ABPL90032 Resource Friendly Building Operations

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2011.
Time Commitment:	Contact Hours: 1 x 3hour studio per week Total Time Commitment: 120 hours maximum, 100 hours minimum.
Prerequisites:	The following is a pre-requisite subject: **ABPL40017 (702-465) Environmental Systems (../../view/2008/702-465)** OR **Subject** / **Study Period Commencement:** / **Credit Points:** ABPL90086 Environmental Systems / Semester 2 / 12.50 Or approval from the subject coordinator.
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/
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 primary focus of this subject is designing and operating a large scale building in a resource friendly manner. After a short introduction on fundamentals on energy transfer modes and comfort the subject provides the students with knowledge on a variety of systems, technologies and components, such as facades, active solar systems, earth heat exchanger, active concrete core cooling, latest engineering services, intelligent building controls, etc. The subject intends to expose the students to energy efficient design solutions, planning methods to improve resource friendliness by showing and discussing national and international examples as well as experiencing buildings during site visits. The students will learn and understand how a building functions and comprehend how design and architectural appearance can be achieved in an energy efficient way. Furthermore they will be able to solve problems with regard to the energy concept and make improvements to existing buildings.
Objectives:	# To develop an understanding of basic modes of energy transfer; # To identify key parameters that influence the energy consumption of a building; # Gain knowledge on sustainable construction, engineering services and resource friendly operations of modern buildings;

	# To improve an understanding of the interdisciplinary character of creating and operating a building in a resource friendly manner.
Assessment:	Assignment due mid semester - 2000 words (40%);3 hour test in class, during the final week of semester (60%).
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 completion of the subject students should have developed the following skills and capabilities: # Critical analysis and resolution of building related problems; # Correct use of technical terminology; # Research and analysis of building methods and new products; # Ability to comprehend complex concepts and express them lucidly, orally and textually.
Related Course(s):	Master of Construction Management Master of Construction Management Master of Property Master of Property
Related Majors/Minors/ Specialisations:	Energy Efficiency Modelling and Implementation