

ENVS10003 Constructing Environments

Credit Points:	12.50
Level:	1 (Undergraduate)
Dates & Locations:	This subject is not offered in 2011. On campus
Time Commitment:	Contact Hours: 48 hours (Lectures: 2 hours per week, Tutorials: 2 hours per week) Total Time Commitment: 120 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None specified
Core Participation Requirements:	For the purposes of considering request 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/
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Subject Overview:	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
Objectives:	On completion of this subject students should be able to: <ul style="list-style-type: none"> # understand how structural principles and material properties underpin the form and fabric of natural and built environments # 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) # begin to quantify actions induced in simple structural forms from environmental and specific loading effects # identify basic properties and behaviour of materials, manufacturing processes and the environmental implications of their selection and use within the constructed environment
Assessment:	One 2 hour examination, end of semester (40%) Assignments totalling 3000 words (tutorial exercises, model construction and testing, site reports, workshop exercises and class presentations), due during semester (60%)
Prescribed Texts:	Interactive Structures - Visualising Structural Behavior (Shahin Vassigh), Wiley, (Interactive software CD-ROM), 2006
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: <ul style="list-style-type: none"> # Bachelor of Arts (https://handbook.unimelb.edu.au/view/2011/B-ARTS) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2011/B-COM) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2011/B-MUS)

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