

206-EC Master of Environmental Engineering

Year and Campus:	2009																								
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees																								
Level:	Graduate/Postgraduate																								
Duration & Credit Points:																									
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Course Overview:	<p>The Graduate Program in Environmental Engineering is designed to meet the theoretical and practical skills of people working in environmental control authorities in industry and elsewhere.</p> <p>The program provides participants with a broad understanding of the practice of environmental management and provides experience in investigation. Participants are able to focus on skill development in the sectors relevant to them.</p> <p>Themes covered include: air pollution, water and wastewater, municipal solid wastes, cleaner production, environment management systems, noise, vibration, water resources management, energy resources management, and politics, the law and the economy.</p>																								
Objectives:	<ul style="list-style-type: none"> # To gain advanced knowledge of the principles underpinning sustainable development. # To acquire key employment skills in the engineering practice of environmental management, including environmental due diligence. 																								
Course Structure & Available Subjects:	This program is designed to provide students with advanced knowledge of the principles underpinning sustainable development and the opportunity to gain employment skills in the engineering practice of environmental management including environmental due diligence.																								
Subject Options:	<p>Core subjects (25 points)</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>421-681 Management for the Environment</td> <td>Semester 2</td> <td>12.500</td> </tr> <tr> <td>421-680 Engineering for Sustainable Environments</td> <td>Summer</td> <td>12.500</td> </tr> </tbody> </table> <p>Restricted Elective Subjects: a minimum of 25 points (minimum of two subjects from this group)</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>421-602 Air Quality Control</td> <td>Semester 1</td> <td>12.500</td> </tr> <tr> <td>421-604 Environmental Management ISO 14000</td> <td>Semester 2</td> <td>12.500</td> </tr> <tr> <td>421-605 Managing Water Borne Risks</td> <td>Semester 2</td> <td>12.500</td> </tr> <tr> <td>421-606 Solid Wastes to Sustainable Resources</td> <td>Semester 1</td> <td>12.500</td> </tr> </tbody> </table> <p>Elective Subjects: up to a maximum of 50 points</p>	Subject	Study Period Commencement:	Credit Points:	421-681 Management for the Environment	Semester 2	12.500	421-680 Engineering for Sustainable Environments	Summer	12.500	Subject	Study Period Commencement:	Credit Points:	421-602 Air Quality Control	Semester 1	12.500	421-604 Environmental Management ISO 14000	Semester 2	12.500	421-605 Managing Water Borne Risks	Semester 2	12.500	421-606 Solid Wastes to Sustainable Resources	Semester 1	12.500
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Taken from the Electives List or other subjects with the approval of the Course Coordinator. A student is limited to a maximum of 25 points by research.

Subject	Study Period Commencement:	Credit Points:
421-519 Design of Environmental Systems	Semester 2	12.500
421-516 Hydraulics and Hydrology	Semester 2	12.500
421-626 Design of Energy Systems	Semester 2	12.500
421-619 Energy for Sustainable Development	Not offered 2009	12.500
421-505 Engineering Hydraulics	Semester 1	12.500
421-663 Engineering Project Management	Semester 1	12.500
421-522 Environmental Engineering Design	Semester 2	12.500
421-525 Field Data Acquisition and Analysis	Semester 1	12.500
421-539 Geotechnical Applications	Semester 2	12.500
421-697 Heating, Ventilation and Airconditioning	Semester 1	12.500
421-523 Occupational Health and Safety Basics	Semester 1, Semester 2	12.500
421-668 Sustainable Irrigation System Management	Not offered 2009	12.500
421-666 Management of Project Resources	Semester 2	12.500
421-654 Principles of Asset Management	Semester 1	12.500
421-664 Project Delivery	Semester 2	12.500
421-640 Water Supply and Waste Water Management	Semester 1	12.500
421-580 Hydrological Processes 1	Semester 1	12.500
421-581 Hydrological Processes 2	Semester 1	12.500
421-609 Technology in Society	Not offered 2009	12.500
421-627 Sustainable Water Resources Management	Semester 2	12.500
421-616 Technology Assessment	Semester 1	12.500
421-711 Solar Energy	Semester 1	12.500

Entry Requirements:

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4 year degree in engineering or science in a relevant discipline with an average grade of at least 65% or via pathway (average grade equivalent to at least 65% at the University of Melbourne)

Language Requirements

International students and students whose prior qualifications are from a university overseas where English is not the official language of instruction and examination need to supply proof of academic English language competency. Proof acceptable to the University includes:

Original evidence of an English Language test score at a sitting within the last 24 months of either -

TOEFL - at least 577 and a TWE of at least 4.5 (paper based) or a TOEFL of at least 233 with an Essay Rating of at least 4.5 (computer based)

or

IELTS - at least 6.5. (A minimum band score of 6 is required in the Academic Writing module).

Entry under a slightly lower Engineering alternative* English Language entry requirement is available as follows:

	<p>TOEFL - at least 550, with a TWE of 4 or the computer based TOEFL of at least 213 with an Essay Rating Score of at least 4 and agreeing in writing to undertake and pass an ESL subject in the first semester of study at The University of Melbourne</p> <p>or</p> <p>IELTS - at least 6 and agreeing in writing to undertake and pass an ESL subject in the first semester of study at The University of Melbourne.</p> <p>* The Faculty of Engineering's English Language alternative may affect the duration and cost of your course.</p>
Core Participation Requirements:	-
Graduate Attributes:	-
Generic Skills:	-
Notes:	<p>The Master of Environmental Engineering is offered by the Department of Civil and Environmental Engineering. Features of this Centre are:</p> <ul style="list-style-type: none"> # Excellent study infrastructure including dedicated computer laboratories # Active student society for social international and cultural exchange <p>Features of the Environmental Engineering program are:</p> <ul style="list-style-type: none"> # Electives from other faculties in the University may be taken with consent from the co-ordinator. # Students can convert the Master of Environmental Engineering to a Master of Engineering Science (Environmental Engineering) by adding a semester of research. # Students with insufficient academic background in Environmental Engineering who wish to move into this area may be given this opportunity by taking some additional fundamental subjects before commencing the program.