

499AA Master of Information Technology

Year and Campus:	2011 - Parkville
CRICOS Code:	045361C
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Graduate/Postgraduate
Duration & Credit Points:	150 credit points taken over 18 months full time. This course is available as full or part time.
Coordinator:	Dr Peter Schachte
Contact:	Melbourne School of Engineering courseinfo@eng.unimelb.edu.au (mailto:courseinfo@eng.unimelb.edu.au) http://www.eng.unimelb.edu.au (http://www.eng.unimelb.edu.au)
Course Overview:	<p>The Master of Information Technology is designed for graduates in engineering and physical sciences seeking professional development and enhancement of their IT knowledge, and also for professionals with background in other disciplines working in the IT industry without formal IT qualifications but with a broad interest in the scientific and engineering applications of the technology.</p> <p>The course design also has the provision to allow exceptional graduates in engineering, physical sciences or a cognate field to acquire research training to proceed to higher degrees by research.</p> <p>The technological understanding and skills presented in the Master of Information Technology are in high demand throughout the computing industry as society is being transformed by the emergence of highly connected, high speed high capacity networks, and a knowledge-based global e-economy.</p> <p>The course allows considerable flexibility, and individuals select their own program from the subjects on offer.</p> <p>The three major strands of study are:</p> <ul style="list-style-type: none"> # Internet Software Development Understanding web software technologies and building web applications # Intelligent Systems Understanding and developing intelligent systems for business applications # E-Business Technologies Understanding and applying technologies to business functions <p>There is no compulsory thesis component in the program, but a subject is offered in which a student may take on a research project under the supervision of a member of academic staff and document the outcome in a written report.</p>
Objectives:	<p>The program is designed to:</p> <ul style="list-style-type: none"> # Provide understanding and expertise in a number of key areas of information technology # Provide an introduction to research skills in a selected area # Improve analytical skills and competencies in problem solving # Improve oral and written communication skills
Course Structure & Available Subjects:	<p>The recommended or standard course structures are listed below. When setting the timetable every effort will be made to avoid clashes between the times of classes associated with these sets of subjects. Students should be aware however, that if it proves to be impossible to achieve a timetable without clashes in these sets of subjects, the Faculty reserves the right to modify course structures in order to eliminate the conflicts. Students will be advised during the enrolment period of the semester if the recommended courses need to be varied. Where the courses include elective subjects these should be chosen so that timetable clashes are avoided. In particular, students in combined degrees should plan their courses so that the</p>

subjects chosen in the other faculty do not clash with those recommended for the engineering component.

Subject Options:

A three-semester program on a full-time basis comprising 150 points as follows:

GROUP A (Foundation Studies) Subjects (take all four):

Subject	Study Period Commencement:	Credit Points:
COMP90041 Programming and Software Development	Not offered 2011	12.50
COMP90038 Algorithms and Complexity	Not offered 2011	12.50
COMP90007 Internet Technologies	Not offered 2011	12.50
SINF90001 Database Systems & Information Modelling	Not offered 2011	12.50

GROUP B (Advanced IT) Subjects (select at least two):

Subject	Study Period Commencement:	Credit Points:
SWEN90002 Engineering for Internet Applications	Not offered 2011	12.50
COMP90010 Web Technologies and Applications	Semester 1	12.50
SINF90006 Internet Software Development Principles	Not offered 2011	12.50
ISYS90043 Business Applications & Architectures	Not offered 2011	12.50

GROUP C (Project Management) Subjects (select One):

Subject	Study Period Commencement:	Credit Points:
SWEN90003 IT Project Management	Not offered 2011	12.50
ISYS90050 IS Project and Change Management	Not offered 2011	12.50
ISYS90052 Models of IS Project Management	Not offered 2011	12.50

GROUP D (Advanced Electives):

Students may take any 600-level subjects offered by the Department of Computer Science and Software Engineering or the Department of Information Systems to make up the balance of their course, subject to the Approval of the Course Coordinator.

Students who enter the program with prior study equivalent to any of the Group A subjects will be given credit. The maximum credit that may be awarded is 50 points. All students must take subjects from Groups B, C, and D, as listed, to make up a minimum of 100 points of advanced study.

Note: Not all subjects may be offered every year and every semester. Students seeking definitive details should contact the Department of Computer Science & Software Engineering prior to commencement.

Entry Requirements:

Applicants must have either:

- # A four-year degree in Engineering or the physical sciences and which includes mathematics at a minimum level of second year and at least one programming subject, as well as a final year grade average of at least 65% (University of Melbourne equivalent). Applicants with a four-year degree with a substantial component of formal studies in computing may be eligible for advanced standing of up to 50 points

OR

	<p># An appropriate 3-year degree with a final year grade average of at least 65% (University of Melbourne equivalent) as well as a minimum of two years documented relevant work experience with exposure to programming in the IT industry.</p> <p>English Requirements</p> <p>English requirements can be found at: http://www.futurestudents.unimelb.edu.au/int/grad/english-req (http://www.futurestudents.unimelb.edu.au/int/grad/english-req)</p>
Core Participation Requirements:	<p>Master of Information Technology The Master of Information Technology welcomes applications from students with disabilities. It is University and degree 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 degree. The Master of Information Technology requires all students to enrol in subjects where they will require: (1) the ability to comprehend complex information technology related information; (2) the ability to clearly and independently communicate a knowledge and application of information technology principles and practices during assessment tasks; and (3) the ability to actively and safely contribute in computer laboratories. Students must possess behavioural and social attributes that enable them to participate in a complex learning environment. Students are required to take responsibility for their own participation and learning. They also contribute to the learning of other students in collaborative learning environments, demonstrating interpersonal skills and an understanding of the needs of other students. Assessment may include the outcomes of tasks completed in collaboration with other students. There are additional inherent academic requirements for some subjects, and these requirements are listed within the description of the requirements for each of these subjects. Students who feel their disability will impact on meeting this requirement are encouraged to discuss this matter with the relevant Subject Coordinator and the Disability Liaison Unit: http://www.services.unimelb.edu.au/disability/</p>
Graduate Attributes:	<p>Graduate Attributes: Ability to undertake problem identification, formulation, and solution Ability to utilise a systems approach to complex problems and to design and operational performance Capacity for creativity and innovation Ability to manage information and documentation</p>
Generic Skills:	<p>An Engineering graduate has a unique skill set comprising a blend of technical, business and interpersonal skills. Upon completion of the Bachelor of Engineering at the University of Melbourne, students will have strong analytical skills, the ability to lead teams and projects and the creativity to look at problems in a way that provides innovative solutions. Our graduates are known for their high standards and professionalism, their understanding of global issues and their outstanding communication skills. For details, see "Objectives".</p>
Notes:	<p>The program is accredited by the Australian Computer Society (ACS).</p>