

CVEN90027 Geotechnical Applications

Credit Points:	12.50								
Level:	9 (Graduate/Postgraduate)								
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.								
Time Commitment:	Contact Hours: 48 hours (Lectures/Tutorials: 44hours, Computer Labs: 4 hours) per semester Total Time Commitment: 120 hours								
Prerequisites:	Successful completion of the following subject is required:								
	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>CVEN90050 Geotechnical Engineering</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	CVEN90050 Geotechnical Engineering	Semester 1	12.50		
Subject	Study Period Commencement:	Credit Points:							
CVEN90050 Geotechnical Engineering	Semester 1	12.50							
Corequisites:	None								
Recommended Background Knowledge:	None								
Non Allowed Subjects:	None								
Core Participation Requirements:	<p><p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.</p> <p>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. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability</p></p>								
Coordinator:	Dr Sam Yuen								
Contact:	Dr Sam Yuen stsy@unimelb.edu.au (mailto:stsy@unimelb.edu.au)								
Subject Overview:	Topics covered include shallow footings, bearing capacity solutions, settlement prediction; raft foundations, soil improvement and stabilisation, deep foundations; capacity and settlement of single piles and pile groups; contaminated soils and effects of chemicals on soil properties; waste disposal systems, site assessment/site selection, remediation techniques, liners, leachate collection systems; deep excavation; and rock mass behaviour								
Objectives:	On completion of this unit students should be able to: <ul style="list-style-type: none"> # Analyse for both the bearing capacity and settlement characteristics of foundations subjected to a variety of loadings # Apply geotechnical engineering principles to solve contaminated soils and waste disposal problems # Describe rock mass behaviour under natural and imposed loads # Recognise the construction methods related to foundations and deep excavation 								
Assessment:	One 3-hour examination, end of semester (60%) Three x 1000 word assignments, due throughout the semester (40%)								
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"> # Ability to undertake problem identification, formulation, and solution # Ability to utilise a systems approach to complex problems and to design and operational performance # Ability to manage information and documentation # Understanding environmental responsibilities and the need for sustainable development
Related Course(s):	Bachelor of Engineering (Civil Engineering) Master of Engineering Structures Master of Engineering Structures Master of Environmental Engineering Master of Environmental Engineering Postgraduate Certificate in Engineering
Related Majors/Minors/ Specialisations:	B-ENG Civil Engineering stream Master of Engineering (Civil) Master of Engineering (Structural)