

CVEN90051 Civil Hydraulics

Credit Points:	12.50						
Level:	9 (Graduate/Postgraduate)						
Dates & Locations:	This subject is not offered in 2011.						
Time Commitment:	Contact Hours: 36 hours (Tutorial/Workshops: 3 hours per week) Total Time Commitment: 120 hours						
Prerequisites:	<p>The following subject is required</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ENGR30001 Fluid Mechanics & Thermodynamics</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	ENGR30001 Fluid Mechanics & Thermodynamics	Semester 1, Semester 2	12.50
Subject	Study Period Commencement:	Credit Points:					
ENGR30001 Fluid Mechanics & Thermodynamics	Semester 1, Semester 2	12.50					
Corequisites:	None						
Recommended Background Knowledge:	None						
Non Allowed Subjects:	None						
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 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/						
Contact:	Dr Michael Stewardson mjstew@unimelb.edu.au (mailto:mjstew@unimelb.edu.au)						
Subject Overview:	<p>The subject content will include three Civil Hydraulics Modules:</p> <p>River Hydraulics: revision of basic concepts of steady-state open channel flow and extend this with applications in natural river channels, time dependent behaviour and flood hydraulics.</p> <p>Coastal Hydraulics: basic wave theory and processes including in the surf zone.</p> <p>Sediment Transport and Water Quality: mechanisms and models of particulate and solute transport in rivers and coastal environments.</p> <p>These modules will be taught using a combination of self-guided on-line content and tutorials</p>						
Objectives:	<p>On completion of this subject students should be able to:</p> <ul style="list-style-type: none"> # identify and describe the dominant forces in particular flows # formulate and solve problems involving open channel or coastal hydraulics including sediment transport # describe the implications of flows being able to take multiple forms 						
Assessment:	Three 1-hour tests, at the end of each module (100%)						
Prescribed Texts:	Reference material will be suggested in class						
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 apply knowledge of science and engineering fundamentals # Ability to undertake problem identification, formulation and solution 						

	# Ability to utilise a systems approach to complex problems and to design and operational performance
Related Course(s):	Bachelor of Engineering (Civil) and Bachelor of Arts Bachelor of Engineering (Civil) and Bachelor of Commerce Bachelor of Engineering (Civil) and Bachelor of Laws Bachelor of Engineering (Civil) and Bachelor of Science
Related Majors/Minors/ Specialisations:	B-ENG Civil Engineering stream Master of Engineering (Civil) Master of Engineering (Environmental) Master of Engineering (Structural)