

SCHEME OF COURSE WORK

Course Details:

Course Title	HUMAN VALUES & PROFESSIONAL ETHICS		
Course Code	22HM11Z1	L T P	C 2 0 0 0
Program:	B.Tech.		
Specialization:	Computer Science and Engineering		
Semester	III		
Prerequisites	None		
Courses to which it is a prerequisite	None		

Course Outcomes (COs):

At the end of the course, the student will be able to:

1	Understand various concepts of ethics and ethical issues
2	Describe various theories relating to professional ethics at work place
3	Determine the fundamental concepts of social experimentation and problem solving
4	Understand an engineer's responsibility for social safety and concepts of risk benefits
5	Describe human values and environment in the era of digitization and globalization of workplace.

Program Outcomes (POs):

Undergraduates will be able to:

1	PO-1 Apply the knowledge of mathematics, science, engineering fundamentals and principles of Information Technology to solve problems in different domains.....
2	PO-2 Analyze a problem, identify and formulate the computing requirements appropriate to its solution
3	PO-3 Design and develop software components, patterns, processes, Frameworks and applications that meet specification within the realistic constraints including societal, legal and economic to serve the needs of the society
4	PO-4 Design and conduct experiments, as well as analyze and interpret data
5	PO-5 Ability to use appropriate techniques & tools to solve engineering problems
6	PO-6 Understand the impact of Information Technology on environment and the evolution and importance of green computing
7	PO-7 Ability to analyze the local and global impact of computing on individual as well as on society
8	PO-8 Ability to demonstrate professional ethical practices and social responsibilities in global and societal contexts.
9	PO-9 Ability to function effectively as an individual, and as a member or leader in diverse and multidisciplinary teams
10	PO-10 Ability to communicate effectively with the engineering community and with society at large

11	PO-11 Ability to understand engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.
12	PO-12 Ability to recognize the need for updating the knowledge in the chosen field and imbibing learning to learn skills.

Course Outcome Versus Program Outcomes:

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO1	PSO2	PSO3
CO 1						3	3	3	2			2	3		2
CO 2						3	3	3	2			2		2	
CO 3						3	3	3	2			2		2	
CO 4						3	3	3	2			2	3		3
CO 5						3	3	3	2			2			

S- Strongly correlated, M- Moderately correlated, Blank- No correlation

Assessment Methods:	Assignment/Seminar/ Mid-Test/End Exam
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Teaching-Learning and Evaluation

Week No.	TOPIC/CONTENTS	Course Outcomes	Sample questions	TEACHING-LEARNING STRATEGY	Assessment Method & S schedule
1	UNIT I: HUMAN VALUES: Morals, Values and Ethics – Integrity- Work Ethics- Service learning.	CO-1	1. Differentiate between Morals and values 2. Explain Work ethics	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
2	Civic Virtue – Respect for others – Living Peacefully – Caring – Sharing – Honesty	CO-1	1. Explain Civic Virtue 2. Define caring and harin	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
3	Courage – Cooperation – Commitment – Empathy – Self Confidence Character – Spirituality	CO-1	1. Explain Self Confidence 2. Discuss about Courage.	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
4	UNIT II: ENGINEERING ETHICS: Senses of Engineering Ethics- Variety of moral issues – Types of inquiry – Moral dilemmas – Moral autonomy	CO-1	1. Explain Types of inquiry 2. Explain Senses of Engineering Ethics	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
5	Kohlberg's theory- Gilligan's theory- Consensus and controversy – Models of professional Roles	CO-2	1. Differentiate between Kohlberg's theory and Gilligan's theory 2. Explain about Models of	▫ Lecture ▫ Powerpoint presentation	ENDEXAM

			professional Roles		
6	Theories about right action- Selfinterest-Customs	CO-2	1. Explain about theories about right action 2. Explain about Customs	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
7	Uses of Ethical theories – Valuing time – Cooperation – Commitment.	CO-2	1. What are the Uses of Ethical theories 2. Discuss about	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
8	UNIT III: ENGINEERING AS SOCIAL EXPERIMENTATION: Engineering As Social Experimentation – Framing the problem	CO-3	1. Explain about Engineering As Social Experimentation	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
9	Determining the facts – Codes of Ethics – Clarifying Concepts – Application issues		1. Explain about Codes of Ethics	▫ Lecture ▫ Powerpoint presentation	
10	Common Ground - General Principles – Utilitarian thinking - respect for persons	CO-3	1. Explain about Common Ground. 2. Discuss about Utilitarian thinking	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
11	UNIT IV: ENGINEERS RESPONSIBILITY FOR SAFETY AND RISK Safety and Risk – Assessment of safety and risk	CO-4	1. Define Safety and Risk 2. Explain about Assessment of safety and risk	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
12	Risk benefit analysis and reducing risk - Safety and the Engineer	CO-4	1. Explain about Risk benefit analysis 2. Discuss about Safety and the Engineer	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
13	Designing for the safety - Intellectual Property Rights (IPR)	CO-4	1. Discuss about designing for the safety 2. Explain Intellectual Property Rights	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
14	UNIT V: GLOBAL ISSUES Globalization – Cross culture issues - Environmental Ethics – Computer Ethics	CO-5	1. Explain Cross culture issues 2. What is meant by Environmental Ethics	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
15	Computers as the instrument of Unethical behaviour – Computers as the object of Unethical acts.	CO-5	1. Explain Computers as the instrument of	▫ Lecture ▫ Powerpoint presentation	ENDEXAM

			behaviour		
16	Autonomous Computers- Computer codes of Ethics- Weapons Development-	CO-5	1. Explain about Computer codes of Ethics 2. Discuss about Weapons Development	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
17	Ethics and Research- Analyzing Ethical Problems in research	CO-5	1. Explain about Ethics and Research 2. Explain about	▫ Lecture ▫ Powerpoint presentation	ENDEXAM
18	ENDEXAM				