Subject Description Form

Subject Code	COMP 4921
Subject Title	Final Year Project
Credit Value	9
Level	4
Pre-requisite/ Co-requisite/ Exclusion	Exclusion: COMP 4911/4912
Objectives	The objectives of this subject are to: 1. provide a student the opportunities to apply and integrate his/her knowledge acquired throughout the undergraduate study. 2. develop the capabilities of a student in analyzing and solving complex and possibly real-case problems. 3. train students with skills on systematic development and documentation of a significant piece of work.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: <u>Professional/academic knowledge and skills</u> (a) conduct literature survey to locate for materials and sources relevant to the selected problem area; (b) understand the materials obtained and connect the materials with the problem to be solved; (c) define and specify the problem precisely; (d) assimilate and apply the knowledge learnt in generating good solutions to the problem; (e) think critically the formulation of alternative models and solutions to the problem, in the analysis of approaches to the solution and their implementation; (f) evaluate the final outcome in an objective manner; <u>Attributes for all-roundedness</u> (g) improve presentation and communicate skills via oral presentation; (h) enhance technical report writing skills with proper organization of materials; (i) develop the ability to learn independently and to find/integrate information from different sources required in solving real-life problems; (j) manage the project efficiently and effectively through the assistance and supervision of the supervisor.
Subject Synopsis/ Indicative Syllabus	1. In-depth study of a topic proposed by the supervisor 2. Proposal writing 3. Regular progress checking and reporting 4. Project documentation

	5. Presentation and demonstration
Teaching/Learning Methodology	The calendar duration of the final year project spreads over the final year of the curriculum and extends normally from September to April. It spans across the academic year for two consecutive semesters. The total student effort required is approximately 378 hours of supervisor and/or project members meeting, laboratory work and independent study for a normal student, which includes the total time spent on literature search, background reading, fact finding, project development, report writing, and presentation preparation and demonstration. The actual amount of time spent may vary for individuals. Final Year Projects are normally sponsored by academic staff of the department or in conjunction with external organizations or other departments in the university. However, a student may propose a topic which forms an extension of his/her work during industrial placement, or an area of his/her own research interest contingent upon the condition that he/she could find an interested academic staff to supervise the project. Projects should be problem-oriented and there is no restriction to the nature of the problem except that it should be relevant to the computing discipline and there must be a computing element in the project. The project could be practical, academic or a hybrid in which the student is encouraged but not constrained to have some original contributions. The student has to submit a proposal, a mid-term checkpoint progress report and a final report throughout the academic year. The proposal must be approved by the supervisor before the student can proceed to the final year project. A rejected proposal must be rewritten and resubmitted. An oral presentation and demonstration is essential at the end of the project. If deemed appropriate, mid-term presentation may be held. At or before the beginning of the academic year, each student will be assigned a supervisor who is in charge of the entire project. The assignment of supervisor normally follows a set of prescribed procedures, announced a few months before the academic year. The supervisor is responsible for assessing the student based on the set of abilities, as laid down in the "objectives" and "intended learning outcome" sections above, that the student demonstrated.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific Assessment Methods/Tasks	% weighting	Intended subject learning outcomes to be assessed									
		a	b	c	d	e	f	g	h	i	j
Continuous Assessment	100	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

The final year project will be accessed by the supervisor, a co-examiner and a moderator. The three of them should give their assessment independently. The weighting of supervisor would be 60% of the total grade, while both co-examiner and moderator would each contribute to 20% of the total grade. Attributes to be assessed include, but not limited to, Problem Identification, Problem Solving, Communication and Presentation, Project Management and Self-Discipline. For instance, Team Work would be assessed in the context of a group-based project.

Additional moderation might be required on the projects. This could take the form of a judging (and arbitration) panel to consider all projects with high and low grades for fairness and quality assurance for their final grades, and to recommend best project award candidates. The panel also helps to resolve any disagreement between supervisor, co-examiner and moderator. Some other projects may also be moderated so as to even out any undue differences.

Student study effort expected

Class Contact:	
Lecture	0 hours
Other student study effort:	
Searching and reading materials, meeting with supervisor / other students, design, program development, testing, documentation, presentation etc.	378 hours
Total student study effort	378 hours

Reading list and references

Reference Books:

1. Kumar, R. Research Methodology: A Step-by-step Guide for Beginners, Third Edition, SAGE Publications, 2011.
2. Burns, R.B. Introduction to Research Methods, Fourth Edition, SAGE Publications, 2000.
3. Roberts, C.M. The Dissertation Journey: A Practical and Comprehensive Guide to Planning, Writing, and Defending Your Dissertation, Third Edition, Corwin

	Press, 2007. 4. Mauch, J.E., Park, N. Guide to the Successful Thesis and Dissertation: A Handbook for Students and Faculty, Fifth Edition, Marcel Dekker, 2003. 5. Rudestam, K.E., Newton, R.R. Surviving Your Dissertation: A Comprehensive Guide to Content and Process, Second Edition, Sage Publications, 2001. 6. Garson, G.D. Guide to Writing Empirical Papers, Theses and Dissertations, Marcel Dekker, 2002. 7. Oshima, A. Writing Academic English, Fourth Edition, Pearson Longman, 2006. 8. APA. Publication Manual of The American Psychological Association, Sixth Edition, American Psychological Association, 2010. 9. Szuchman, L.T. Writing with Style: APA Style Made Easy, Fifth Edition, Wadsworth/Cengage Learning, 2011. 10. Statistics, simulation, programming, and relevant books. 11. ACM and IEEE magazines, Transactions and Journals. 12. Other International Journals. 13. Relevant conference proceedings and magazines (including ACM and IEEE conferences). 14. Technical reports from universities and major companies.