

## GEOG90006 Fundamentals & Management of GIS

<b>Credit Points:</b>	12.50
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	2010, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 48 hours in a total time commitment of 120 hours Total Time Commitment: Not available
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	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: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>
<b>Coordinator:</b>	Dr Graham Brodie
<b>Contact:</b>	Email: <a href="mailto:grahamb@unimelb.edu.au">grahamb@unimelb.edu.au</a> ( <a href="mailto:grahamb@unimelb.edu.au">mailto:grahamb@unimelb.edu.au</a> ) Phone: 5833 9273
<b>Subject Overview:</b>	<p>This subject should introduce students to: information management; a definition of GIS; an overview of the range of GIS applications available for processing and analysing land survey data associated with soil, plants and animals; the use of GIS for decision making; integration of GIS with other technologies; geographic referencing methods; geographic data structures and models; relationships between geographic features; database definition and modelling; introduction to the Information Communication Technologies associated with data collection, manipulation, modelling, analysis, transmission and display; GIS and the Internet; and future trends in GIS.</p> <p>Upon completion of this subject students should understand how information is obtained and used to support decision making in rural environments.</p> <p>Students will need access to computers capable of running ArcExplorer. Generally this will be a PC capable of running the latest version of the Windows Operating system. Students should consult with the subject coordinator to clarify these needs for the latest versions of these software packages before undertaking the subject.</p>
<b>Objectives:</b>	To introduce students to: <ul style="list-style-type: none"> <li># spatial information gathering and management;</li> <li># an overview of GIS applications;</li> <li># and the use of GIS for decision support.</li> </ul>
<b>Assessment:</b>	One 3-hour end of semester written examination (50%), plus a Case Study Report (2000 words; 30%) – by week 6 and practical exercise reports (1500 words total; 20%) – by week 12.
<b>Prescribed Texts:</b>	None

<b>Recommended Texts:</b>	Brodie, G. I. 2009, Ingenious Devices and Systems: Engineering for Landscape Managers, VDM Verlag, Saarbruecken, Germany.
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<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>Generic Skills:</b>	The generic skills that will be developed during this subject include: <ul style="list-style-type: none"> <li># Computer literacy,</li> <li># problem solving,</li> <li># time management,</li> <li># research skills; and</li> <li># writing skills.</li> </ul>
<b>Related Course(s):</b>	Master of Agricultural Science Master of Environment Master of Environment Master of Forest Ecosystem Science Postgraduate Certificate in Environment Postgraduate Diploma in Environment
<b>Related Majors/Minors/ Specialisations:</b>	Climate Change