GEOM90015 Spatial Data Infrastructure

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2011.
Time Commitment:	Contact Hours: 24 hours lectures and 24 hours projects & lab exercises Total Time Commitment: 120 hours
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 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/
Contact:	**abbas.r@unimelb.edu.au (mailto:abbas.r@unimelb.edu.au)**
Subject Overview:	This subject presents the principles, concepts and design strategies for the development of Spatial Data Infrastructure (SDI). The subject will discuss technologies and disciplines to facilitate the development of SDIs as an enabling platform. It will also examine related disciplines such as land and marine administration as well as technical areas such as interoperability, web-mapping and web-delivery to better meet sustainable development objectives. Topics covered include SDI concepts and theory (principles, issues, hierarchy and sustainable development); Current SDI initiatives; SDI Development Strategies and Development Models; SDI as an enabling Platform; SDI and Spatially Enabled Government and Society; SDI and Partnerships Approaches; Financing SDI Development; Challenges for Developed and Developing Countries; Capacity Building for SDI; Marine SDI and Seamless SDI; SDI Development-Institutional and Technical Aspects; Policy and Privacy Issues; SDI and Land Administration; Metadata, Standards and Clearinghouse; SDI Application areas; SDI Benchmarking; SDI Implementation.
Objectives:	On successful completion of this subject students will have the ability to: # Identify and discuss SDI principles and issues, institutional arrangements supporting SDI initiatives, the need for effective and efficient design and development of SDIs; # Review a variety of technologies for developing and maintaining SDIs. # To understand and analyse a range of local and overseas approaches to SDI development in both developed and developing countries, and # Model design and evaluate SDI and other related spatial data initiatives.
Assessment:	One 2-hour written examination at the end of semester (50%).One major assignment of 3000 words due end of the semester (25%);Two practical exercises of not more than 1000 words over the first eight weeks of the semester (15%),One selected topic presentation over the semester (10%).
Prescribed Texts:	Rajabifard A (2007), Towards a Spatially Enabled Society. The University of Melbourne Press. SDI cookbook (2004), produced by the GSDI Association (www.gsdi.org). Williamson, I.P., Rajabifard, A. and Feeney, M.-E. (2003). Developing Spatial Data Infrastructures: From Concept to Reality. Taylor and Francis

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
Generic Skills:	On successful completion students should have: # Ability to undertake problem identification, formulation, and solution # Understanding of social, cultural, global, and environmental responsibilities and the need to employ principles of sustainable development # Ability to communicate effectively witht he engineering team and wit the community at large.
Related Course(s):	Master of Geographic Information Technology Master of Spatial Information Science Postgraduate Certificate in Engineering
Related Majors/Minors/ Specialisations:	Master of Engineering (Geomatics)