

746BU Master of Engineering Structures

Year and Campus:	2010 - Parkville																					
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees																					
Level:	Graduate/Postgraduate																					
Duration & Credit Points:	100 credit points taken over 12 months full time. This course is available as full or part time.																					
Coordinator:	Assoc.Professor Nelson Lam																					
Contact:	Melbourne School of Engineering Ground Floor Old Engineering Building #173 The University of Melbourne VIC 3010 AUSTRALIA General telephone enquiries + 61 3 8344 6703 + 61 3 8344 6507 Facsimiles + 61 3 9349 2182 + 61 3 8344 7707 Email: eng-info@unimelb.edu.au (mailto:eng-info@unimelb.edu.au)																					
Course Overview:	<p>The Graduate Program in Engineering Structures is designed to meet the needs of graduates involved in disciplines associated with the advanced design of engineering structures. The Program includes contemporary issues such as ecologically sustainable buildings and the design of structures for extreme loading, such as earthquake, wind, blast and fire. Participants are also able to choose from a wide range of elective subjects including subjects focusing on project management and architecture. The major themes of this course are: structural systems, conceptual design, sustainable design, extreme loading and advanced analysis techniques.</p> <p>A two-semester program on a full-time basis comprised of 100 points.</p>																					
Objectives:	The Master of Engineering Structures aims to produce graduates who are both skilled in structural engineering principles and have the ability to apply them to complex, open-ended engineering tasks and problems.																					
Course Structure & Available Subjects:	Students must complete 100 points. This consists of a minimum of 5 subjects which are selected from the Structural Engineering selectives and up to 3 subjects are selected from the Civil and Environmental Engineering electives.																					
Subject Options:	<p>Structural Engineering Selectives</p> <p>Select a minimum of 5 subjects from the following list. Total of 62.5 points.</p> <p>Remaining subjects may be treated as Civil and Environmental Engineering electives.</p> <p>421-679 Advanced Structural Analysis - commences in 2011</p> <table><tr><th>Subject</th><th>Study Period Commencement:</th><th>Credit Points:</th></tr><tr><td>CVEN90017 Earthquake Resistant Design of Buildings</td><td>Semester 1</td><td>12.50</td></tr><tr><td>CVEN90024 Design of High Rise Structures</td><td>Semester 1</td><td>12.50</td></tr><tr><td>CVEN90026 Extreme Loading of Structures</td><td>Semester 1</td><td>12.50</td></tr><tr><td>CVEN90016 Concrete Design and Technology</td><td>Semester 2</td><td>12.50</td></tr><tr><td>CVEN90018 Structural Dynamics and Modelling</td><td>Semester 2</td><td>12.50</td></tr><tr><td>CVEN90035 Design in Steel & Other Materials</td><td>Semester 2</td><td>12.50</td></tr></table> <p>Civil and Environmental Engineering Electives</p> <p>Select up to 3 subjects from the following list. Total of 37.5 points.</p>	Subject	Study Period Commencement:	Credit Points:	CVEN90017 Earthquake Resistant Design of Buildings	Semester 1	12.50	CVEN90024 Design of High Rise Structures	Semester 1	12.50	CVEN90026 Extreme Loading of Structures	Semester 1	12.50	CVEN90016 Concrete Design and Technology	Semester 2	12.50	CVEN90018 Structural Dynamics and Modelling	Semester 2	12.50	CVEN90035 Design in Steel & Other Materials	Semester 2	12.50
Subject	Study Period Commencement:	Credit Points:																				
CVEN90017 Earthquake Resistant Design of Buildings	Semester 1	12.50																				
CVEN90024 Design of High Rise Structures	Semester 1	12.50																				
CVEN90026 Extreme Loading of Structures	Semester 1	12.50																				
CVEN90016 Concrete Design and Technology	Semester 2	12.50																				
CVEN90018 Structural Dynamics and Modelling	Semester 2	12.50																				
CVEN90035 Design in Steel & Other Materials	Semester 2	12.50																				

421-509 Geotechnical Engineering - commences in 2011

421-670 Sustainable Buildings (/view/2009/421-670) - will be available in 2010

Research subjects are subject to approval

Subject	Study Period Commencement:	Credit Points:
CVEN90043 Sustainable Infrastructure Systems	Semester 1	12.50
ENEN90031 Quantitative Environmental Modelling	Semester 1	12.50
ENEN90033 Solar Energy	Semester 1	12.50
CVEN90020 Research Topic	Semester 1, Semester 2	12.50
CVEN90045 Engineering Project Implementation	Semester 2	12.50
CVEN90027 Geotechnical Applications	Semester 2	12.50
ENEN90011 Energy Efficiency Technology	Semester 2	12.50
ENEN90027 Energy for Sustainable Development	Semester 1	12.50
ENEN90014 Sustainable Buildings	September	12.50

Entry Requirements:

The Selection Committee will evaluate the applicant's ability to pursue successfully the course using the following criteria-

- # A four year degree in structural engineering with at least H3 (65%) average, or equivalent.
- # A four year degree in civil engineering with at least H3 (65%) average, or equivalent, and:
- # One years work experience, or
- # 30% of the final year of the degree dedicated to structural engineering subjects.
- # A 3 year undergraduate degree in structural engineering with at least H3 (65%) average, or equivalent, and at least two years of documented professional work experience since graduation related to the degree.
- # A 3 year undergraduate degree in civil engineering with at least H3 (65%) average, or equivalent, and at least three years of documented professional work experience since graduation related to the degree.

The Selection Committee may conduct interviews and tests and may call for referee reports and employer references to elucidate any of the matters referred to above.

Language Requirements

All applicants must meet the English language requirements of the University to be eligible to be offered a place.

Please check the **University English language requirements (<http://www.futurestudents.unimelb.edu.au/int/grad/english-req>)**

* The Melbourne School of Engineering's English Language alternative may affect the duration and cost of your course.

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 these subjects 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/>

Graduate Attributes:

The Melbourne School of Engineering has mapped the University of Melbourne graduate attributes with Engineers Australia graduate attributes and Melbourne School of Engineering graduate attributes.