

CS2066: IT PROFESSIONALS AND SOCIETY

Effective Term

Semester A 2022/23

Part I Course Overview

Course Title

IT Professionals and Society

Subject Code

CS - Computer Science

Course Number

2066

Academic Unit

Computer Science (CS)

College/School

College of Engineering (EG)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

JC2066 IT Professionals: Ethical, Legal and Social Issues

Exclusive Courses

SS3904 Science, Technology and Society for Computing

Part II Course Details

Abstract

The course aims to provide students with concepts and knowledge of technology trend and its impact on the society. It stimulates students to have a basic awareness of the legal responsibilities, ethical obligations and professional conduct as

an IT professional; and understand issues relating to sustainable development, health and safety in the workplace of an information society. Eminent professionals are invited to deliver some of the lectures, aiming to provide students with some professional insights leading to the need for life-long learning.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Recognise the impact of information technology on the society, and the role of IT professionals in the development of ICT industries.		x	x	
2	Understand the responsibilities of IT professionals in sustainable development, and health and safety in the workplace.		x	x	
3	Describe the legal responsibilities, ethical obligations and rules of conduct of an IT professional.		x	x	
4	Recognise and appreciate the world-wide technology trend and innovation, and the need for life-long learning.		x	x	

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Teaching and Learning Activities (TLAs)

TLAs	Brief Description	CILO No.	Hours/week (if applicable)	
1	Lecture	Made up of a mixture of lectures and group work. Professional engineers, eminent industrialists and ICAC officers will be invited as guest lecturers to enrich students' learning. Students' learning on each lecture topic is complemented by selected case studies, assignments and follow-up group work or individual assignments. Tutorials provide the forum for case analyses, topical discussions and interactions among students and tutor.	1, 2, 3, 4	2 hours/ week
2	TutorialXGroup Work/ Individual Work)		1, 2, 3, 4	1 hour/ week

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)	
1	At least 2 group assignments with presentation	1, 2, 3, 4	40	
2	Short test	1, 2, 3	10	

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

2

Additional Information for ATs

For a student to pass the course, at least 30% of the maximum mark for the examination must be obtained.

Assessment Rubrics (AR)**Assessment Task**

Continuous Assessment

Criterion

Achievements in CILOs

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

Examination

Criterion

Achievements in CILOs

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

- Introduction to Local and Global Industry
Overview of local and global ICT industries in various sectors. International cooperation. Technology transfer. Quality assurance practices.
- Engineering and Society
Impact of engineering on society and impact of society on engineering- key issues. The role of engineers and professionals in society.
- Technological Trends and life-long learning
Emerging technologies. Eminent practitioners in industry and commerce will be invited to deliver at least 3 topics of current interests. Continuous professional development and life-long learning.
- Ethics in Practice
Engineering professional ethics, conflicts of interests, code of conduct, legal issues.
- Health and safety

Health, safety and welfare at work, preventing the unlawful activities

- Sustainable development

Environmental issues, shortage of resources, sustainable development.

Reading List

Compulsory Readings

Title	
1	Nil

Additional Readings

Title	
1	L. S. Hjorth, B. A. Eichler, A. S. Khan, J. A. Morello: Technology and Society – issues for the 21st century and beyond. (Pearson, 3rd edition, 2008).
2	Charles E. Harris, Michael S. Pritchard & Michael J. Rabins, Engineering Ethics: Concepts and Cases, Belmont, California: Wadsworth, ISBN: 978-0495502791.
3	Castells, M., Fernández-Ardèvol, M. Qiu, J. L., and Sey, A. Mobile communication and society: a global perspective. (Cambridge, Mass. : MIT Press, 2009)
4	Website of HKIE https://www.hkie.org.hk/en/