

## MC-SCIINF Master of Science (Information Systems)

<b>Year and Campus:</b>	2010 - Parkville
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Level:</b>	Graduate/Postgraduate
<b>Duration &amp; Credit Points:</b>	200 credit points taken over 24 months full time. This course is available as full or part time.
<b>Coordinator:</b>	Dr Reeva Lederman
<b>Contact:</b>	Melbourne Graduate School of Science Faculty of Science The University of Melbourne  T: +61 3 8344 6404 F: +61 3 8344 5803 W: <a href="http://www.graduate.science.unimelb.edu.au/">http://www.graduate.science.unimelb.edu.au/</a> ( <a href="http://www.graduate.science.unimelb.edu.au/">http://www.graduate.science.unimelb.edu.au/</a> )
<b>Course Overview:</b>	The Master of Science - Information Systems is one of the research training streams of the Master of Science. The research training streams give students the opportunity to undertake a substantive research project in a field of choice as well as a broad range of coursework subjects including a professional tools component, as a pathway to PhD study or to the workforce.
<b>Objectives:</b>	On completion of this course students should have: <ul style="list-style-type: none"> <li># a comprehensive understanding of the process and practice of research in Information Systems;</li> <li># a sophisticated understanding of the Information Systems discipline;</li> <li># completed a substantial piece of original research; and</li> <li># the necessary skills for further advanced research in Information Systems (e.g. in doctoral studies)</li> </ul>
<b>Course Structure &amp; Available Subjects:</b>	<p>Students must complete a total of 200 points over a two year full-time (or four year part-time) program comprising:</p> <ul style="list-style-type: none"> <li># 615-610 Research Methods in Information Systems as a core discipline subject of 12.5 points;</li> <li># between 37.5 and 112.5 points of elective discipline subjects;</li> <li># between 25 and 50 points of professional tools subjects; and</li> <li># a 50 point or a 100 point research project.</li> </ul> <p>Core discipline subject (12.5 points) Students must take the following subject:</p> <ul style="list-style-type: none"> <li># 615-610 Research Methods in Information Systems</li> </ul> <p>Elective discipline subjects (between 37.5 points and 112.5 points) Students must select three to nine approved coursework subjects from the list below: IS Skills</p> <p>In the following list 615-502 Fundamentals of Information Systems and 615-570 Database Systems and Information Modelling are most suited to students who have not completed an undergraduate degree in Information Systems and are an ideal introduction to some fundamental skills in this discipline.</p> <ul style="list-style-type: none"> <li># 615-502 Fundamentals of Information Systems</li> <li># 615-570 Database Systems and Information Modelling</li> <li># 615-680 Information Technology Infrastructure</li> <li># 615-681 Business Analysis Modelling and Design</li> <li># 615-671 Business Applications &amp; Architectures</li> <li># 615-652 Emerging Technologies &amp; Issues</li> </ul>

**IS Management**

- # 615-682 IS Project and Change Management
- # 615-660 IS Strategy and Governance
- # 615-683 Impact of Digitisation
- # 615-695 Professional IS Consulting

**IS Project & Change Management**

- # 615-659 Advanced IS Project Management
- # 615-662 Advanced IS Change Management
- # 615-692 Organisational Change for IS Managers (not available in 2010)
- # 615-684 Models of IS Project Management

**IT Service Provision**

- # 615-685 Managing In-House IT Service Provision
- # 615-687 ICT Contract Law Basics (not available in 2010)
- # 615-688 ICT Outsourcing Contract Management

**Business Analytics**

- # 306-622 Business Intelligence (subject to approval from the Graduate School of Business and Economics)
- # 325-692 Decision Analysis (subject to approval from the Graduate School of Business and Economics)
- # 615-644 Data Warehousing

**Interaction Design**

- # 615-636 Interaction Design and Usability
- # 615-672 Pervasive Computing (not available in 2010)
- # 615-656 Knowledge Management Systems or 615-691 Decision Support Using ICT (not available in 2010)
- # 615-683 Impact of Digitisation

Where appropriate a student may complete up to two approved 200 or 300 level subjects. Students may also select approved postgraduate subjects from cognate disciplines (e.g. computer science, business information systems).

Professional tools (between 25 and 50 points)

Students must take at least 25 points (2 subjects) but no more than 50 points of Professional Tools subjects;

- # 600-615 Thinking and Reasoning with Data
- # 600-614 Business Tools: Money, People and Processes
- # 600-622 Business Tools: The Market Environment
- # 615-668 Critical Analysis in Science
- # 615-505 e-Science
- # 600-617 Systems Modelling and Simulation
- # 600-618 Ethics and Responsibility in Science
- # 600-616 Science in Context
- # 600-619 Scientists, Communication and the Workplace

Research Project (50 points or 100 points)

Students will gain research experience in Information Systems (or cognate discipline) by completing a thesis (worth 100% of the overall score) and two oral presentations (hurdle). Students may complete a 50 point Minor Research Project or, with approval from the Course Coordinator, a 100 point Major Research Project.

Minor Research Project (50 points):

Students complete a thesis of no more than 12,000 words. This is the recommended path for most students.

Students may enrol in a combination of research project subjects as indicated below, over their two years of full-time study or over their four years of part-time study, to ensure they have completed a total of 50 points for the minor research project by the end of their course.

50 point Minor Research Project:

- # 615-613 Information Systems Research Project Minor – 12.5 points
- # 615-612 Information Systems Research Project Minor – 25.0 points
- # 615-611 Information Systems Research Project Minor – 37.5 points
- # 615-607 Information Systems Research Project Minor – 50 points

**Major Research Project (100 points):**

Students complete a thesis of no more than 22,000 words. This option can only be undertaken with approval from the Course Coordinator. Students may enrol in a combination of research project subjects as indicated below, over their two years of full-time study or over their four years of part-time study, to ensure they have completed a total of 100 points for the major research project by the end of their course.

**100 point Major Research Project:**

- # 615-617 Information Systems Research Project Major – 12.5 points
- # 615-616 Information Systems Research Project Major – 25.0 points
- # 615-615 Information Systems Research Project Major – 37.5 points
- # 615-614 Information Systems Research Project Major – 50 points

**Subject Options:**

**Discipline core**

Subject	Study Period Commencement:	Credit Points:
ISYS90031 Research Methods in Information Systems	Semester 1	12.50

**Discipline elective - IS Skills**

Subject	Study Period Commencement:	Credit Points:
ISYS90026 Fundamentals of Information Systems	Semester 1, Semester 2	12.50
SINF90001 Database Systems & Information Modelling	Semester 1, Semester 2	12.50
ISYS90048 Information Technology Infrastructure	Semester 1	12.50
ISYS90049 Business Analysis Modeling and Design	Semester 1, Semester 2	12.50
ISYS90043 Business Applications & Architectures	Semester 1	12.50
ISYS90032 Emerging Technologies and Issues	July	12.50

**Discipline elective - IS Management**

Subject	Study Period Commencement:	Credit Points:
ISYS90050 IS Project and Change Management	Semester 2	12.50
ISYS90038 IS Strategy and Governance	Semester 1	12.50
ISYS90051 Impact of Digitisation	Semester 2	12.50
ISYS90045 Professional IS Consulting	Semester 1, Semester 2	12.50

**Discipline elective - IS Project and Change Management**

Subject	Study Period Commencement:	Credit Points:
ISYS90037 Advanced IS Project Management	Semester 1	12.50
ISYS90040 Advanced IS Change Management	Semester 2	12.50
615-692 Organisational Behaviour for IS Managers	Not offered 2010	12.50
ISYS90052 Models of IS Project Management	Semester 2	12.50

**Discipline elective - IT Service Provision**

Subject	Study Period Commencement:	Credit Points:
ISYS90053 Managing In-house IT Service Provision	Semester 1	12.50
615-687 ICT Contract Law Basics	Not offered 2010	12.50
ISYS90055 ICT Outsourcing Contract Management	Semester 2	12.50

**Discipline elective - Business Analytics**

Subject	Study Period Commencement:	Credit Points:
BISY90004 Business Intelligence	Semester 2	12.50
MGMT90028 Decision Analysis	Semester 1	12.50
SINF90004 Data Warehousing	Semester 1	12.50

**Discipline elective - Interaction Design**

Subject	Study Period Commencement:	Credit Points:
SINF90002 Interaction Design and Usability	Semester 2	12.50
615-672 Pervasive Computing	Not offered 2010	12.50
ISYS90035 Knowledge Management Systems	Semester 1	12.50
ISYS90051 Impact of Digitisation	Semester 2	12.50

**Professional Tools**

Subject	Study Period Commencement:	Credit Points:
MAST90044 Thinking and Reasoning with Data	Semester 1	12.50
BUSA90403 Business Tools: Money People & Processes	Semester 2	12.50
BUSA90471 Business Tools: The Market Environment	Semester 1	12.50
615-668 Critical Analysis in Science	Not offered 2010	12.50
SCIE90007 E-Science	Semester 2	12.50
MAST90045 Systems Modelling and Simulation	Semester 1	12.50
SCIE90005 Ethics and Responsibility in Science	Semester 2	12.50
SCIE90004 Science in Context	Semester 2	12.50
SCIE90006 Scientists, Communication & the Workplace	April	12.50

**Research Project - Minor**

Subject	Study Period Commencement:	Credit Points:
ISYS90061 Information Systems Research Proj Minor	Semester 1, Semester 2	12.50
ISYS90060 Information Systems Research Proj Minor	Semester 1, Semester 2	25
ISYS90059 Information Systems Research Proj Minor	Semester 1, Semester 2	37.50
ISYS90056 Information Systems Research Proj Minor	Semester 1, Semester 2	50

**Research Project - Major**

	<b>Subject</b>	<b>Study Period Commencement:</b>	<b>Credit Points:</b>
	ISYS90065 Information Systems Research Proj Major	Semester 1, Semester 2	12.50
	ISYS90064 Information Systems Research Proj Major	Semester 1, Semester 2	25
	ISYS90063 Information Systems Research Proj Major	Semester 1, Semester 2	37.50
	ISYS90062 Information Systems Research Proj Major	Semester 1, Semester 2	50
<b>Entry Requirements:</b>	Bachelor degree with a major in an appropriate discipline with at least an H3 (65%) average in the major or equivalent.		
<b>Core Participation Requirements:</b>	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact upon their active and safe participation in a course are encouraged to discuss this with the relevant course coordinator and the Disability Liaison Unit.		
<b>Further Study:</b>	The Research Training programs offer a pathway to a PhD.		
<b>Graduate Attributes:</b>	Graduates will:have the ability to demonstrate advanced independent critical enquiry, analysis and reflection;have a strong sense of intellectual integrity and the ethics of scholarship; have in-depth knowledge of their specialist discipline(s); reach a high level of achievement in writing, research or project activities, problem-solving and communication; be critical and creative thinkers, with an aptitude for continued self-directed learning; be able to examine critically, synthesise and evaluate knowledge across a broad range of disciplines; have a set of flexible and transferable skills for different types of employment; andbe able to initiate and implement constructive change in their communities, including professions and workplaces.		
<b>Links to further information:</b>	<a href="http://graduate.science.unimelb.edu.au/">http://graduate.science.unimelb.edu.au/</a>		