451-103 Information Science and Programming

Credit Points:	12.50
Level:	1 (Undergraduate)
Dates & Locations:	This subject is not offered in 2009.
Time Commitment:	Contact Hours: Four hours per week (2 lecture, 2 practical) Total Time Commitment: Not available
Prerequisites:	None
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. 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
Subject Overview:	This subject provides an introduction to problem solving in Geomatics using spreadsheets and scientific programming. The focus will include: # algorithmic problem solving; # the structure and syntax of the procedural programming language Microsoft Visual Basic; # the design and development of computer software packages; # computational methods in Geomatics using Microsoft Excel spreadsheets; and # using Microsoft Visual Basic within the Microsoft Excel environment. In undertaking this subject, students should be able to: # design and write scientific programs; # solve practical problems in Geomatics through the development of simple Visual Basic programs; # use Microsoft Excel to efficiently undertake routine computations in Geomatics; and # write Microsoft Visual Basic routines for use in Excel in order to generate practical solutions for more complex Geomatics problems.
Assessment:	One 3-hour written examination at the end of semester (50%) Two written programs (one set at the beginning of semester and due mid-semester, the other set mid-semester and due at the end of semester) and the relevant documentation to support the program. Each worth 25%, totalling 3000 words.
Prescribed Texts:	None
Recommended Texts:	Information Not Available
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 Geomatic Engineering and Bachelor of Arts