

196-AA Master of Utilities Management

Year and Campus:	2008																								
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees																								
Level:	Graduate/Postgraduate																								
Duration & Credit Points:																									
Contact:	<p>Senior Student Advisor</p> <p>Melbourne School of Design Tel: (+61 3) 8344 6417 / 9862</p> <p>Fax:(+61 3) 8344 5532 Email: abp-graduateschool@unimelb.edu.au</p>																								
Course Overview:	<p>The Graduate Program in Utilities Management uses experienced educators, researchers and practitioners in this specialist field.</p> <p>The program aims to provide participants with the technological and competitive skills needed to effectively and efficiently manage infrastructure in today's rapidly changing environment of the information society.</p> <p>Themes covered include: asset management, public and private partnerships, strategic planning, and private and public financing.</p>																								
Objectives:	<p>That a graduate of the program should:</p> <ul style="list-style-type: none"> # gain an advanced understanding of the theoretical and practical principles relating to utilities management; # acquire an advanced knowledge of asset management and its role in the management of various infrastructure utility sectors; # develop a capacity to bridge the technical and management issues involved in the management of utilities in contemporary society. 																								
Course Structure & Available Subjects:	<p>This course is designed to provide a student with an advanced understanding of the theoretical and practical principles relating to utilities management and asset management, together with its role in the management of various infrastructure utility sectors. It also focuses on the capacity to bridge the technical and management issues involved in the management of utilities in contemporary society.</p> <p>A two-semester program on a full-time basis comprising 100 points, consisting of:</p>																								
Subject Options:	<p>The course consists of eight subjects: 2 core subjects; a further minimum of two subjects chosen from Group A; and the remaining four subjects to be chosen from the list of approved electives including but not limited to Group B.</p> <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>421-654 Principles of Asset Management</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>451-610 Fundamentals of GIS</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> <p>Restricted elective 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>451-624 Management of GIS</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>325-887 Strategic Management of Organisations</td> <td>Not offered 2008</td> <td>12.500</td> </tr> <tr> <td>421-616 Technology Assessment</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>333-641 Financial Management</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	421-654 Principles of Asset Management	Semester 1	12.50	451-610 Fundamentals of GIS	Semester 1	12.50	Subject	Study Period Commencement:	Credit Points:	451-624 Management of GIS	Semester 2	12.50	325-887 Strategic Management of Organisations	Not offered 2008	12.500	421-616 Technology Assessment	Semester 1	12.50	333-641 Financial Management	Semester 1, Semester 2	12.50
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Note: 333-641 (work experience is a prerequisite for this subject)

Elective Subjects: 50 points

Taken from subjects on the Electives List or other subjects approved by the Course Coordinator.

A student is limited to a maximum of 25 points by research.

Subject	Study Period Commencement:	Credit Points:
421-505 Engineering Hydraulics	Semester 1	12.50
421-511 Advanced Concrete Theory & Design	Not offered 2008	12.500
421-512 Structural Dynamics	Not offered 2008	6.250
421-513 Computer Aided Design (Masters)	Not offered 2008	6.250
421-514 General Structural Design	Not offered 2008	6.250
421-516 Hydraulics and Hydrology	Semester 2	12.50
421-517 Earthquake Engineering (Masters)	Not offered 2008	6.250
421-518 Applied Hydrology	Not offered 2008	6.250
421-519 Design of Environmental Systems	Semester 2	12.50
421-520 Canal Hydraulics	Not offered 2008	6.250
421-521 Coastal Engineering	Not offered 2008	12.500
421-522 Environmental Engineering Design	Semester 2	12.50
421-523 Occupational Health and Safety Basics	Semester 1, Semester 2	12.50
421-525 Field Data Acquisition and Analysis	Semester 1	12.50
421-539 Geotechnical Applications	Semester 2	12.50
421-547 Transport Engineering (Masters)	Not offered 2008	12.500
421-548 Transport Systems (Masters)	2	12.500
421-553 Engineering Systems Management (Masters)	1	12.500
421-580 Hydrological Processes 1	Semester 1	12.50
421-581 Hydrological Processes 2	Semester 1	12.50
421-602 Air Quality Control	Semester 1	12.50
421-604 Environmental Management ISO 14000	Semester 2	12.50
421-605 Managing Water Borne Risks	Semester 2	12.50
421-606 Solid Wastes to Sustainable Resources	Semester 1	12.50
421-609 Technology in Society	Semester 1	12.50
421-616 Technology Assessment	Semester 1	12.50
421-619 Energy for Sustainable Development	Semester 2	12.50
421-624 Special Studies In Hydraulic Eng.	Not offered 2008	12.500
421-625 Case Studies in Development Technologies	2	12.500

421-626 Design of Energy Systems	Semester 2	12.50
421-627 Sustainable Water Resources Management	Semester 2	12.50
421-629 Energy Efficiency Technology	Semester 2	12.50
421-636 Applied Fortran Programming	Semester 2	12.50
421-637 Indoor Environment Quality	Not offered 2008	12.500
421-640 Water Supply and Waste Water Management	Semester 1	12.50
421-642 Research Topic	Semester 1, Semester 2	12.50
421-643 Research Investigation	Semester 1, Semester 2	25
421-644 Research Project	Semester 1, Semester 2	50
421-649 Special Studies	Semester 1, Semester 2	12.50
421-650 Preliminary Studies	Semester 1, Semester 2	12.50
421-654 Principles of Asset Management	Semester 1	12.50
421-663 Engineering Project Management	Semester 1	12.50
421-664 Project Delivery	Semester 2	12.50
421-666 Management of Project Resources	Semester 2	12.50
421-667 Project Management Practices	Semester 2	12.50
421-668 Sustainable Irrigation System Management	Semester 1	12.50
421-670 Sustainable Buildings	Semester 2	12.50
421-671 Financial Analysis of Complex Projects	Semester 1	12.50
421-672 Management of Technological Enterprises	Semester 1	12.50
421-673 Sustainable Supply Chain Management	Semester 2	12.50
421-680 Engineering for Sustainable Environments	Summer	12.50
421-681 Management for the Environment	Semester 2	12.50
421-682 Engineering Systems Management	Semester 2	12.50
421-683 Principles of Public Private Partnership	2	12.500
421-693 Anatomy & Physiology for Engineers	Semester 2	12.50
421-694 Advanced Design of High Rise Structures	Semester 1	12.50
421-695 Extreme Loading of Structures	Semester 1	12.50
421-696 Structures for Blast, Impact and Fire	Semester 1	12.50
421-697 Heating, Ventilation and Airconditioning	Semester 1	12.50
421-825 Energy from Biomass and Wastes	Not offered 2008	12.500
431-671 Auditory Processing and Hearing Bionics	Semester 2	12.50
433-650 Computational Gene Expression	Semester 2	12.50
451-624 Management of GIS	Semester 2	12.50

	316-660 Managerial Economics	Semester 1, Semester 2	12.50
	316-802 Macroeconomics for Managers	Semester 1, Semester 2	12.50
	325-677 People and Change	Semester 2	12.50
	325-679 Supply Chain Management	Semester 2	12.50
	325-692 Decision Analysis	Semester 1	12.50
	325-693 Business Risk Management	Not offered 2008	12.500
	325-694 Managing Innovation and Entrepreneurship	Semester 1, Semester 2	12.50
Entry Requirements:	<p>4 year degree in engineering or related science with an average grade of 65% or via pathway (average grade equivalent to at least 65% at the University of Melbourne).</p> <p>Language Requirements</p> <p>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:</p> <p>Original evidence of an English Language test score at a sitting within the last 24 months of either -</p> <p>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)</p> <p>or</p> <p>IELTS - at least 6.5. (A minimum band score of 6 is required in the Academic Writing module).</p> <p>Entry under a slightly lower Engineering alternative* English Language entry requirement is available as follows:</p> <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:	-		
Further Study:	-		
Graduate Attributes:	-		
Generic Skills:	-		
Notes:	175-501 is only eligible to be included as an elective subject for programs greater than 12 months full-time duration or equivalent part-time. For courses of less than twelve months duration, if this subject is required it is considered an additional subject.		