Department of Software Engineering (SWE)
Faculty of Science and Information Technology (FSIT)
Daffodil International University (DIU)
(Version 1.0)

PART A: INTRODUCTION		
1	**Course Code**	SE441
2	**Course Title**	Software Engineering Professional Ethics
3	**Course Type(Core University/Program/Elective)**	Core Program
4	**Level/Term**	L3-T3
5	**Academic Session**	Spring 2023
6	**Course Instructor**	Debabrata Mallick (DM)
7	**Prerequisite**	N/A
8	**Credit Value**	3.0
9	**Contact Hours**	2 Hours Per week
10	**Total Marks**	100
11	**Course Summary**	Ethics in the broadest sense refers to the concern that humans have always had for figuring out how best to live. The philosopher Socrates is quoted as saying in 399 B.C., "the most important thing is not life, but the good life." Like medical, legal and business ethics, engineering ethics is a well-developed area of professional ethics in the modern West. The first codes of engineering ethics were formally adopted by American

		engineering societies in 1912-1914. Professional engineers today, then, are expected to both learn about and live up to ethical standards as a condition of their membership in the profession. A failure of any critical software systems can result in death or grievous injury just as easily as a missing bolt or a poorly designed gas tank. This by itself is more than enough reason for software engineers to take seriously the ethics of their professional lives.
12	Course Objectives	The goal of this course is to introduce the students about the concept of software engineering professional ethis principles. The main objectives of this course are, 1. To explore the Introduction to Computer Ethics and Social Context of Computing; 2. To demonstrate Responsibility, Liability, and Professional Ethics; 3. To explain and analyze Codes of Ethics broadly; 4. To explain Copyrights, Licensing Issues, Intellectual Property Rights and Patents; 5. To elaborate Open Source Movement; 6. To illustrate the process of Computer Crime, Viruses and Hacking; 7. To explore the details about Censorship and the Internet; Data Protection and Information Privacy Issues 8. Digital Security Act 2018.

13	Course Learning Outcomes (CLO)	**By the end of semester, students should be able to:**	
		CLO1	**Know** the concept of Computer Ethics and Social Context of Computing.
		CLO2	**Know** the responsibility, Liability, and Professional Ethics.
		CLO3	**Know** the concept of Codes of Ethics broadly.
		CLO4	**Know** the concept of Copyrights, Licensing Issues, Intellectual Property Rights and Patents, Open Source Movement.
		CLO5	**Know** the concept of Computer Crime, Viruses and Hacking, Censorship and the Internet; Data Protection and Information Privacy Issues, Digital act 2018.

PLO/ CLO	SWE PLOs											
	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO1 0	PLO1 1	PLO1 2
CLO 1								X		X		
CLO 2								X		X		
CLO 3								X		X		
CLO 4								X		X		
CLO 5								X		X		

(Row 14: Mapping/Alignment of CLOs with Program Learning Outcomes (PLO))

PART B: CONTENT OF THE COURSE

Week	Syllabus	Learning Outcome	Complexity Level	CLO	PLO	Assessment
1	**Introduction to Computer Ethics :** • Computer ethics Objectives and Overviews. • Software engineering ethical activity. • Software engineering ethical principles. •Definition of computer ethics. • Scenarios of computer ethics.	Able to learn objective, overview, computer ethics and software engineering ethical principles.	C2	1	1	Class Test-1, Assignment-1
2	**Social Context of Computing :**	Able to learn about social context of	C2	1	1	Class Test-1, Assignment-

	• Similarities of Computer Ethics to Other Ethics • Professional ethics & general ethics. • Technical & professional ethics. • Introduction to the Social Implications of Computing • Social Implications of Networked Communications	computing.				1, Mid Exam
3	**Responsibility, Liability:** • What includes in Professional responsibility. • How to behave with office colleagues. • Professional responsibility and liability.	Able to learn professional responsibility and liability.	C2	1	1	Class Test-1, Assignment-1, Mid Exam
4	**Professional Ethics:** • What includes in Professional Ethics. • Components of professional ethics. • Principle of ethics.	Able to learn about Professional ethics.	C4	2	2	Class Test-2, Assignment-1, Mid Exam
MID EXAM						
5,6	**Code of ethics:** • Code of ethics purpose. • Versions of code of ethics. • Do's and Don'ts for the ethics culture of the computer professionals. • Ethics Guidelines. • Ethics in business.	Able to learn about code of ethics details.	C6	3	2	Class Test-3, Assignment-2, Final Exam

7,8	**Copyrights, Licensing Issues, Intellectual Property Rights and Patents:** • What is copyright? • Copyright details with scenario. • What is IPR? • IPR details with scenario. • What is Patents? • Patent details with scenario. • Need for ethics cultures. • What is digital signature? •What is Software Licensing? • Benefits of using Licensed Software. • Current Situation of software licensing.	Able to learn about copyrights, licensing issues, licensing issues, IPR and patents.	C6	3	2	Class Test-3, Assignment-2, Final Exam
9	**Open Source Movement :** • What is open source? • Why open source? • Application areas of open source. • List of open source languages • List of open source database. • List of Open Source Operating Systems.	Able to learn open source software uses benefits and drawbacks with scenario.	C6	4	2	Class Test-3, Assignment-2, Final Exam

	• List of Open Source Servers. • Open source challenges.					
10	**Computer Crime, Viruses and Hacking :** • What is computer crime? Types of computer crime. • Prevention of computer crime. • Software piracy. • Computer crime in Bangladesh.	Able to learn about computer crime, viruses and hacking.	C6	4	2	Class Test-3, Assignment-2, Final Exam
11	**Censorship and the Internet; Data Protection and Information Privacy Issues :** • What is censorship? • Should Internet be censored? • What is privacy really? • What is identity theft? • Data protect mechanism.	Able to learn about censorship, data protection and information privacy issues.	C4	4	2	Class Test-3, Assignment-2, Final Exam
12	**Digital Act 2018:** • Overview • What is cyber law? • What is cyber crime? • Preliminary of Digital Act 2018. • Digital Security Agency.	Able to learn about digital act 2018 with scenario.	C4	4	2	Class Test-3, Assignment-2, Final Exam

| | | • Critical Information Infrastructure | | | | | |
| | | • Investigation of offense and trail. | | | | | |

FINAL EXAM

PART C: ASSESSMENT AND EVALUATION								
		Methods	**Weighting**	**CLO-1**	**CLO-2**	**CLO-3**	**CLO-4**	**CLO-5**
19	**Assessment Methods**	Attendance	7%	0%	0%	0%	0%	0%
		Class Test	15%	2%	5%	3%	5%	0%
		Presentation	8%	0%	0%	0%	0%	8%
		Assignment	5%	1.5%	1%	1.5%	1%	0%
		Mid-Term Exam	25%	5%	20%	0%	0%	0%
		Final Exam	40%	0%	0%	15%	25%	0%
		Total	**100%**	**8.5%**	**26%**	**19.5%**	**31%**	**8%**
20	**Grading System**	**Marks**	**Grade**	**Grade Point**	**Remark**			
		80-100%	A +	4	Outstanding			
		75-79%	A	3.75	Excellent			
		70-74%	A-	3.5	Very Good			
		65-69%	B+	3.25	Good			
		60-64%	B	3	Satisfactory			
		55-59%	B-	2.75	Above Average			
		50-54%	C+	2.5	Average			
		45-49%	C	2.25	Below Average			

		40-44%	D	2	Pass	
		00-39%	F	0	Fail	
21	Make-up Procedures	Improvement Exam (Students who have failed or received unsatisfactory grades (less than or equal to B) in the regular examinations and thus want to improve their grades), and Incomplete (I) Exam.				

PART D: LEARNING RESOURCES		
22	Text Book(s)	SOFTWARE ENGINEERING ETHICS Donald Gotterbarn Software Engineering Ethics Research Institute. **Format: Writer(s), Title, Edition, Publisher, Year(Latest).**
23	Reference Books(s)	Professional Ethics of Software Engineers: An Ethical Framework. Yotam Lurie, Shlomo Mark.
24	Other Resources (Online Resources or others)	NA

Signatures:

Course Teacher	Chair of Course Development Committee	Chair of Accreditation Committee	Head SWE	Director of IQAC
			Name:	
Name:	Name:	Name:		Name: