ABPL90268 Facade Design and Performance

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: July, Parkville - Taught on campus. On campus
Time Commitment:	Contact Hours: Lectures 1 x 1.5 hours weekly; Tutorials 1 x 2 hours weekly Total Time Commitment: Not available
Prerequisites:	Admission to the Master of Architecture, Master of Construction Management or Master of Property.
Corequisites:	None specified
Recommended Background Knowledge:	Knowledge of computer drafting and rendering; good skills in AutoCad, 3D rendering, Rhino and others will be assumed Some experience using energy simulation software tools such as Ecotect and others will be useful. In addition, students need to be familiar with energy efficient building concepts and sustainable architecture.
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 Eckhart Hertzsch
Contact:	Environments and Design Student Centre T: +61 3 8344 6417/9862 F: +61 3 8344 5532 Email: msd-courseadvice@unimelb.edu.au
Subject Overview:	This subject provides the student with knowledge of façade technology and adaptive architecture. The students will be introduced to a biomimicry approach to the design of responsive building facades. After an introduction on general façade functions, systems and types that are available to serve the architects' design ideas and appearances, further information will be provided about adaptive architecture and energy efficiency in buildings. Students will explore nature systematically, find biomimicry concepts and transfer these methods and strategies to create and design a highly responsive façade. Detailing, construction and installation of the building envelope will then be introduced to support the development of their concept design to a detailed study of the building skin. This subject will not just provide an overview to the complexity of façade design and engineering to achieve an adaptive, energy efficient building but also guide students to develop new cutting edge façade concepts using a nature inspired design approach.
Objectives:	# To develop an understanding of available façade types and systems and their performances with regard to architectural appearance and energy efficiency. # To design and detail a nature inspired façade concept for an adaptive & energy efficient building.
Assessment:	3 x studio presentations, due at the end of teaching period.Assignment 1, equivalent 1,500 words, due end of teaching periodAssignment 2, equivalent 1,500 words, due end of teaching periodAssignment 3, equivalent 2,000 words, due end of teaching period1 x hurdle

	requirementSubmission of studio work in publication format, (hurdle requirement) due 6th August.
Prescribed Texts:	None specified
Recommended Texts:	An overview of literature will be provided before subject start.
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:	# Analytic and problem solving skills; # Design and communication skills; and # Concept transfer skills.
Related Course(s):	Master of Architecture Master of Architecture Master of Construction Management Master of Construction Management Master of Property Master of Property