ABPL20036 Environmental Building Systems

Credit Points:	12.5
Level:	2 (Undergraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 2 hours of lectures and 2 hours of tutorials per week. Total Time Commitment: 170 Hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, 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 Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Coordinator:	Assoc Prof Masa Noguchi, Mr Xavier Cadorel
Contact:	Semester 1 Subject Coordinator emails: **masa.noguchi@unimelb.edu.au (mailto:masa.noguchi@unimelb.edu.au)** **xcadorel@unimelb.edu.au (mailto:xcadorel@unimelb.edu.au)** Semester 2 Subject Coordinator emails: **masa.noguchi@unimelb.edu.au (mailto:masa.noguchi@unimelb.edu.au)** **xcadorel@unimelb.edu.au (mailto:xcadorel@unimelb.edu.au)** Senior tutor email: **adrian.chu@unimelb.edu.au (mailto:adrian.chu@unimelb.edu.au)** The Eastern Precinct (building 138) (between Doug McDonell building and Eastern Resource Centre) **Enquiries:** Current Student: **http://ask.unimelb.edu.au/ (http://ask.unimelb.edu.au/)** Web: **http://edsc.unimelb.edu.au/ (http://edsc.unimelb.edu.au/)**
Subject Overview:	This subject covers key elements of building services and sustainability at a residential and commercial scale. The subject aims to teach the basic terminology and concepts behind providing comfortable and effectively functioning buildings in terms of sun, envelope, services (water, waste, gas, electricity, data, fire protection), heating and cooling, air quality, acoustics and vertical transport. Using the sustainability tools being used in the industry (FirstRate5, NABERS and Green Star) students will be given a framework in which to understand how buildings perform and their impact on the environment. They will also be introduced to modelling software that will enable them to carry out performance analysis of initial designs.
Learning Outcomes:	On completion of this subject students will be able to:

	# Understand the terminology, principles and techniques of environmental control systems at both small and medium scale; # Integrate environmental controls into architectural designs in a sustainable manner.
Assessment:	Assignment 1, submission of written report and drawings equivalent to 1200 words due week 5, 30%; Weekly Quizzes equivalent to 1200 words, 30%; One 2-hour exam (equivalent to 2000 words) at the end of the semesterperiod, 40%. Hurdle requirement: A minimum of 40% must be achieved in the examination in order to pass the subject.
Prescribed Texts:	Course reader
Recommended Texts:	Alison Kwok, *The Green Studio Handbook: Environmental Strategie, 2nd Edition.*
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2016/B-ARTS)** # **Bachelor of Biomedicine (https://handbook.unimelb.edu.au/view/2016/B-BMED)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2016/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2016/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2016/B-MUS)** # **Bachelor of Science (https://handbook.unimelb.edu.au/view/2016/B-SCI)** # **Bachelor of Engineering (https://handbook.unimelb.edu.au/view/2016/B-ENG)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	The following skills should be obtained upon completion of the subject: # Written, verbal and graphic presentation of ideas; # Critical thinking and analysis; # Evaluation of existing knowledge; # Appropriate use of design terminology; # Application of generic theories to specific examples.
Related Majors/Minors/ Specialisations:	Architecture major Civil (Engineering) Systems major Construction major Engineering Systems Environments Discipline subjects Landscape Architecture major Property major Restrictions for Breadth Options within the Bachelor of Environments - relating to specific majors Urban Design and Planning major