

MC-SISC Master of Spatial Information Science

Year and Campus:	2010 - Parkville
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Graduate/Postgraduate
Duration & Credit Points:	200 credit points taken over 24 months full time. This course is available as full or part time.
Coordinator:	Associate Professor Stephan Winter
Contact:	<p>Melbourne School of Engineering Office Building 173, Grattan Street The University of Melbourne VIC 3010 Australia</p> <p>General telephone enquiries: + 61 3 8344 6703 + 61 3 8344 6507</p> <p>Facsimiles: + 61 3 9349 2182 + 61 3 8344 7707</p> <p>Email: eng-info@unimelb.edu.au (mailto:eng-info@unimelb.edu.au)</p>
Course Overview:	<p>The Master of Spatial Information Science is a two-year full time program (also available in part-time mode) which offers a professional entry Masters qualification to graduates with a three-year undergraduate degree in an appropriate discipline*. Spatial Information is based on the now established Geographic Information Science (GIScience). GIScience is by nature interdisciplinary, at the intersection of spatial information science, artificial intelligence, cognitive and neuroscience, linguistics, and philosophy. This course uniquely reflects this character, not by trying to put everything together, but by enabling the students to specialize in one of these intersection areas, with geoinformatics as one of their bases.</p> <p>The course will allow students to study spatial information with a wide range of specializations, such as in economy (market and value of spatial information), in psychology (spatial cognition, human-computer interaction on spatial information), in computer science (mobile spatial computing, spatiotemporal databases, spatial data mining), in planning (spatiotemporal analysis and visualization), in civil engineering (management of infrastructure), or in Geomatics (spatial data capture, tracking, mining).</p>
Objectives:	The course serves the needs for a professional qualification for the broad spatial information profession, which covers, among others, areas of government, infrastructure management, planning including public participatory planning, telecommunication (location-based) and webbased services (mapping, navigation, volunteered geographic information), intelligent transportation systems, intelligent building systems, land management, banking and insurance industry, consulting, environments, agriculture and forestry.
Course Structure & Available Subjects:	<p>The Master of Spatial Information Science consists of:</p> <ul style="list-style-type: none"> # Seven spatial information subjects (five core and two electives) (87.5 credit points) # Four subjects from (an)other discipline(s) (approved electives) (50 credit points) # One research methods subject to prepare for a research project (12.5 credit points) # One semester interdisciplinary research project (50 credit points)
Subject Options:	<p>Core and elective requirements in the Master of Spatial Information Science Students must complete 62.5 credit points (five subjects) of core subjects, 25 credit points (two subjects) of spatial information electives, 50 credit points (4 subjects) of approved electives, 12.5 credit points (1 subject) of a research methods subject to prepare for a research project and 50 credit points (1 subject) of a interdisciplinary research project.</p> <p>Core spatial information subjects The following core subjects must be taken in the Master of Spatial Information Science</p>

Subject	Study Period Commencement:	Credit Points:
GEOM90008 Foundations of Spatial Information	Semester 1	12.50
GEOM90018 Spatial Databases	Semester 1	12.50
GEOM90006 Spatial Analysis	Semester 2	12.50
GEOM90016 Advanced Topics in GIScience	Semester 2	12.50
GEOM90007 Spatial Visualisation	Semester 1	12.50

Spatial information electives in the Master of Spatial Information Science

Students must select two subjects from the list of electives below

Subject	Study Period Commencement:	Credit Points:
GEOM90014 Managing Spatial Information Projects	Semester 1	12.50
GEOM90032 Land Administration	Semester 1	12.50
GEOM90017 Geomatics Internship	Summer Term, Semester 1	12.50
GEOM90015 Spatial Data Infrastructure	Semester 2	12.50
GEOM90005 Remote Sensing	Semester 2	12.50
451-675 Satellite Positioning	Not offered 2010	12.50
207-518 Applications for Spatial Information	Not offered 2010	12.50

Research methodology subject in the Master of Spatial Information Science

Students must select one subject from the list of research methods subjects below, other equivalent research methodology subjects may be approved by the course coordinator

Subject	Study Period Commencement:	Credit Points:
ABPL90070 Research Methods (Masters)	Semester 2	12.50
ISYS90031 Research Methods in Information Systems	Semester 1	12.50

Interdisciplinary research project subject/s in the Master of Spatial Information Systems

Students must select either

- # 451-650 Spatial Information Research Project; or
- # 451-612 Spatial Information Research Project A and 451-637 Spatial Information Research Project B; or
- # 451-625 Spatial Information Research Project C and 451-626 Spatial Information Research Project D

From the list of interdisciplinary research project subjects below

Subject	Study Period Commencement:	Credit Points:
GEOM90020 Spatial Information Research Project	Summer Term, Semester 1, Semester 2	50
GEOM90010 Spatial Information Research Project A	Summer Term, Semester 1, Semester 2	12.50
GEOM90023 Spatial Information Research Project B	March, Summer Term, Semester 2	37.50
GEOM90013 Spatial Information Research Project C	Summer Term, Semester 1, Semester 2	25

	GEOM90031 Spatial Information Research Project D	Summer Term, Semester 1, Semester 2	25
<p>Electives in the Master of Spatial Information Science</p> <p>Students must select four elective subjects. The course allows a combination of four subjects of ANY graduate or postgraduate subjects, pending the course coordinator's approval.</p>			
Entry Requirements:	<p>A three-year undergraduate degree in an appropriate* discipline with at least a 65% average (University of Melbourne equivalent).</p> <p>All students at the University of Melbourne must satisfy the University's English language entry requirements. For details, see www.eng.unimelb.edu.au/english (http://www.eng.unimelb.edu.au/english)</p> <p>Students must meet the individual pre-requisites of chosen subjects within the course. With the general expectation that electives are chosen in the area of students first degree, prerequisites are not expected to be a major barrier.</p> <p>* Broad discipline areas include computer science, environments (planning, landscape, and agriculture), economics, cognitive science or public health or other discipline specialisation as approved by the Coordinator.</p>		
Core Participation Requirements:	<p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/</p>		
Graduate Attributes:	<p>Master of Spatial Information Science Graduate Attributes</p> <p>Strong analytical skills Depth of understanding Practical ingenuity Creativity Understanding of global issues Communication Business and management High ethical standards and professionalism Leadership Lifelong learners Academically excellent Knowledgeable across disciplines Attuned to cultural diversity Active global citizens Leaders in communities</p>		
Professional Accreditation:	<p>The Melbourne School of Engineering is seeking accreditation for the Master of Spatial Information Science from the Royal Institution of Chartered Surveyors (RICS) and Surveying and Spatial Sciences Institute (SSI).</p>		
Generic Skills:	<p>Graduates are able to demonstrate competence across the broad field of spatial information science and engineering, and, through a specialization in one other science or engineering discipline of their choice, they have an excellent understanding of interfaces and links with other science and engineering disciplines. The Master of Spatial Information Science program develops breadth of understanding and outlook, and ability to engage with a wide range of technologies and applications, with sufficient depth in one or more specific areas of practice to develop competence in handling technically advanced and complex problems.</p>		
Links to further information:	<p>http://www.eng.unimelb.edu.au/Postgrad/MEng/grad_msis.html</p>		
Notes:	<p>None</p>		