

# JC2066: IT PROFESSIONALS: ETHICAL, LEGAL AND SOCIAL ISSUES

---

**Effective Term**

Semester A 2022/23

## 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 Engineering (EG)

**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	Recognise the impact of information technology on the society, and the role of IT professionals in the development of ICT industries.	25	x	x	
2	Understand 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	Recognise and appreciate 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.

**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.	1, 2, 3, 4	3 hours/week
2	Tutorial (Group Work/ Individual Work)	Tutorials provide the forum for case analyses, topical discussions and interactions among students and tutor.	1, 2, 3, 4	8 hours/semester
3	Group assignment and presentation	Students' learning on each lecture topic is complemented by 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 <a href="https://www.hkie.org.hk/en/">https://www.hkie.org.hk/en/</a>
5	Understanding Heidegger on Technology. <a href="https://www.thenewatlantis.com/publications/understanding-heidegger-on-technology">https://www.thenewatlantis.com/publications/understanding-heidegger-on-technology</a>
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. <i>Science</i> , 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.