499-AA Master of Information Technology

Year and Campus:	2009
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Graduate/Postgraduate
Duration & Credit Points:	
Contact:	Engineering Student Centre Ground Floor, Old Engineering Building The University of Melbourne Victoria 3010 AUSTRALIA Tel: +61 3 8344 6703 Fax: +61 3 9349 2182 Email <a href="http://eng-unimelb.custhelp.com">http://eng-unimelb.custhelp.com</a> (Engineering%20Student%20Centre %20%20Ground%20Floor,%20Old%20Engineering%20Building%20The %20University%20of%20Melbourne%20Victoria%203010%20AUSTRALIA%20%20Tel: %20+61%203%208344%206703%20Fax:%20+61%203%209349%202182%20%20Email%20http:/eng-unimelb.custhelp.com)
Course Overview:	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.  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.  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.  The course allows considerable flexibility, and individuals select their own program from the subjects on offer.  The three major strands of study are:  # 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  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.
Objectives:	The program is designed to:  # 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:	-
Subject Options:	Completion of twelve subjects each of 12.5 points or ten subjects and an IT Project (or Minor Research Project) of 25 points. The program has two groups of subjects:  # Group A: consists of foundation subjects that bring students up-to-date with modern computing concepts, techniques and tools. A student will choose a maximum of four of these subjects

Page 1 of 3 02/02/2017 10:22 A.M.

# **Group B:** offers advanced study in information technologies and their applications.

Subjects are typically taught with a combination of input from academics and practitioners. Students are expected to have their own PCs/laptops to complete the course. Limited additional access to the university computing laboratories may be available outside set class time.

With written permission from the Program Director subjects in Groups A and/or Group B may be substituted by other relevant subjects.

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

# **GROUP A (Foundation Studies) Subjects (maximum of four)**

Choose up to four subjects

	Subject	Study Period Commencement:	Credit Points:
	433-520 Programming and Software Development	Semester 1, Semester 2	12.500
	433-521 Algorithms and Complexity	Semester 1, Semester 2	12.500
	433-522 Internet Technologies	Semester 1, Semester 2	12.500
ĺ	615-570 Database Systems & Information Modelling	Semester 1, Semester 2	12.500
Ī	615-572 Information Systems Analysis & Design	Not offered 2009	12.500

# **GROUP B (Advanced IT) Subjects (3 or 4 subjects)**

Choose at least three subjects from:

Subject	Study Period Commencement:	Credit Points:
433-620 Engineering for Internet Applications	Semester 2	12.500
433-621 Web Technologies and Applications	Semester 1	12.500
615-670 Internet Software Development Principles	Semester 1, Semester 2	12.500
615-671 Business Applications & Architectures	Semester 1	12.500

# **GROUP B (Remaining Subjects)**

Choose at remaining subjects from:

Subject	Study Period Commencement:	Credit Points:
433-643 IT Project Management	Semester 1	12.500
433-645 Software System Security	Not offered 2009	12.500
433-646 Systems Requirements Engineering	Not offered 2009	12.500
433-652 Distributed Systems	Semester 1, Semester 2	12.500
433-653 Mobile Computing Systems Programming	Not offered 2009	12.500
433-654 Sensor Networks and Applications	Semester 2	12.500
433-655 Distributed Algorithms	Semester 1	12.500
433-661 High Performance Database Systems	Semester 2	12.500
433-667 Text and Document Management	Semester 1	12.500
433-677 Networks & Parallel Processing	Semester 2	12.500

Page 2 of 3 02/02/2017 10:22 A.M.

433-678 Cluster and Grid Computing	Semester 1	12.500
433-679 Evolutionary and Neural Computation	Semester 2	12.500
433-682 Software Agents	Semester 1	12.500
433-684 Machine Learning	Not offered 2009	12.500
433-690 Information Technology Research Project	Semester 1, Semester 2	25.000
433-693 Directed Study 6A	Summer, Semester 1, Semester 2	12.500
615-636 Interaction Design and Usability	Not offered 2009	12.500
615-610 Research Methods in Information Systems	Semester 1	12.500
615-645 Information Systems Modelling	Not offered 2009	12.500
615-652 Emerging Technologies and Issues	Semester 2	12.500
615-653 Consumer-oriented eCommerce	Not offered 2009	12.500
615-655 Business to Business Electronic Commerce	Semester 2	12.500
615-656 Knowledge Management Systems	Semester 1	12.500
615-657 Enterprise Systems	Semester 2	12.500
615-659 Advanced IS Project Management	Semester 1	12.500
615-661 Innovation & Enterpreneurship in IT	Semester 1	12.500
615-662 Advanced IS Change Management	Semester 1	12.500
615-663 IS in an International Context	Not offered 2009	12.500
615-667 eCommerce Security	Not offered 2009	12.500
615-672 Pervasive Computing	Semester 1	12.500
615-690 Minor Research Project in IS	Semester 1, Semester 2	25.000
	<del>- \</del>	·

#### **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

# 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.

Core Participation Requirements:

Graduate Attributes:

Generic Skills:

Notes: The program is accredited by the Australian Computer Society (ACS).

Page 3 of 3 02/02/2017 10:22 A.M.