

Subject Description Form

Subject Code	COMP1901
Subject Title	Seminars and Topics in Information Technology
Credit Value	3
Level	1
Pre-requisite / Co-requisite / Exclusion	
Objectives	<p>The objectives of this subject are to:</p> <ul style="list-style-type: none">• educate and inspire the students about different aspects of Information Technology and its applications;• cultivate students' global outlook through the local and international social impact of Information Technology;• cultivate and develop students' creative thinking, computational problem-solving and logical reasoning skills;• educate students on different aspects of entrepreneurship and the process of creating new ventures in the information technology industry; and• engage the students in desirable forms of learning in university, including self-regulation, autonomous learning and deep understanding.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ul style="list-style-type: none">(a) demonstrate an understanding and enthusiasm of the different types of computing disciplines;(b) develop problem-solving skills and apply basic computational thinking skills to solving simple problems;(c) understand business models, aspects and the role of entrepreneurship in the computing industry;(d) search for information, formulate a project plan, and manage a project with initiative; and(e) be aware of the University's expectations for honest academic behaviors and to understand the importance of academic integrity, including definitions and good practices by which to stay clear of dishonest behaviors and academic plagiarism.

<p>Subject Synopsis/ Indicative Syllabus</p>	<p><u>Online Tutorial on Academic Honesty</u></p> <p>Students are required to complete successfully an Online Tutorial on Academic Honesty on or before week 5 of the first semester. The students will understand the importance of academic honesty by completing the Online Tutorial.</p> <p><u>Seminars</u></p> <p>Seminars will be delivered by professors, alumni and/or reputable professionals in computing. They are designed to educate students about computing, in particular about the different areas covered by the streams of study in the Department. The objective is to arouse their interest in computing, cultivate their sense of belonging to the profession, and educate them about their study options within the Department.</p> <p><u>Projects</u></p> <p>Based on the CARE (Computing for Application, Research and Entrepreneurship) model/philosophy, students will carry out three computing-related projects with application, research and/or entrepreneurship elements. The projects are designed to develop students' creativity, problem-solving skills and team-work abilities through learning and practicing basic concepts in computing. For example, students will work in small groups to investigate computing problems, to develop computing systems/applications and to create business ideas/models with IT elements.</p>
<p>Teaching/ Learning Methodology</p>	<p><u>Online Tutorial on Academic Integrity</u></p> <p>The Online Tutorial on Academic Honesty is developed by the University to help the students understand the importance of academic honesty. By going through the Online Tutorial, students will be aware of the importance of upholding academic honesty during University study. They will also learn about proper citation and referencing methods to avoid plagiarism, and the various supports that are available in the University.</p> <p><u>Seminars</u></p> <p>The seminars are designed to arouse students' interests about the computing disciplines and industries. The mode of delivery will be interactive and engaging. Students will be motivated to make preparations by researching for information and doing background reading. They will be encouraged to raise questions and discuss with the presenters. Assessment will consist of quiz(zes) and/or individual assignment(s) that are designed to enhance their computing knowledge, to measure students' learning outcomes as well as to encourage participation and interaction.</p> <p><u>Projects</u></p> <p>Project-based learning will be used for students to explore/learn different aspects of computing (e.g., to facilitate them to make programme choices). For example, students will carry out two technical projects (e.g., one system/application-oriented project and one data-oriented project) as well as one entrepreneurship project. The technical projects are intended to teach students to investigate computing problems and to apply computing knowledge. Lectures and workshops will be held to teach the concepts, and students will then work in groups to propose, design and develop a project that is designed to apply and practice the concepts learned. Students will be given opportunities to interact closely with staff and other students, and to develop their problem-solving, teamwork and interpersonal skills. Assessment components</p>

	<p>will consist of demonstration, code inspection, presentation and/or reports. The entrepreneurship project is intended to develop students' appreciation and understanding about entrepreneurship and the commercialization process for selected information technology topic(s). Students will form a virtual startup to apply and practice the entrepreneurship concepts with the application of different IT disciplines. Assessment will focus towards students' understanding about entrepreneurship, innovation and creativity, in the form of report and/or presentation.</p> <p>Note: To widen student exposures and to complement other learning activities, a visit or field trip may be organized (e.g., international study tour or local company visit).</p>																																													
<p>Assessment Methods in Alignment with Intended Learning Outcomes</p>	<p>Students' performance in this subject will be assessed by using a letter-grading system in accordance with the University's convention from grade F (failure) to A+. The relative weights of the different assessment components are as follows:</p> <table border="1" data-bbox="384 636 1465 1272"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">% weighting</th> <th colspan="5">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> </tr> </thead> <tbody> <tr> <td>1. Online Tutorial on Academic Honesty</td> <td>0%</td> <td></td> <td></td> <td></td> <td></td> <td>✓</td> </tr> <tr> <td>2. Seminars Quiz(zes) / Individual Assignment(s)</td> <td>10%</td> <td>✓</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3. Projects</td> <td>90%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> </tr> <tr> <td>Total</td> <td>100%</td> <td colspan="5"></td> </tr> </tbody> </table> <p>Explanation of the use of the different assessment methods in assessing the intended learning outcomes:</p> <p>Quiz(zes) and individual assignment(s) are intended to test the students' understanding of the concepts covered in the seminars as well as related computing knowledge. Through projects, students can demonstrate their creativity, problem-solving, logical reasoning and interpersonal skills. They can also demonstrate their ability to search for information, formulate a project plan, and to manage a project with initiative. Through business plans, students can demonstrate their understanding about entrepreneurship.</p> <p>In order to pass this subject, students must obtain a Grade D or above for total marks in the seminars and projects components, and passed the online tutorial on academic honesty on or before Week 5 of the first semester.</p>						Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					a	b	c	d	e	1. Online Tutorial on Academic Honesty	0%					✓	2. Seminars Quiz(zes) / Individual Assignment(s)	10%	✓					3. Projects	90%	✓	✓	✓	✓		Total	100%					
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<p>Student Study Effort Expected</p>	<p>Class contact:</p> <table border="1" data-bbox="384 1877 1465 2018"> <tbody> <tr> <td>▪ Seminars</td> <td>6 Hrs.</td> </tr> <tr> <td>▪ Projects (10 hours per project)</td> <td>30 Hrs.</td> </tr> </tbody> </table> <p>Other student study effort:</p>						▪ Seminars	6 Hrs.	▪ Projects (10 hours per project)	30 Hrs.																																				
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	<ul style="list-style-type: none"> ▪ Online tutorial on academic honesty, self-study, information search, meetings and discussions, assignments, projects, etc. 	69 Hrs.
	Total student study effort	105 Hrs.
Reading List and References	<p>Reference Books:</p> <ol style="list-style-type: none"> 1. Fogler, H. Scott and LeBlanc, Steven E., <i>Strategies for creative problem solving</i>, Prentice Hall, 3rd Edition, 2014. 2. O’Leary, Timothy J., O’Leary, Linda I. and O’Leary, Daniel A., <i>Computing essentials: Making IT work for you</i>, Complete 2015, McGraw Hill, 2015. 3. Wolber, D., Abelson, H., Spertus, E. and Looney, L., <i>App Inventor 2: create your own Android apps</i>, 2nd Edition, O’Reilly, 2014. 4. Prayaga, L., Hawthorne, J. and Whiteside, A., <i>Android App Inventor for the absolute beginner</i>, Cengage Learning PTR, 2014. 5. Tyler, J., <i>App inventor for Android: build your own apps--no experience required!</i>, Wiley, 2011. 6. Allen, K., <i>Entrepreneurship for scientists and engineers</i>, Prentice Hall, 2010. 	