1	12.50
ENGR90029 Analysing Energy Systems	Semester 1	12.50
ECON90015 Managerial Economics	Semester 1, Semester 2	12.50
FNCE90060 Financial Management	Semester 1, Semester 2	12.50
ENGR90030 Non-Renewable Energy	Semester 2	12.50
SCIE90014 Renewable Energy	Semester 2	12.50
ENGR90032 Energy Supply and Value Chains	Semester 1	25
ELEN90069 Electrical Power Systems	Semester 1	12.50

Elective subjects

Subject	Study Period Commencement:	Credit Points:
ACCT90031 Sustainability Accounting	Semester 2	12.50
ENST90004 Climate Change Politics and Policy	Semester 2	12.50
ENST90017 Environmental Policy Instruments	Semester 2	12.50
ENEN90014 Sustainable Buildings	September	12.50
ENEN90033 Solar Energy	Semester 1	12.50

	ENGR90031 Energy Systems Project	Semester 1, Semester 2	25
	LAWS70141 Energy Regulation and the Law	March	12.50
	MGMT90141 Business Analysis & Decision Making	Semester 1, Semester 2	12.50
	CVEN90048 Transport Systems	Semester 2	12.50
	MAST90014 Optimisation for Industry	Semester 1	12.5
	ENGM90006 Engineering Contracts and Procurement	Semester 2	12.5
	CVEN90061 Freight Systems	Semester 1	12.5
	ERTH90026 Climate Modelling and Climate Change	Not offered 2016	12.5
	<p>Enrolment in Energy Regulation and the Law is subject to approval from the Faculty of Law.</p> <p>The Energy Systems Project is only available to students who achieve an average mark of 75% or more in the preceding subjects in this degree.</p> <p>Students may also take other relevant University subjects as electives, subject to approval from the degree coordinator.</p>		
Entry Requirements:	<p>1. In order to be considered for entry, applicants must have completed:</p> <ul style="list-style-type: none"> • either <ul style="list-style-type: none"> – an undergraduate degree in a relevant discipline (such as Commerce, Science, Engineering) with a weighted average mark of at least H2B (70%) or equivalent, including at least 12.5 points of mathematics, statistics or another quantitative subject at an appropriate level, or equivalent, or – an undergraduate degree in a relevant discipline (such as Commerce, Science, Engineering) with a weighted average mark of at least H3 (65%) or equivalent, including at least 12.5 points of mathematics, statistics or another quantitative subject at an appropriate level, and two years of documented work experience in an applicable field, or equivalent. <p>Meeting these requirements does not guarantee selection.</p> <p>2. In ranking applications, the Selection Committee will consider:</p> <ul style="list-style-type: none"> • prior academic performance; and where relevant • the professional experience. <p>3. 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/_data/assets/pdf_file/0007/1413727/Use-of-Selection-Instruments-Rules-of-the-Academic-Board-23-March-2015.pdf) on the use of selection instruments.</p> <p>4. Applicants are required to satisfy the university's English language requirements for postgraduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 (http://about.unimelb.edu.au/academicboard/resolutions) is required. For more information on meeting the University's English language requirements, see: http://futurestudents.unimelb.edu.au/info/international/english_and_foundation_programs (http://futurestudents.unimelb.edu.au/info/international/english_and_foundation_programs)</p>		
Core Participation Requirements:	<p>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 Overview, Objectives, Assessment and Generic Skills sections of this entry. 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 the Student Equity and Disability Support: http://www.services.unimelb.edu.au/disability/</p>		
Graduate Attributes:	<p>The University of Melbourne Graduate Attributes can be found here</p>		