

Subject Description Form

Subject Code	LSGI4502
Subject Title	Final Year Project (Part A & B)
Credit Value	6
Level	4
Pre-requisites	LSGI2223 Geographic Information Science; and LSGI2652 Utility Surveying and Management; and LSGI2373 Surveying
Objectives	The main objective of this subject is to help students to integrate knowledge gained throughout the course, to achieve a higher order learning process and to apply this to solve professional problems. Each student will be supervised by a fulltime member of staff who, through weekly or more frequent meetings with the student, provides guidance and critical discussion of the work. This subject also aims at promoting self awareness, problem solving and critical thinking through regular discussions between the student and their supervisor.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: <ol style="list-style-type: none"> 1. Application of knowledge gained through the degree programme (L4); 2. Advanced research skills in investigating an area of particular interest (L4); 3. Organisational skills in carrying the project through (L4); 4. The mastery of selected technologies (L4); 5. Their analytical skills in deriving sound and well argued conclusions (L4); 6. Their skills in report design and presentation (L4).
Subject Synopsis/ Indicative Syllabus	<p>A. Proposal At the end of Year 2, students should choose a broad field of investigation and approach a supervisor. Assistance will be given to students in establishing their subject areas, including topics suggested by industry. An important element of the project will be the integration of both Geomatics and computing science concepts. At the end of the first month in Year 3, students are to submit a proposal that outlines the area of investigation, a bibliography, and a tentative work schedule.</p> <p>B. Progress Report A report outlining the work to date will be submitted immediately after the first semester. This report will contain an outline of the problem, a comprehensive literature review, evaluation of alternative solutions and the design of the project methodology. It is a draft report covering preliminary results, analyses, problems and possible solutions, and a timetable for completion.</p>

	<p>C. Presentation Towards the end of the semester students will present a summary of their dissertation topic and defend the results and conclusions during a Q & A session. Supervisor and moderator must ask some questions related to statements in the written FYP report.</p> <p>D. Final Report By the end of the second semester students must submit a bound copy of their dissertation. Any Generative AI content must be declared/acknowledged.</p>																																														
<p>Teaching/Learning Methodology</p>	<p>Students are to work individually on a topic of the student's choice in Geo-IT/Computing Science related areas as approved by the Head in consultation with the LSGI Research and Development Sub-Committee. Students are encouraged to establish contact with staff from both LSGI and COMP. Progress reports are immediately assessed and graded by the supervisor. Final assessment of the dissertation document and the oral presentation will be carried out by two internal assessors one of whom is the supervisor.</p>																																														
<p>Assessment Methods in Alignment with Intended Learning Outcomes</p>	<table border="1" data-bbox="534 1032 1394 1505"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">% weighting</th> <th colspan="6">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> </tr> </thead> <tbody> <tr> <td>1. Progress report</td> <td>10%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td>✓</td> </tr> <tr> <td>2. Oral presentation</td> <td>30%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>3. Written thesis</td> <td>60%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>Total</td> <td>100 %</td> <td colspan="6"></td> </tr> </tbody> </table> <p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>This subject is assessed based on continuous efforts, progress of the student, oral presentation and a written report. Assessment rubrics for this subject have been developed to grade the performance of students in the intended learning outcome areas 1 to 6. For Geo-IT students, at least 20% of the assessment will focus on programming and algorithmic work. Together with the assessment rubrics for oral presentation, the students' overall performance is assessed.</p>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						1	2	3	4	5	6	1. Progress report	10%	✓	✓	✓	✓		✓	2. Oral presentation	30%	✓	✓	✓	✓	✓	✓	3. Written thesis	60%	✓	✓	✓	✓	✓	✓	Total	100 %						
Specific assessment methods/tasks	% weighting			Intended subject learning outcomes to be assessed (Please tick as appropriate)																																											
		1	2	3	4	5	6																																								
1. Progress report	10%	✓	✓	✓	✓		✓																																								
2. Oral presentation	30%	✓	✓	✓	✓	✓	✓																																								
3. Written thesis	60%	✓	✓	✓	✓	✓	✓																																								
Total	100 %																																														

Student Study Effort Expected	Class contact:	
	▪ Lecture	13 Hrs.
	Other student study effort:	
	▪ Self-study	200 Hrs.
	Total student study effort	213 Hrs.
Reading List and References	<p>Hawkins, C.F., Sorgi, M., Lock, S. (2013) Research: how to plan, speak and write about it. Springer. ISBN 978-1447135203</p> <p>Machi, L.A., McEvoy, B.T. (2016) The Literature Review: Six Steps to Success. Corwin. Third edition. ISBN 978-1506336244</p> <p>Polya, G. (2014) How to Solve It: A New Aspect of Mathematical Method. Princeton University Press. ISBN 978-0691164076.</p> <p>Roberts, C., Hyatt, L. (2018) The Dissertation Journey: A Practical and Comprehensive Guide to Planning, Writing, and Defending Your Dissertation. Corwin. Third Edition. ISBN 978-1506373317</p> <p>Watson, G. (1987) Writing a thesis; a guide to long essays and dissertations. Addison-Wesley Longman Ltd. ISBN 978-0582494657</p> <p>LSGI's Teaching and Learning web site.</p>	