

CVEN90051 Civil Hydraulics

Credit Points:	12.50									
Level:	9 (Graduate/Postgraduate)									
Dates & Locations:	This subject is not offered in 2013. Lecture material will be delivered on-line									
Time Commitment:	Contact Hours: 39 hours, comprising of three hours of tutorial/workshops per week and three hours of laboratory workshop/demonstrations during the semester Total Time Commitment: 120 hours									
Prerequisites:	<p>One of the following subjects 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>Not offered 2013</td> <td>12.50</td> </tr> <tr> <td>ENGR30002 Fluid Mechanics</td> <td>Not offered 2013</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	ENGR30001 Fluid Mechanics & Thermodynamics	Not offered 2013	12.50	ENGR30002 Fluid Mechanics	Not offered 2013	12.50
Subject	Study Period Commencement:	Credit Points:								
ENGR30001 Fluid Mechanics & Thermodynamics	Not offered 2013	12.50								
ENGR30002 Fluid Mechanics	Not offered 2013	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>									
Contact:	<p>Dr Michael Stewardson mjstew@unimelb.edu.au (mailto:mjstew@unimelb.edu.au)</p>									
Subject Overview:	<p>The subject content will include three Civil Hydraulics modules:</p> <ol style="list-style-type: none"> 1 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 2 Coastal Hydraulics: basic wave theory and processes including in the surf zone 3 Sediment Transport and Water Quality: mechanisms and models of particulate and solute transport in rivers and coastal environments <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 30 minute tests, at the end of each module (30%) Group and online activities for each module equivalent to 500 words each (30%) 2-hour examination, end of semester (40%)									

Prescribed Texts:	Readings will be available on-line and as a bound volume available for purchase from the Book Co-op
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 Engineering) Bachelor of Engineering (Civil) and Bachelor of Arts Bachelor of Engineering (Civil) and Bachelor of Commerce 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)