ABPL90153 Complex Building Energy Modelling

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2011, Parkville This subject commences in the following study period/s: January, Parkville - Taught on campus. July, Parkville - Taught on campus. This subject is a quota subject and places are limited. Students may provisionally enroll via the Student Portal, but places are not guaranteed until selection is completed. You will be notified in writing by the Student Centre if you are selected.
Time Commitment:	Contact Hours: 36 hours Total Time Commitment: 120 hours: 36 hours contact, 84 hours non contact.
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
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 Dominique Hes
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:	The subject teaches how to use two modelling approaches to investigate and communicate complex and innovative environmental solutions for energy efficient building design. Led by experienced software users from industry and from software manufactures, this course will allow students to specialise in a software tool which they may already be using at their work. Based on a case study approach students will assess an existing or new building project and prepare the documentation arguing for the innovative approaches to energy efficiency that are proposed. Focus will not only be on learning how to model these complex scenarios, but also how to interpret their practicality and develop risk profiles allowing end users to be able to choose between innovation and benefit.
Objectives:	On successful completion, students will be able to: # model complex scenarios including natural ventilation, mixed mode/hybrid ventilation, use of passive techniques such as thermal chimneys, thermal mass, chilled beams, labyrinths, geothermal energy and solar energy # use modelling to develop risk benefit scenarios # communicate the benefits of various alternative options # interpret results # appreciate the relationship between design elements and thermal performance # be able to add meaningfully to a business case of an innovative system within an active actual project

Assessment:	One 2 hour examination (50%).One assignment analysing a complex project and presenting the various options for improved performance (50%).
Prescribed Texts:	None
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
Related Course(s):	Master of Architecture Master of Architecture
Related Majors/Minors/ Specialisations:	Energy Efficiency Modelling and Implementation