GEOM30009 Imaging the Environment

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 2 h lecture and 2 h practical per week Total Time Commitment: 120 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	451-105
Core Participation Requirements:	For the purposes of considering request 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/
Coordinator:	Dr Joseph Leach
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Subject Overview:	This subject will introduce students to the use of imagery in the mapping of both human and natural environments. Both aerial photography and satellite imagery will be use to illustrate the techniques of measurement and interpretation by which both spatial position and semantic content can be extracted from image data.
Objectives:	On successful completion students should be able: # To allow students to understand those characteristics of different image techniques which allow information to be extracted from the image # To allow students to understand how image data can be used in mapping, monitoring and managing both human and natural environments
Assessment:	Five short practical reports due across the semester (8% each, 40%) totalling no more than 5000 words and a 3-hour end-of-semester examination (60%)
Prescribed Texts:	Photogrammetry, 2nd Ed, Karl Krauss, de Gruyter, 2007 Lillesand, Kiefer and Chipman Remote Sensing and Image Interpretation. Fifth Ed. Wiley and sons, 2003.
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:	On completion of this subject students will have: # The ability to apply knowledge of basic science fundamentals # The ability to communicate effectively, not only with other scientists but also with the community at large # The ability to undertake problem identification, formulation and solution # The ability to function effectively as an individual and in multi-disciplinary and multi-cultural teams, with the capacity to be a leader or manager as well as an effective team member # An expectation of the need to undertake lifelong learning, capacity to do so # The capacity for independent critical thought, rational inquiry and self-directed learning # Openness to new ideas and unconventional critiques of received wisdom.
Related Course(s):	Bachelor of Science
Related Majors/Minors/ Specialisations:	Environmental Science Environmental Science Environmental Science Geomatics Geomatics Marine Biology Master of Engineering (Geomatics) Physical (Environmental Engineering) Systems