ABPL90153 Complex Building Energy Modelling

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: January, Parkville - Taught on campus. On campus
Time Commitment:	Contact Hours: 36 hours Total Time Commitment: 120 hours: 36 hours contact, 84 hours non contact.
Prerequisites:	Students taking this subject should have either completed the subject below, or have experience with energy modelling software, such as Eco Tect, Energy Plus, or Trnsys.

Subject	Study Period Commencement:	Credit Points:
702-350 Intro to Building Energy Modelling	Not offered 2010	12.50

Corequisites:	None specified
Recommended Background Knowledge:	None specified
Non Allowed Subjects:	None specified
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** T: +61 3 8344 6417/9862 F: +61 3 8344 5532 Email: **msd-courseadvice@unimelb.edu.au (mailto:msd-courseadvice@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:	None specified
Assessment:	One 2 hour examination (50%).One assignment analysing a complex project and presenting the various options for improved performance (50%).
Prescribed Texts:	None specified
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:	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.
Related Course(s):	Master of Architecture Master of Architecture Master of Environment Master of Environment Postgraduate Certificate in Environment Postgraduate Diploma in Environment
Related Majors/Minors/ Specialisations:	Energy Efficiency Modelling and Implementation