



GUJARAT TECHNOLOGICAL UNIVERSITY

Program Name: Bachelor of Computer Applications

Level: Under Graduate

Course / Subject Code : BC02001081

Course / Subject Name : Professional Ethics

w. e. f. Academic Year:	2024-25
Semester:	2
Category of the Course:	Value Added Courses

Prerequisite:	Basic Excel Skill
Rationale:	Data analytics using spreadsheet lies in its accessibility, versatility, and cost-effectiveness, enabling users to conduct data analytics tasks efficiently and effectively across industries and applications.

Course Outcome:

After completion of the course, student will able to:

No.	Course Outcomes	RBT Level*
1	Discuss general concepts related to moral, law, and professional ethics	UN
2	Discuss ethical aspects related to computing and information technology.	UN
3	Discuss societal aspects related to computing and information technology	UN
4	Discuss the impact of new technological development on society and ethics	UN

Teaching and Examination Scheme:

Teaching Scheme (in Hours)			Total Credits L+T+ (PR/2)	Assessment Pattern and Marks				Total Marks
L	T	PR	C	Theory		Tutorial / Practical		
				ESE (E)	PA / CA (M)	PA/CA (I)	ESE (V)	
2	0	0	2	70	30	0	0	100

Course Content:

Unit No.	Content	No. of Hours	Weightage (%)
1	History of Computing: Evolution of computing and information technology, internet, World Wide Web; Emergence of social and ethical problems in computing, Need of computer ethics education	1	5%



GUJARAT TECHNOLOGICAL UNIVERSITY

Program Name: Bachelor of Computer Applications

Level: Under Graduate

Course / Subject Code : BC02001081

Course / Subject Name : Professional Ethics

2	Morality and the law: Morality, law, etiquettes and manners	2	5%
3	Ethics and Ethical Analysis: Definition, Ethical Theories, Functional definition of ethics, Ethical reasoning and decision making, Codes of ethics, Reflection on Computer Ethics, Technology and Values	2	5%
4	Ethics and the Profession: Evolution of Professions, Ethical Professions – education and licensing, Professional decision making and ethics, Professionalism and ethical responsibilities	3	10%
5	Anonymity, Security, Privacy, and Civil Liberties: Anonymity, Security, Privacy, Ethical and legal framework for information	3	10%
6	Intellectual Property Rights (IPR) and Computer Technology: Definition, Computer products and services; Foundation of Intellectual Property (IP); Ownership; IP crimes, Protection of ownership rights; Protecting computer software under the IP; Transnational issues and IP	3	10%
7	Social Context of Computing: The digital divide; Obstacles to overcoming digital divide; ICT in the workplace; Employee monitoring; Workplace, Employee, Health and Productivity	3	10%
8	Software Issues – Risks and Liabilities: Definitions; Causes of software failures; Risk; Consumer protection; Improving software quality; Producer protection	3	10%
9	Computer Crimes: History of computer crimes; Types of computer system attacks; Motives of computer crimes; Costs and social consequences; Computer crime prevention strategies	3	10%
10	New Frontiers of Computer Ethics – Artificial Intelligence; Virtualization and Virtual reality; Cyberspace	4	15%
11	Cyberbullying: Definition; Types of cyberbullying; Areas of society affected by cyberbullying; Legislation against cyberbullying; Effect of cyberbullying; Dealing with cyberbullying	3	10%
	Total Hours:	30	100%



GUJARAT TECHNOLOGICAL UNIVERSITY

Program Name: Bachelor of Computer Applications

Level: Under Graduate

Course / Subject Code : BC02001081

Course / Subject Name : Professional Ethics

Suggested Specification Table with Marks (Theory):

Distribution of Theory Marks					
R Level	U Level	A Level	N Level	E Level	S Level
25	75	0	0	0	0

Where R: Remember; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create (as per Revised Bloom's Taxonomy)

References/Suggested Learning Resources:

(a) Textbook:

1. Ethical and Social Issues in Information Age (6th Edition) by Joseph Migga Kizza, Springer Publication, Texts in Computer Science
2. ACM Code of Ethics and Professional Conduct available at <https://ethics.acm.org/>

Reference Books:

1. Engineering Ethics for a Globalized World by Collen Murphy, Paolo Gadoni, Hassan Bashir, Jr. Charles E. Harris, and Eyad Masad; Springer Publication
2. Engineering Ethics: Concepts and Cases (6th Edition) by Jr. Charles E. Harris, Michael S. Pritchard, Ray W. James, Elaine E. Englehardt, Michael J. Rabins; Cengage Publishing

CO- PO Mapping:

Legend: '3' for high, '2' for medium, '1' for low and '-' for no correlation of each CO with PO.

Semester 2	Subject Name: Professional Ethics										
	POs										
Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11
CO1	-	-	-	-	-	3	3	-	-	3	1
CO2	-	-	-	-	-	3	3	-	-	1	1
CO3	-	-	-	-	-	3	3	-	-	3	1
CO4	-	-	-	-	-	3	3	-	-	3	1

* * * * *