

**COMSATS UNIVERSITY ISLAMABAD**  
**BS-COMPUTER SCIENCE (COURSE DESCRIPTION FORM)**

**CSC110 – PROFESSIONAL PRACTICES FOR IT**

<i>Number of Credit Hours:</i>	<input checked="" type="checkbox"/> 3 credits	<input type="checkbox"/> 4 credits	
<i>Number of Lecture Hours per Week:</i>	<input type="checkbox"/> 1 hour	<input type="checkbox"/> 2 hours	<input checked="" type="checkbox"/> 3 hours
<i>Number of Lab Hours per Week:</i>	<input checked="" type="checkbox"/> none	<input type="checkbox"/> 2 hours	<input type="checkbox"/> 3 hours
<i>Number of Tutorial Hours per Week:</i>	<input checked="" type="checkbox"/> none	<input type="checkbox"/> 1 hour	<input type="checkbox"/> 2 hours

***Catalog Description:***

Social Context: Social Implications of Computing and Networked Communication, Impact of Social Media on Individualism and Collectivism; Analytical Tools: Ethical Argumentation, Theories and Decision Making, Moral Values; Professional Ethics: Community Values, Nature of Professionalism, Self-assessment, Professional Certification (Such as ACM/IEEE-CS, SE, AITP), Accountability, Responsibility and Liability, Role of Computing Professional in Public Policy; Intellectual Property: Philosophical Foundations of Intellectual Property, Intellectual Property Rights, Intangible Digital Intellectual Rights, Digital Rights Management, Discrimination and Harassment, Forms of Professional Credentialing, Copyrights, Patents, Trade Secrets, Trademarks, Plagiarism, Open Source Movement; Privacy and Civil Liberties/Human Rights: Philosophical Foundations, Legal Foundations of Privacy Protection, Privacy Implications of Widespread Data Collection, Surveillance Systems and Cloud Computing, Technology based Solutions for Privacy Protection, Privacy Legislation in Areas of Practice, Civil Liberties/Human Rights, Cultural & Religious Differences, Freedom of Expression and its Limitations; Sustainability: How to be a Sustainable Practitioner, The global, Social and Environmental Impacts of Computer Use and Disposal; IEEE CS/ACM Code of Ethics and Professional Practice.

***Prerequisites:***

None

***Text Book:***

1. Ethics in Information Technology, Reynolds, G., 5<sup>th</sup> Edition (2014), Cengage Course Technology.
2. Ethical and Social Issues in Information Age, Kizza J. M., 5<sup>th</sup> Edition (2013), Springer-Verlag.

***Reference Books:***

1. Ethics for the Information Age, Quinn, M.J., 5<sup>th</sup> Edition (2013), Pearson Education.
2. A Gift of Fire, Social, Legal, and Ethical Issues for Computing Technology, Baase, S., 4<sup>th</sup> Edition (2013), Pearson Inc.

***Assessment Plan for the Course:***

<b>Evaluation Methods</b>	<b>Theory Weight (%)</b>
Quizzes (4)	15
Assignments (4)	10
Sessional exam(I and II)	10 and 15
Terminal Exam	50
<b>Total</b>	<b>100</b>

***Major Topics Covered in the Course:***

<b>Unit</b>	<b>Topic</b>	<b>No of teaching hours</b>
1.	Introduction to Ethics, Ethics and morality, Ethics in western thought, Ethics in Islamic perspective.	4.5
2.	Social implications of computing and networked communication, Impact of social media on individualism and collectivism and culture, Growth and control of Internet, Accessibility issues, context-aware computing.	4.5
3.	Ethical argumentation, Ethical Theories and decision making, Moral assumptions and values.	4.5
4.	Professional Ethics, Community values, Nature of professionalism, Professional certification, IEEE/ACM Code of ethics and professional practice, Professionalism and ethical responsibilities, Discrimination and harassment.	6
5.	Philosophical foundations of Intellectual Property, Intellectual property rights, Intangible digital intellectual property, digital right management.	4.5
6.	Copyrights, patents, trade secrets, trademarks, software piracy, plagiarism.	4.5
7.	Privacy rights, privacy protection, Privacy implications of widespread data collection, Technology-based solutions for privacy protections, Civil liberties and cultural differences, Freedom of expression.	4.5
8.	Sustainability, guidelines for a sustainable practitioner, Global, social and environmental impact of computer use and disposal (e-wastage).	4.5
9.	Security policies, Laws and computer crime, social engineering, identity theft and recovery.	4.5
<b>Total Contact Hours</b>		<b>42</b>

**Course Learning Outcomes:**

Upon completion of the course, students will be able to:

C1	Describe positive and negative ways in which computer technology alters modes of social interaction at the personal level.
C2	Evaluate ethical / social tradeoffs in technical decisions.
C3	Evaluate the professional code of ethics from the ACM, the IEEE Computer Society, and other organizations.
C4	Identify contemporary examples of intangible digital intellectual property.
C5	Investigate the impact of technological solutions to privacy problems.

**Relationship between Course Learning Outcomes and Program Learning Outcomes:**

Course Learning Outcomes	Unit of the syllabus	Possible artifacts	Level	Program Learning Outcomes
C1	1-2	Quizzes, Assignments, Sessional Exams	L	g-1, g-2
C2	3	Quizzes, Assignments, Sessional Exams	M	e-3
C3	4	Quizzes, Assignments, Sessional Exams	M	e-1
C4	5-6	Quizzes, Assignments, Terminal Exam	L	e-1
C5	7-9	Quizzes, Assignments, Terminal Exam	M	g-1

**Prepared by: Dr. Iftikhar Azim Niaz**