Subject Description Form

Subject Code	COMP452
Subject Title	Computing Professionals in Society
Credit Value	3
Level	4
Pre-requisite / Co-requisite/ Exclusion	Pre-requisite/Co-requisite: Nil Exclusion: COMP402, COMP427
Objectives	The general objective is to enable students to understand the social responsibilities of the computing professionals, because they hold a very powerful position in society. To be addressed in particular are professionalism and computer ethics. This means (i) identifying correctly the potential for an ethical problem in a particular context, the moral rules that might be compromised, and the cause of these issues; (ii) being aware of the responsibilities with respect to ethical issues in human activities affected by computers; (iii) deciding on courses of action and recommend changes to prevent recurrence of those events; and (iv) communicating well-informed opinions based on fact in a well-reasoned professionally competent way. The second objective is to develop students' ability to analyze the fact and to communicate well in writing and orally because only well-informed opinions based on fact and presented in a well-reasoned professionally competent way are acceptable. This makes the writing intensive side of this course, which emphasizes clear written expression. The third objective is to promote student participating in class discussion as well as taking quizzes and completing a number of written assignments, since opinions can be changed, and improved, through thoughtful discussion so that students are expected to come to class well-prepared.

Intended Learning Outcomes	Upon completion of the subject, students will be able to: *Professional/academic knowledge and skills* (a) be aware of the ethical issues surrounding computers; (b) heighten their sensitivity to ethical issues in the use of computers and in the practice of the computer profession, so that they are more likely to see issues and respond appropriately; (c) apply the conceptual tools provided in the course to develop analytical skills for determining what to do in ethical decision making or what the likely impacts the computer will have in this or that context; and (d) work alone or in groups to arrive at ethical decisions. *Attributes for all-roundedness* (e) communicate effectively (both in Chinese and English) verbally at a level sufficient for project and system presentation, as well as general conversation ; (f) communicate effectively in writing with technical documents and reports; (g) learn independently for problem solving and solution seeking; (h) collaborate with other team members for project design and development, while exhibiting leadership in a project team whenever designated or necessary; (i) think and reason critically, especially on different issues related to computing professional in the society. **Alignment of Programme Outcomes:** Programme Outcome 1: This subject contributes to helping students' effective communication skills (writing and oral skills) through logical argument analysis assignment (individual) and scenarios analysis report and presentation (group project) in English. Programme Outcome 3: This subject contributes to developing students' understanding and ability to evaluate ethical issues through an examination of ethical principles, the impact of such applied ethical issues as privacy, intellectual property and computer crimes and laws, and ethical and social analysis of these issues. Programme Outcome 4: This subject contributes to training critical thinking through logical argument analysis assignment. Programme Outcome 7: This subject contributes to cultivating team work spirit through group project.
Subject Synopsis/ Indicative Syllabus	**Topic** **1. Introduction** Generic skills; typical scenarios of profession; characteristics of a profession; the system of professions; the Computing profession; social

	issues
	2. The underpinning ethical principles What is ethics; traditional/philosophical ethics; relativism/utilitarianism/ deontology; rights/social contract/Rawl's theory of justice.
	3. Computer ethics Policy vacuum; social context; is computer ethics unique?
	4. Methods/tools for ethical analysis Competing factors in decision making; practical approach/the 4-step analysis; sample cases.
	5. Computer crimes and laws
	6. Privacy Personal privacy; computer and privacy.
	7. Software ownership and intellectual property Ethical/legal issues of software; intellectual property; property rights; legal protection; philosophical basis; consequentialist argument.
	10. Seminars/Tutorial, Case/scenario analysis presentation, etc
	Guest Speakers: Subject specialists from industry are invited to conduct forums to discuss and share with students the state-of-the-art developments and opinions relevant to the topics.
Teaching/Learning Methodology	The course will be conducted in a combination of methods, specifically, three lectures, three seminars, one workshop, one or two forums (to be led by subject specialists from industry) and student-presentation of case analysis. As such, students are expected to read and understand the ideas presented in lectures and seminars, and in the reading list recommended, explain the ideas, analyze issues and see them from diverse perspectives, and formulate and critique arguments. Therefore, students are required to demonstrate this in class discussion and in written assignments. Quizzes will be given, aiming at determining the student's grasp of the materials learned.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)								
		a	b	c	d	e	f	g	h	i
1. Class participation	10%	✓	✓	✓	✓	✓				
2. Assignment: Ethical Analysis	20%	✓	✓	✓	✓		✓	✓		✓
3. Mid-term quiz	20%	✓	✓					✓		
4. End-term quiz	20%	✓	✓					✓		
5. Case/scenario Analysis: presentation and report	30%	✓	✓	✓	✓	✓	✓		✓	
Total	100 %									

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

While class participation and the quizzes aim to assess students' performance on an individual basis, the Ethical Analysis assignment and the case analysis presentation and report are designed to encourage/train/ assess performance in a group

This arrangement of assessment is designed to achieve an even distribution of individual-group performance. While individual performance is important, group participation is an essential attribute expected of a modern computing professional.

Furthermore, the assignment and case report aim at refinement and improvement writing skills, the oral presentation an opportunity for dialogue in English on their (students') feet, and of course, the rest of the assessment is without saying part of the convention which lays in the core of the students' total performance portfolio.

Student Study Effort Expected

Class contact:	
▪ Lecture/seminar/forums	26 Hrs.
▪ Tutorial/workshop/presentation	13 Hrs.
Other student study effort:	
▪ Reading of recommended materials	14 Hrs.
▪ Reading of supplementary materials	7 Hrs.
Total student study effort	60 Hrs.

Reading List and References

1. Johnson, D.G., *Computer Ethics* 3rd edition, Prentice Hall, 2001
2. Johnson, D.G., *Computer Ethics* 4th edition, Prentice Hall, 2009
3. Johnson, D.G. & Nissenbaum, H., *Computer Ethics & Social Value*,

	Prentice Hall, 1995 4. Kallman, E.A. & Grillo, J.P., *Ethical Decision Making and Information Technology*, McGraw-Hill, 1996 5. Lee, Wanbil W. & Chan, Keith C.C., "Computer Ethics: a Potent Weapon for Information Security Management", *IS Audit &Control Journal*, Information Systems Control & Audit Association (*Jonline*, December 2008) 6. Lee, Wanbil W., *Information Security Management: Semi-intelligent Risk-analytic Audit*, VDM (Verlag Dr Müller), 2010 7. Quinn, M.J., Ethics for the Information Age, Addison Wesley, 2006 8. Tavani, H.T., Ethics and Technology, 2nd edition, John Wiley &Sons, 2007