

Subject Description Form

Subject Code	COMP 200
Subject Title	Seminars and Topics in Information Technology
Credit Value	3
Level	1
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	<p>The objectives of this subject are to:</p> <ol style="list-style-type: none"> 1. Educate and inspire the students about different aspects of Information Technology and its applications. 2. Cultivate students' global outlook through the local and international social impact of Information Technology. 3. Cultivate and develop students' creative thinking, computational problem-solving and logical reasoning skills. 4. Educate students on different aspects of entrepreneurship and the process of creating new ventures in the Information Technology industry. 5. 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 subject, students will be able to:</p> <ol style="list-style-type: none"> a. Demonstrate and understand the different types of IT disciplines b. Demonstrate a global outlook and understand the social impact of IT on the global and local community c. Understand and apply basic computational concepts to solving simple computational problems. d. Understand different business models, aspects and the role of entrepreneurship in the global and local IT industry e. Search for information, formulate a project plan, and manage a project with initiative,
Subject Synopsis/ Indicative Syllabus	<p>The subject will be offered in the first year. There are two major components: <i>seminars</i> and <i>projects</i>.</p> <p><i>Seminars and Lectures</i> The <i>seminars</i> portion of the course will cover four main topics as described below, and are designed to educate the students about the diversity of information technology as a field, and its importance and impact on the</p>

development of society.

1. *Different aspects of information technology.*
Students will be guided to dissect case studies that will illustrate the different aspects of information technology, namely: computer science, computing, enterprise information systems, creative software design. The case studies will feature diverse examples of well-known companies around the world. Examples include IBM, Microsoft, Google, Apple, Facebook, etc.
2. *Basic Concepts and Skills in information technology.*
These workshops will take place in small groups and are designed to develop students' knowledge of basic computing concepts. Topics will include logical and sequential thinking, basic flow control, variables and data storage and computational problem-solving.
3. *Industry and business models in information technology.* Students will learn about different business and development models that are used in the IT industry locally and worldwide, ranging from the established IT firms to entrepreneurial enterprises. Included topics will also cover the role of entrepreneurship in the economy, opportunity recognition and evaluation, entrepreneurial strategies, writing a business plan, social and legal aspects such as intellectual property rights, open-source software, free software, etc.
4. *Social Impact of information technology.* Students will learn about the different ways that IT has transformed the way that people interrelate, as well as the ways that social forces have transformed information technology. Topics will include the digital divide, social trends, social and ethical issues with IT and the Internet, etc.

Assignments and Projects

The *Assignments and Projects* aspect of the course is designed to fulfill the following objectives:

1. Develop and practice basic computational concepts, problem-solving, creative design and

	<p>teamwork skills.</p> <p>2. Apply and practice concepts related to entrepreneurship in the IT industry.</p> <p>The project(s) will be open-ended and students will work in groups. They will propose, design and develop a project, exercising the concepts taught in the seminars. The goal is to exercise their innovation, creativity and problem-solving skills.</p>
<p>Teaching/Learning Methodology</p>	<p><i>Seminars and Lectures</i> The seminars will be designed to arouse the students' interest and educate them about issues in information technology. Invited talks will be given by experts in the field. These include researchers and industry leaders. The delivery mode will be interactive and engaging, and experiential learning activities such as site visits will also be included. Students will be motivated to prepare in advance by searching for information and doing background reading. They will be encouraged to raise questions and discuss with the presenters as well as their peers. The assessment components will include reflective essays, group discussions and debates and class exercises.</p> <p><i>Workshops</i> The workshops component of the subject is intended to teach students about basic computing concepts such as logical and sequential thinking and basic problem-solving. The delivery mode will be held in small groups to facilitate staff/student and student/student interaction. The assessment components will include quizzes and assignments.</p> <p><i>Computing Project</i> Students will work in groups to propose, design and develop a project that is designed to apply and practice the concepts learned in the workshops. 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 will consist of demonstration, code inspection, presentation and reports.</p> <p><i>Entrepreneurship Project</i> Students will work in groups on a project that is designed</p>

to apply and practice the entrepreneurship concepts learned in the seminars and lectures. Assessment components will consist of project proposals, presentations, reports and reflective essays. Students will also be encouraged to participate in open competitions such as the Global Challenge Club.

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
Seminars and Lectures Essays, group discussions, debates, class exercises.	20%	✓	✓		✓	
Workshops and Computing Project Demonstration, code inspection, presentation and reports	40%			✓		✓
Entrepreneurship Project Proposal, presentation, report and reflective essays	40%		✓		✓	✓
Total	100%					

This subject will assess students' performance using a letter grading system. The explanation of the use of the different assessment methods in assessing the intended learning outcomes is as follows:

Reflective essays allow students to express their appreciation and understanding about the different aspects of information technology in society, and the group discussions and debates encourage them to be more engaged in the seminars and lectures. The projects are intended to assess the students' grasp of computing and entrepreneurial concepts, and are also intended to train and practice the students' creativity, problem-solving skills and interpersonal (teamwork) skills.

Student study effort expected	Class Contact:	
	Lecture	28 hours
	Tutorial	14 hours
	Other student study effort:	
	Self-study, information search, assignments, projects, etc.	63 hours
	Total student study effort	105 hours
Reading list and references	<ol style="list-style-type: none"> 1. Timothy O'Leary, Linda O'Leary. Computing Essentials 2010, Complete Edition (O'Leary) Career Education; 20 edition (February 11, 2009) 2. Randall Stross. Planet Google: One Company's Audacious Plan to Organize Everything We Know. Free Press; Reprint edition (September 22, 2009) 3. Chris Anderson. Long Tail, The, Revised and Updated Edition: Why the Future of Business is Selling Less of More. Hyperion; Rev Upd edition (July 8, 2008) 4. Stephen G. Kochan. Programming in Objective-C 2.0 (3rd Edition) (Developer's Library). Addison-Wesley Professional; 3 edition (May 11, 2011) 	