

Master of Engineering (Environmental)

Year and Campus:	2011
Coordinator:	Dr Michael Stewardsonmjstew@unimelb.edu.au
Contact:	Melbourne School of Engineering Current Students: courseinfo@eng.unimelb.edu.au (mailto:courseinfo@eng.unimelb.edu.au) Prospective Students: Visit http://www.eng.unimelb.edu.au/Postgrad/MEng/me_environmental.html (http://www.eng.unimelb.edu.au/Postgrad/MEng/me_environmental.html)
Overview:	<p>Environmental engineers create sustainable solutions to environmental challenges. Students in this specialisation learn from staff active in research areas specialisations such as hydrology, irrigation and water management. The course has a strong focus on sustainability and project management.</p> <p>Guest lectures and seminars by industry professionals are available to students, along with community project work and site visits that combine theory with practice.</p> <p>Career opportunities exist with: agencies for conservation, natural resource management and environmental protection; in-house and external consultancy groups for the private and public sector on sustainability issues; and international sustainable development work.</p>
Objectives:	To produce graduates who are both skilled in environmental engineering principles and have the ability to apply them to complex, open-ended engineering tasks and problems.
Structure & Available Subjects:	<p>The Master of Engineering (Environmental) consists of 300 points- 237.5 points core and 62.5 points elective subjects as detailed below.</p> <p>Advanced standing will be awarded for equivalent subjects taken in prior study to applicants on the following basis:</p> <ul style="list-style-type: none"> # a maximum of 150 points for applicants with a 4 year Bachelor of Engineering or equivalent. # a maximum of 100 points for applicants with a 3 year undergraduate degree. Students entering with a three year bachelor degree must complete at least 200 points of study within the Masters of Engineering. In cases where applicants have completed the equivalent of more than 100 points of core masters subjects, discipline specific electives must be taken to fulfill the 200 minimum masters study requirement. <p>Note: applicants from the University of Melbourne with:</p> <ul style="list-style-type: none"> # An appropriate "Engineering System" major will receive 100 points of advanced standing. Applicants who have completed more than 100 points of core subjects in their undergraduate degree will obtain exemption for the cores taken but will need to replace the points in excess of 100 points with elective subjects. # Engineering breadth sequences (including those in the Bachelor of Commerce) will receive advanced standing to a maximum of 100 points.
Subject Options:	<p>Total 300 points - 237.5 points core (compulsory) and 62.5 points elective subjects from the lists below. Students must complete all 300 points of subjects, including all core subjects, or have advanced standing or exemption.</p> <p>The core and elective subjects are those listed below. The order of subjects below is one way of progressing through the course - students who meet subject requisites may tailor their individual study plan to take into account advanced standing and their preferred study load. Students plan their study on-line, however Melbourne School of Engineering course advisors are available to assist students with individual study plans.</p> <p>Suggested first 100 points:</p> <p>Suggested study plan for the first 100 points:</p> <ul style="list-style-type: none"> # 100 points Core <p>Core (Total 100 points)</p>

Subject	Study Period Commencement:	Credit Points:
ENGR20004 Engineering Mechanics	January, Semester 1, Semester 2	12.50
MAST20029 Engineering Mathematics	Summer Term, Semester 1, Semester 2	12.50
ENGR90021 Engineering Communication	Semester 1, Semester 2	12.50
ENGR30001 Fluid Mechanics & Thermodynamics	Semester 1, Semester 2	12.50
CVEN30008 Risk Analysis	Not offered 2011	12.50
ENEN20002 Earth Processes for Engineering	Not offered 2011	12.50
ENGR20003 Engineering Materials	Not offered 2011	12.50
CVEN30010 Systems Modelling and Design	Not offered 2011	12.50

Suggested second 100 points:

Suggested study plan for the second 100 points:

- # 87.5 points Core
- # 12.5 points Approved Electives

Core (Total 87.5 points)

Subject	Study Period Commencement:	Credit Points:
ENEN90031 Quantitative Environmental Modelling	Not offered 2011	12.50
CVEN90043 Sustainable Infrastructure Systems	Not offered 2011	12.50
CVEN90044 Engineering Site Characterisation	Not offered 2011	12.50
CVEN90045 Engineering Project Implementation	Not offered 2011	12.50
CVEN90051 Civil Hydraulics	Not offered 2011	12.50
ENEN90032 Environmental Analysis Tools	Not offered 2011	12.50
ENEN90028 Monitoring Environmental Impacts	Not offered 2011	12.50

Suggested third 100 points:

Suggested study plan for the third 100 points:

- # 50 points Core
- # 50 points Environmental Engineering Electives from the list below

Core (Total 50 points)

Subject	Study Period Commencement:	Credit Points:
CVEN90052 Integrated Design	Not offered 2011	25
CVEN90047 Research Project	Not offered 2011	25

Approved Elective

Total 12.5 points

Any postgraduate engineering subject or any environmental engineering elective from the second list below (no approval required) or any postgraduate subject from another faculty subject to approval the other faculty and by the specialisation coordinator.

Environmental Engineering Electives

Total 50 points

	Subject	Study Period Commencement:	Credit Points:
	ENEN90033 Solar Energy	Not offered 2011	12.50
	ENEN90029 Water and Waste Water Management	Not offered 2011	12.50
	ENEN90006 Solid Wastes to Sustainable Resources	Not offered 2011	12.50
	CVEN90050 Geotechnical Engineering	Not offered 2011	12.50
	ENEN90027 Energy for Sustainable Development	Not offered 2011	12.50
	ENEN90034 Hydrological Processes	Not offered 2011	12.50
	CVEN90019 Sustainable Water Resources Systems	Not offered 2011	12.50
	ENEN90011 Energy Efficiency Technology	Not offered 2011	12.50
	ENEN90030 Contaminant Hydrogeology	Not offered 2011	12.50
	ENEN90005 Environmental Management ISO 14000	Not offered 2011	12.50
Links to further information:	http://www.eng.unimelb.edu.au/Postgrad/MEng/me_environmental.html		
Related Course(s):	Master of Engineering		