702-253 Residential Construction and Structures

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 2, - Taught on campus.
Time Commitment:	Contact Hours: - Total Time Commitment: -
Prerequisites:	880-103 (ENVS10003) - Constructing Environments
Corequisites:	-
Recommended Background Knowledge:	-
Non Allowed Subjects:	-
Core Participation Requirements:	-
Coordinator:	Mr Jim Georgiou
Contact:	-
Subject Overview:	A major portion of the general public has aspirations for home ownership and this continues to drive the residential market in Australia. This subject provides an introduction to residential and multi-unit residential low rise construction systems with an emphasis on materials selection, usage and construction methods. The various structural systems and design concepts currently in use are incorporated and interlinked into all the topics, which include an introduction to footing, floor, wall and roof framing systems and their compliance with Australian Standard Codes. The structural considerations include the analysis of loads, load paths, lateral stability, timber column and beam design for strength and stiffness, and general beam behaviour and statics analysis. The issue of materials technology, its application and performance are incorporated throughout the lecture series leading to an awareness of building pathology and maintenance. The subject also provides an introduction to residential services.
Objectives:	On completion of this subject students should be able to: # Link basic structural design concepts with current residential construction practices # Read and interpret residential construction drawings # Communicate construction solutions by means of sketches and drawings # Propose and evaluate alternative construction systems
Assessment:	Assignment 1: (10%) Trade Literature Information Search - approximately 1000 word report on findings of trade literature search plus hard copy examples in an appendix.Assignment 2: (30%) House Watching Report - house watching report approximately 1500 - 2000 words plus photographs and annotated sketches.Exam (60%) - Regardless of assignment results, a minimum mark of 40% has to be achieved in the exam to pass this subject.
Prescribed Texts:	Coursework notes available.
Recommended Texts:	***The Construction of Buildings****, Vol. 1, Edition 7* R. Barry ***Principles of Structures****,* Hanaor, A, Blackwell Science
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2009/D09)** # **Bachelor of Biomedicine (https://handbook.unimelb.edu.au/view/2009/J07)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2009/F04)**

	# **Bachelor of Music (https://handbook.unimelb.edu.au/view/2009/M05)** # **Bachelor of Science (https://handbook.unimelb.edu.au/view/2009/R01)** # **Bachelor of Engineering (https://handbook.unimelb.edu.au/view/2009/355-AA)** 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:	# Analytical skills # Problem solving skills # Drawing reading skills # Research skills
Links to further information:	http://www.benvs.unimelb.edu.au/
Related Majors/Minors/ Specialisations:	Construction Property