GEOM90010 Spatial Information Research Project A

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2014.
Time Commitment:	Contact Hours: Contact hours with academic supervisors on request. Total Time Commitment: 200 hours
Prerequisites:	Enrolment into this subject requires subject coordinator permission **And** Successful completion of the following subject is required to enrol:

Subject	Study Period Commencement:	Credit Points:
GEOM90016 Advanced Topics in GIScience	Semester 1	12.50

Corequisites:	None
Recommended Background Knowledge:	Students should have some background knowledge of individual project work and report writing from breadth or capstone subjects.
Non Allowed Subjects:	Students cannot enrol in and gain credit for this subject and:

Subject	Study Period Commencement:	Credit Points:
GEOM90020 Spatial Information Research Project	Summer Term, Semester 1, Semester 2, Winter Term	50
GEOM90013 Spatial Information Research Project C	Summer Term, Semester 1, Semester 2, Winter Term	25
GEOM90031 Spatial Information Research Project D	Summer Term, Semester 1, Semester 2	25

Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Contact:	Professor Stephan Winter **winter@unimelb.edu.au (mailto:winter@unimelb.edu.au)**
Subject Overview:	**AIMS** The Spatial Information Research Project is the capstone experience of a postgraduate course, requiring integrating knowledge and expertise gained from all previous coursework and applying it to an individual challenging research problem under academic supervision. Reflecting the interdisciplinary character of the course, the student can choose two supervisors; one of them

has to be from the Geomatics discipline in the Department of Infrastructure Engineering. The project will culminate in a thesis.

Students may undertake this 50 point research project in the following options:

One semester by enrolling in GEOM90020 Spatial Information Science Research Project (50pts)

OR

Stretched over two consecutive semesters by combining either:

GEOM90010 Spatial Information Research Project A (12.5pts) in one Semester and GEOM90023 Spatial Information Research Project B (37.5pts) in the consecutive semester.

OR

GEOM90013 Spatial Information Research Project C (25pts) in one Semester and GEOM90031 Spatial Information Research Project D (25pts) in the consecutive semester.

These options facilitate some flexibility in the choice of electives that are offered in particular semesters only, however, the approval for this arrangement is completely at the discretion of the Subject Coordinator. A project stretched over two semesters is still assessed as a whole at the end of the second component. The thesis has to cover the whole project.

INDICATIVE CONTENT

The student will develop a research question in spatial information science and an appropriate research methodology for investigating the question. After approval by the supervisor(s) the student will apply this methodology, analyse results, and report in a thesis.

Learning Outcomes:	**INTENDED LEARNING OUTCOMES (ILO)** Having completed this subject the student is expected to: 1 Define a research project in their subject matter; 2 Develop an approach in order to run a research project in their subject matter; 3 Use and develop associated technologies to according to their chosen methodology; 4 Interpret and discuss experimental results with respect to a hypothesis.
Assessment:	The research project culminates in a thesis, reporting about the addressed research problem, approach, results, and conclusions. A project stretched over two semesters is still assessed at the end of the second component. The thesis will be assessed by two examiners, both possibly supervisors. At the beginning of the project the supervisor(s) will discuss with the student their expectations on a page or word limit on an individual basis, due to the variety of the characters of research projects in spatial information such as fieldwork, programming, or literature review. The final mark is based on the report worth 100%. The total workload of a Spatial Information Research Project is 480 hours. The assessment covers all Intended Learning Outcomes (ILOs).
Prescribed Texts:	None
Recommended Texts:	None
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 apply knowledge of science and engineering fundamental; # Ability to undertake problem identification, formulation, and solution; # Ability to conduct an engineering project; # Capacity for creativity and innovation; # Capacity for lifelong learning and professional development.
Notes:	**LEARNING AND TEACHING METHODS** The subject is guided by weekly progress meetings with the supervisor(s). While the components of the project are relatively constant (research idea, literature review, theoretical framework, experiment, analysis, discussion and reporting) the student is urged to develop early

a time plan to manage their progress according to their individual research problem. The time plan is used in supervisor meetings to reflect on progress and potentially provide guidance.

The thesis has in many cases the form of a scientific paper, such that in cases of outstanding and scientifically original work the thesis can also be submitted for publication.

INDICATIVE KEY LEARNING RESOURCES

As an individual research project it is up to the student to identify required resources (typically access to the scientific literature as provided electronically through the University library). Computing resources are provided by the University. The skills for doing a research project were developed in the pre-requisite subject.

CAREERS / INDUSTRY LINKS

Typically this is an academic research project, oriented along scientific literature and aiming to produce a scientific outcome.

Related Course(s):	Master of Geographic Information Technology Master of Spatial Information Science