

JC2066: IT PROFESSIONALS: ETHICAL, LEGAL AND SOCIAL ISSUES

Effective Term

Semester A 2024/25

Part I Course Overview

Course Title

IT Professionals: Ethical, Legal and Social Issues

Subject Code

JC - Joint Course

Course Number

2066

Academic Unit

Computer Science (CS)

College/School

College of Computing (CC)

Co-offering Academic Unit(s)

Academic Unit(s)
School of Law
Public and International Affairs

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

CS2066 IT Professionals and Society

Exclusive Courses

Nil

Part II Course Details**Abstract**

The interdisciplinary course aims to provide students with the concepts and knowledge of technological trends and the complexities that technological evolution, law and ethics pose. Technological development requires compliance with the established legal and ethical concerns, demands their evolution, and also changes the practice of law. This dynamic interaction changes the environment in which professionals in Information Technology, Law and Ethics operate, and leads to the evolution of the standards of professional conduct in IT and Law. Experts and professionals will provide students with professional insights leading to the development of interdisciplinary skills to cope with the problem and help them become life-long learners understanding their respective discipline in its societal context.

The discussed law and technology issues will provide students with an international and comparative perspective. Students will develop capabilities in critical thinking, collaboration with other disciplines, and an interdisciplinary understanding of technology and the tech-related field of law.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Identify the impact of information technology on the society, and the role of IT professionals in the development of ICT industries.	25	x	x	
2	Describe the responsibilities of IT professionals in sustainable development, and health and safety in the workplace.	25	x	x	
3	Identify and describe the interaction between technology and legal and ethical obligations and how these affect the rules of conduct of an IT professional.	25	x	x	
4	Discuss the evolution of world-wide technology and the role the law and ethics play in helping innovation, and in developing interdisciplinary thinking and the need for life-long learning.	25	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.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	Students will participate in a mixture of lectures and group work. Professional engineers, eminent industrialists and ICAC officers will be invited as guest lecturers to enrich students' learning.	1, 2, 3, 4	3 hours/week
2	Tutorial (Group Work/ Individual Work)	Students will attend in tutorials which provide the forum for case analyses, topical discussions and interactions among students and the instructor.	1, 2, 3, 4	8 hours/semester
3	Group assignment and presentation	Students will also work on selected case studies, assignments, and follow-up group work or individual assignments	1, 2, 3, 4	After class
4	Project	Students will choose a real-world problem and conduct research regarding the social and ethical implications. Students will report their results in a course report, and during a poster/ presentation session held at the end of the semester.	1, 2, 3, 4	After class

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	Project	1, 2, 3, 4	20	
3	Quiz and participation	1, 2, 3, 4	10	

Continuous Assessment (%)

70

Examination (%)

30

Examination Duration (Hours)

2

Additional Information for ATs

For a student to pass the course, at least 30% of the maximum mark for the continuous assessment and 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, e.g., AI/ML and AR/VR. History and Design of the Internet. 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.
- Nature of Technology: A Philosophical Perspective
Martin Heidegger’ s view of technology as “enframing” things by extracting them from their context in the world. Helping students understand the deep nature of technology, including IT, in relation to the way of life in contemporary society.
- Ethics of AI in Healthcare
Should AI serve as a physician’ s assistant only, or should it replace the physician?
- Ethics in Practice
IT professional ethics, privacy, intellectual property, conflicts of interests, code of conduct.
- Law and Technology
Technology requires new laws and legal services based on new technology.
- Sustainable Development
Environmental issues, shortage of resources, sustainable design, and ICTs for sustainable development. Technology and culture. Legal obligations for companies, governments, and professionals.

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/
5	Understanding Heidegger on Technology. https://www.thenewatlantis.com/publications/understanding-heidegger-on-technology
6	Becker, A (2019). Artificial intelligence in medicine: What is it doing for us today? Health Policy and Technology 8: 198-205.
7	Michael J. Quinn. Ethics for the Information Age, 2nd Edition. Pearson Addison Wesley, 2006.
8	Rahul Tongia, Eswaran Subrahmanian, and V.S. Arunachalam. Information and Communications Technology for Sustainable Development: Defining a Global Research Agenda. Allied Publishers, 2005
9	Bill Maurer (2015) How Would You Like to Pay: How Technology is Changing the Future of Money Durham: Duke University Press.

10	Grimmelman, J. (2020). Internet Law: Cases and Problems: 10th Edition
11	Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). Privacy and human behavior in the age of information. Science, 347(6221), 509–514.
12	Manuel Velasquez, Claire Andre, Thomas Shanks, S.J., and Michael J. Meyer. “What is ethics?” Center for Applied Ethics, Santa Clara University.