

ABPL90120 Building Sustainability

Credit Points:	12.50						
Level:	9 (Graduate/Postgraduate)						
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: September, Parkville - Taught on campus. This subject is run intensively at the Parkville campus. Please check the timetable for exact dates.						
Time Commitment:	Contact Hours: 36 hours intensive subject held in the first week of the mid-semester break Total Time Commitment: 120 hours						
Prerequisites:	Entry into the Melbourne School of Design or approval from the subject coordinator.						
Corequisites:	None						
Recommended Background Knowledge:	None						
Non Allowed Subjects:	<p>702-444 Building Sustainability (UG) (../view/2008/702-444)</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ENEN90014 Sustainable Buildings</td> <td>September</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	ENEN90014 Sustainable Buildings	September	12.50
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ENEN90014 Sustainable Buildings	September	12.50					
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 course are articulated in the Course Description, Course Objectives and Generic Skills 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, Mr Christopher Jensen						
Contact:	<p>Environments and Design Student Centre Ground Floor, Baldwin Spencer (building 113)</p> <p><i>Enquiries</i> Phone: 13 MELB (13 6352) Website: http://www.msd.unimelb.edu.au (http://www.msd.unimelb.edu.au/)</p>						
Subject Overview:	<p>This subject provides a multi-disciplinary overview of the design of sustainable buildings and considers the design from an architectural, services engineering, facade engineering, environmental engineering and structural engineering, tenants and owners perspective. Topics include: ecological sustainable design, life cycle analysis, planning for sustainable buildings and cities, regulatory environment, barriers to green buildings, green building rating tools, material selection, embodied energy, operating energy, indoor environmental quality (noise, light and air), facade systems, ventilation systems, transportation, water treatment systems, water efficiency, building economics, and staff productivity.</p> <p>A number of industry based case study examples will be introduced to complement the lectures.</p>						
Objectives:	<p>On successful completion, students should be able to:</p> <ul style="list-style-type: none"> # identify the critical sustainability issues that should be addressed in planning a building or new development; # estimate the green star rating of a new building; # identify the issues effecting indoor environmental quality; # select different heating and cooling ventilation systems and justify the selection; 						

	<ul style="list-style-type: none"> # calculate the embodied energy of different structural systems including recycled materials and faade systems; # calculate the utilisation energy and greenhouse gas production of different building conceptual designs; # carry out conceptual designs for the design of a water supply system for a building with a focus on water conservation and recycling measures and estimate the expected water consumption requirement; # undertake cost studies of different green star rated buildings using life cycle cost analysis techniques.
Assessment:	One two-hour written exam (40%). One written assignment of approximately 4,000 words or equivalent (60%).
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
Generic Skills:	<ul style="list-style-type: none"> # Self-directed learning. # Written, verbal and visual presentation of ideas. # Essay and report writing. # Graphic communication skills. # Ability to analyse social and cultural contexts. # Critical thinking and analysis. # Appropriate use of design terminology.
Related Course(s):	Master of Architecture Master of Architecture Master of Design (Urban Design) Master of Urban Design Master of Urban Design Master of Urban Planning
Related Majors/Minors/Specialisations:	Energy Efficiency Modelling and Implementation Energy Studies Sustainable Cities, Sustainable Regions