

# ENVS10003 Constructing Environments

<b>Credit Points:</b>	12.50
<b>Level:</b>	1 (Undergraduate)
<b>Dates &amp; Locations:</b>	2010, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus. On campus
<b>Time Commitment:</b>	Contact Hours: 48 hours: 2x1 hours of lectures; 1x2 hours of tutorials. Total Time Commitment: 120 hours
<b>Prerequisites:</b>	None specified
<b>Corequisites:</b>	None specified
<b>Recommended Background Knowledge:</b>	None specified
<b>Non Allowed Subjects:</b>	None specified
<b>Core Participation Requirements:</b>	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. This course requires all students to enrol in subjects where they must actively and safely contribute to class activities. Students who feel their disability will affect their meeting this requirement are encouraged to discuss this matter with the Subject Coordinator and the Disability Liaison Unit.
<b>Coordinator:</b>	Ms Clare Newton, Prof Graham Hutchinson
<b>Contact:</b>	Environments and Design Student Centre T: +61 3 8344 6417/9862 F: +61 3 8344 5532 Email: envs-courseadvice@unimelb.edu.au
<b>Subject Overview:</b>	What are the structural principles and material properties that underpin the form and fabric of the natural and built environments? Through analysis, observation, experimentation, testing and review, students will explore examples and applications from both natural and artificial structures. Through exercises, site visits and model making, students will engage with Structures (e.g. force and support systems) and Materials (e.g. metals, masonry, ceramics, polymers and timber). Physical and environmental properties of materials are presented together with their mechanical properties, and life cycle issues including embodied energy.
<b>Objectives:</b>	At the completion of this subject students should be able to: <ul style="list-style-type: none"> <li># Understand how structural principles and material properties underpin the form and fabric of natural and built environments;</li> <li># Explore physical measures that quantify length, area, volume, mass, weight and scale and their application to representations of objects (e.g. – in drawings and models);</li> <li># Begin to quantify actions induced in simple structural forms from environmental and specific loading effects;</li> <li># Identify basic properties and behaviour of materials, manufacturing processes and the environmental implications of their selection and use within the constructed environment.</li> </ul>
<b>Assessment:</b>	Assignments (tutorial exercises, model construction and testing, site reports, workshop exercises and class presentations) of 3000 words 60% (due during semester), and a 2-hour examination in the end of semester examination period (40%).
<b>Prescribed Texts:</b>	Interactive software by Shahin Vassigh, Interactive Structures - Visualising Structural Behavior, Wiley, (CD-ROM), 2006.
<b>Breadth Options:</b>	This subject potentially can be taken as a breadth subject component for the following courses:

	<p># <b>Bachelor of Arts</b> (<a href="https://handbook.unimelb.edu.au/view/2010/B-ARTS">https://handbook.unimelb.edu.au/view/2010/B-ARTS</a>)</p> <p># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2010/B-COM">https://handbook.unimelb.edu.au/view/2010/B-COM</a>)</p> <p># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2010/B-MUS">https://handbook.unimelb.edu.au/view/2010/B-MUS</a>)</p> <p>You should visit <b>learn more about breadth subjects</b> (<a href="http://breadth.unimelb.edu.au/breadth/info/index.html">http://breadth.unimelb.edu.au/breadth/info/index.html</a>) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	<p>At the completion of this subject students should have the following skills:</p> <ul style="list-style-type: none"> <li># Be able to apply knowledge of basic science and engineering fundamentals</li> <li># Be able to undertake problem identification, formulation and solution</li> <li># Learn from experiments through reflection and analysis</li> <li># Communicate effectively with their peers and the community at large</li> <li># Developed a capacity for independent critical thought, rational inquiry and self-directed learning</li> </ul>
<b>Links to further information:</b>	<a href="http://www.benvs.unimelb.edu.au/">http://www.benvs.unimelb.edu.au/</a>
<b>Related Majors/Minors/Specialisations:</b>	<p>Architecture  Civil (Engineering) Systems  Construction  Physical (Environmental Engineering) Systems  Property</p>