## 421-491 Quantification of Physical Processes B

Credit Points:	12.500
Level:	Undergraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: Thirty-two hours of lectures, sixteen hours of tutorials, computer labs and practicals. Total Time Commitment: Not available
Prerequisites:	421-316 Engineering Hydraulics and Hydrology, 421-325 Field Data Acquisition and Analysis and 421-327 Computing for Land and Spatial Systems or equivalent
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	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.
Coordinator:	Andrew Western
Subject Overview:	This is a companion subject to 421-490 Quantification of Physical Processes A. At the conclusion of this subject students should be capable of undertaking quantitative analyses of physical processes related to subsurface hydrology. Emphasis will be placed on the application of fundamental principles of mathematics and physics to the conceptualisation and analysis of the complex interactions that are the hallmark of environmental systems. Students should also be able to build computer models of these interactions and interpret the output from such models. Topics covered include interaction between surface and subsurface water, the unsaturated zone, groundwater hydrology, numerical groundwater modelling, contaminant transport in groundwater, and contaminated site remediation.
Assessment:	One 3-hour written end of semester examination (70%) and assignments and quizzes totalling less than 2000 words (30%).
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:	Information Not Available
Related Course(s):	Bachelor of Engineering (EngineeringManagement) Environmental Bachelor of Engineering (Environmental Engineering) Bachelor of Engineering (Environmental) and Bachelor of Arts Bachelor of Engineering (Environmental) and Bachelor of Commerce Bachelor of Engineering (Environmental) and Bachelor of Laws Bachelor of Engineering (Environmental) and Bachelor of Science