ABPL90086 Environmental Systems

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 hours: 1 x 2 hours of lectures per week; 1 x 1 hour of tutorials per week Total Time Commitment: 120 hours
Prerequisites:	Admission to the Melbourne School of Design or written permission from the subject coordinator.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	702-465 (ABPL40017) Environmental Systems
Core Participation Requirements:	For the purposes of considering requests 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 Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry.The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Coordinator:	Dr Boon Lay Ong
Contact:	**Environments and Design Student Centre** Ground Floor, Baldwin Spencer (building 113) *Enquiries* Phone: 13 MELB (13 6352) Website: **http://www.msd.unimelb.edu.au (http://www.msd.unimelb.edu.au/)**
Subject Overview:	This subject covers key elements of building services and sustainability. The services component of the subject (50%) includes: # refrigeration,heating and air handling plant; # air distribution; # energy efficiency, and documentation of air-conditioning system designs; # non-residential electrical, telecommunications, transportation and building management systems; # special servicing conditions including hospitals, auditoria, industrial buildings, commercial kitchen planning, and district services. The sustainability component of the subject (50%) includes: # design for daylighting, natural ventilation and mixed mode systems; # displacement ventilation, evaporative cooling and radiant cooling systems; # active solar heating and cooling systems; # indoor air quality, environmental comfort and post-occupancy evaluation; # principles of room acoustics and sound isolation.
Objectives:	On completion of this subject students will have a working familiarity with both passive and active systems of environmental control used in commercial and institutional buildings.

Assessment:	One two-hour examination (70%). Exercises (eg. written and drawn assignments, class presentations) equivalent to not more than 3000 words (30%). Students must demonstrate a high level of engagement with and/or critical analysis of the subject content to complete the subject at postgraduate level, and will be subject to assessment at postgraduate level.
Prescribed Texts:	None specified
Recommended Texts:	Parlour, R. P. *Building services: a guide to integrated design & engineering for architects*. Pymble, N.S.W: Integral Publishing, 2000.
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:	# application of calculation methods; # correct use of technical terminology; # relating to consultants.
Related Course(s):	Bachelor of Property and Construction Bachelor of Property and Construction (Honours) Master of Architecture Master of Construction Management Master of Design (Urban Design) Master of Property Master of Property Master of Urban Design
Related Majors/Minors/ Specialisations:	Building Building Systems and Trade Specialties Energy Efficiency Modelling and Implementation Research and Development