421-636 Applied Fortran Programming

Credit Points:	12.500
Level:	Graduate/Postgraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 2, - Taught on campus.
Time Commitment:	Contact Hours: Face-to-face on Parkville campus: 36 hours (12 hours lectures, 12 hours tutorials, 12 hours laboratory classes). One-week intensive course held two weeks before the commencement of Semester 2 (9 – 15 July 2007); Non-contact time commitment: 84 hours 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
Coordinator:	Lu Aye
Subject Overview:	Overview of high level imperative languages; program constructs structured programming and modularity. Program design, testing and debugging cycle. Develop typical programs using numerical methods for differential equations heat transfer, fluid flow and mass transfer. Simulation of heating, ventilating and air conditioning systems. Gradually varied flow computations in canal systems. Pipe network computations. On successful completion, students should have developed: • proficiency in solving engineering problems • become familiar with the simulation and modelling of engineering systems using FORTRAN programming language
Assessment:	One 2-hour examination (20%). Project work of up to 3,500 words equivalent (60%). Tutorial (20%).
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
Related Course(s):	Master of Development Technologies Master of Energy Studies Master of Engineering Project Management Master of Engineering Structures Master of Environmental Engineering Master of Utilities Management Master of Water Resource Management