Ethics and Professional Practice	Code & No:	IT 481
	Credits:	2(2,0,0)
	Pre-requisite:	90 Credits
	Co-requisite:	None
	Level:	7

Course Description:

This course will develop the ethical foundations of good professional practice in information technology. It will provide the necessary background of ethical theories and practices, and discuss the role of professional organizations in maintaining such practice, specifically in the information technology industry. Also, It considers legislation that applies in the information technology industry, including major areas of ethical related in information technology, such as, software ownership, data privacy, and computer cracking

Course Aims:

1. Present knowledge of different kinds of ethical arguments
2. Understand the codes of conduct
3. Recognize potential health and safety issues in computing
4. Understand the need for making web pages accessible
5. Understand the dangers in computer cracking
6. Understand the nature of privacy and how it is protected.
7. Understand the property laws and the legal mechanisms of protecting software as property

Student Outcomes (SOs):

☐(a) An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline

☒(b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution

☐(c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs

☐(d) An ability to function effectively on teams to accomplish a common goal

☒(e) An understanding of professional, ethical, legal, security and social issues and responsibilities

☐(f) An ability to communicate effectively with a range of audiences

☐(g) An ability to analyze the local and global impact of computing on individuals, organizations, and society

☐(h) Recognition of the need for and an ability to engage in continuing professional development

☒(i) An ability to use current techniques, skills, and tools necessary for computing practice.

☐(j) An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices. [CS]

☐(k) An ability to apply design and development principles in the construction of software systems of varying complexity. [CS]

☐(j) An ability to use and apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, and web systems and technologies. [IT]

☐(k) An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems. [IT]

☐(l) An ability to effectively integrate IT-based solutions into the user environment. [IT]

☐(m) An understanding of best practices and standards and their application. [IT]

☐(n) An ability to assist in the creation of an effective project plan. [IT]

Course Learning Outcomes (CLOs):

1. Understand ethical theories: authoritarian, intuitionist, egoist, utilitarian, and deontologist.
2. Know the advantages and disadvantages of the two main theories: utilitarian and deontological.
3. Understand origin and purpose of professions, internal regulation versus external regulation, dimensions of professional responsibility, professional organizations: ethics and codes of conduct.
4. Recognize potential problems in the use of VDUs, keyboards and workspaces
5. Ensure accessibility of Web pages.
6. Recognize computer hacking, computer cracking, and difficulties with traditional legal concepts.
7. Understand the meaning of privacy, computer data and human dignity, the problematic status of information stored on computers.
8. Understand the Theories of property and ownership: Patent, Copyright, and trade secrets, and Ownership of computer software

SOs and CLOs Mapping:

CLO/SO	a	b	c	d	e	f	g	h	i	j	k	l	m	n
CLO1					√									

CLO2					√									
CLO3					√									
CLO4					√									
CLO5									√					
CLO6					√									
CLO7		√												
CLO8					√									

No.	Topics	Weeks	Teaching hours
1	Ethical theories: authoritarian, intuitionist, egoist, utilitarian, and deontologist,	2	4
2	The advantages and disadvantages of the two main theories: utilitarian and deontological	1	2
3	In context examine the parameters and complexities of ethical practice in various health care contexts, ethical Principals define distinguish and apply the ethical principle of autonomy, on- malfeasance, beneficence, justice, fidelity, veracity,	3	6
4	team, institutional and societal value commitments in light of changing contexts of practice, moral agency, ethics of care, narrative ethics, justice ethical deliberation	2	4
5	ethical tensions: distinguish between various types of ethical tensions including ethical uncertainty, theories,	2	4
6	Support diversity in communication ,knowledge of self and other, Engage in effective dialogue	2	4

	7	privacy and confidentiality values : identify and critically consider personal, professional,	2	4
		Total	14	28

Textbook:

- Joseph M. Kizza: "Ethical and social issues in Information Age" 5th Edition Springer 2013.

Essential references:

- Joseph M. Kizza: "Ethical and social issues in Information Age" 5th Edition Springer 2013.