



PROFESSIONAL ETHICS

Subject Code : MC500HS
Regulations : R16 - JNTUH
Class : III Year B.Tech EEE I Semester



Department of Electrical and Electronics and Engineering

BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

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PROFESSIONAL ETHICS (MC500HS)

Course Planner

I. COURSE OVERVIEW

To enable the students to imbibe and internalize the Values and Ethical Behavior in the personal and Professional lives.

II. PREREQUISITES.



- Understand the professional Rules of conduct for Engineers.
- Appreciate codes of conduct, professional Rules of conduct.
- Recognize the conflict of interest and Develop strategies
- Understand the importance of communication with all stakeholders.
- Apply practical strategies for handling ethical dilemmas.

III. COURSE OBJECTIVE.

1	Students will understand the importance of Values and Ethics in their personal lives and professional careers
2	The students will learn the rights and responsibilities
3	Responsibilities of employee, team member and a global citizen.

IV. COURSE OUTCOME

Sl.No	Description	Knowledge Level (Blooms Level)
1	Understanding basic purpose of profession, professional ethics and various moral and social issues.	Application (Level2)
2	Awareness of professional rights and responsibilities of a Engineer, safety and risk benefit analysis of a Engineer	Remember(Level 1)
3	Acquiring knowledge of various roles of Engineer In applying ethical principles at various professional levels	Analyze, Create (Level 4, Level 6)
4	Professional Ethical values and contemporary issues	Analyze (Level 4)
5	Excelling in competitive and challenging environment to contribute to industrial growth.	Analyze (Level 2)

V. HOW PROGRAMME OUT COME ARE ASSESSED.

	Programme outcome PO	Level	Proficiency assessed by
PO1	Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.	3	Assignment
PO2	Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.	3	Assignment
PO3	Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.	2	Assignment
PO4	Conduct investigations of complex problems: Use	2	Assignment

	research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.		
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern Ethical Tools	-	-
PO6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the Computer Science and Engineering professional engineering practice.	1	Assignment
PO7	Environment and sustainability: Understand the impact of the Computer Science and Engineering professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.	-	-
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.	-	-
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	-	-
PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.	-	-
PO11	Project management and finance: Demonstrate knowledge	-	-



	and Understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.		
PO12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the Broadest context of technological change.	2	Research

SLIGHT (LOW) 2. MODERATE (MEDIUM) 3. SUBSTANTIAL (HIGH) NONE

VI. Program Specific Outcomes (PSOs)

	Program Specific Outcomes (PSO)	Level	Proficiency assessed by
PSO1	Design and development of high voltages and current equipments to know the performance of electrical equipments by testing.	1	Assignments, seminars
PSO2	Testing techniques for research and advanced studies in Electrical and Electronics engineering	1	Assignments, seminars

1 SLIGHT (LOW) 2. MODERATE (MEDIUM) 3. SUBSTANTIAL (HIGH) 4 NONE

VII. JNTUH SYLLABUS

UNIT – I:

Introduction to Professional Ethics: Basic Concepts, Governing Ethics, Personal & Professional Ethics, Ethical Dilemmas, Life Skills, Emotional Intelligence, Thoughts of Ethics, Value Education, Dimensions of Ethics, Profession and professionalism, Professional Associations, Professional Risks, Professional Accountabilities, Professional Success, Ethics and Profession.

UNIT – II:

Basic Theories: Basic Ethical Principles, Moral Developments, Deontology, Utilitarianism, Virtue Theory, Rights Theory, Casuist Theory, Moral Absolution, Moral Rationalism, Moral Pluralism, Ethical Egoism, Feminist Consequentialism, Moral Issues, Moral Dilemmas, Moral Autonomy.

UNIT – III:

Professional Practices in Engineering: Professions and Norms of Professional Conduct, Norms of Professional Conduct vs. Profession; Responsibilities, Obligations and Moral Values in Professional Ethics, Professional codes of ethics, the limits of predictability and Responsibilities of the engineering profession
Central Responsibilities of Engineers - The Centrality of Responsibilities of Professional Ethics; lessons from 1979 American Airlines DC-10 Crash and Kansas City Hyatt Regency Walk away Collapse.

UNIT – IV:



Work Place Rights & Responsibilities, Ethics in changing domains of Research, Engineers and Managers; Organizational Complaint Procedure, difference of Professional Judgment within the Nuclear Regulatory Commission (NRC), the Hanford Nuclear Reservation. Ethics in changing domains of research - The US government wide definition of research Misconduct, research misconduct distinguished from mistakes and errors, recent history of Attention to research misconduct, the emerging emphasis on understanding and fostering Responsible conduct, responsible authorship, reviewing & editing.

UNIT – V:

Global issues in Professional Ethics: Introduction – Current Scenario, Technology Globalization of MNCs, International Trade, World Summits, Issues, Business Ethics and Corporate Governance, Sustainable Development Ecosystem, Energy Concerns, Ozone Deflection, Pollution, Ethics in Manufacturing and Marketing, Media Ethics; War Ethics; Bio Ethics, Intellectual Property Rights.

VIII LESSON PLAN WEEK WISE

Session	Week	Topic	Course learning outcome	References
UNIT-I				
1.	1	Introduction to Professional Ethics	knowledge	T1,R1
2.		Basic Concepts Governing Ethics	knowledge	T1,R1
3.		Personal & Professional Ethics, Ethical Dilemmas	understand	T1,R1
4.		Life Skills, Emotional Intelligence	understand	T2,R2
5.	2	Thoughts of Ethics, Value Education	knowledge	T2,R2
6.		Profession and professionalism, Professional, Associations, Professional Risks	Understand knowledge	T1,R1
7.		Professional Accountabilities, Professional Success, Ethics and Profession.	Knowledge	T2,R2
UNIT-II				
8.	3	Basic Ethical Principles, Moral Developments	understand	T1,R1
9.		Deontology, Utilitarianism	Analyze	T1,R1
10.		Virtue Theory, Rights Theory,	analyze	T2,R2
11.		Moral Absolution	understand	T2,R2
12.	4	Moral Rationalism	Understand	
13.		Moral Pluralism,	Knowledge	T1,R1
14.		Ethical Egoism	Analyzed	T1,R1



15.		Feminist Consequentialism	Understand	T2,R2
		MOCK TEST-1		
16.	5	Moral Issues	Understand	T1,R1
17.		Moral Dilemmas	Understand	T2,R2
18.		Moral Autonomy	knowledge	T1,R1
		Bridge class #1		
		UNIT-III		
19.		US-AMERICAN CRASH	Evaluate	T1R1
20.		Professional Conduct,	Understand	T2,R2
21.		Norms of Norms of Professional Conduct	Knowledge	T2,R2
22.		. Profession; Responsibilities,	Understand	T2,R2
		Bridge class #2		
23.	7	Obligations and Moral Values in Professional Ethics	Understand	T1,R1
24.		Professional codes of ethics, the limits of predictability	Knowledge analyze	T2,R2
25.		responsibilities of the engineering profession	Understand	T1,R1
26.		Central Responsibilities of Engineers -	Understand	T1,R1
		Bridge class #3		
27.	8	The Centrality of Responsibilities of Professional	Understand Knowledge	T2,R2
28.		Ethics; lessons from 1979	knowledge	T1,R1
29.		American Airlines DC-10 Crash	Knowledge	T2,R2
30.		Kansas City Hyatt Regency Walk away Collapse	Analyze Understand	T1,R1
		Bridge class #4		
		UNIT-IV		
31.	9	Work Place Rights & Responsibilities, -	Analyze	T1,R1
		ETHICS vs MORALS	Knowledge	T2,R2
32.		Ethics in changing domains of Research, Engineers	Knowledge	
33.		Managers; Organizational Complaint Procedure, difference of Professional Judgment	Knowledge	T1,R1
34.		Nuclear Regulatory Commission (NRC), the	Evaluate	



		Hanford Nuclear Reservation.		T2,R2
		Bridge class #5		
35.	10	within the Ethics in changing domains of research	Recall understand	T1,R1
36.		The US government wide definition of research	Knowledge	T2,R2
37.		misconduct, research misconduct distinguished from mistakes and errors	knowledge	T1,R1
38.		recent history of attention to research misconduct,	Recall understand	T1,R1
		Bridge class #6		
39.	11	the emerging emphasis on understanding and fostering	analyze	T2,R1
40.		emphasis on understanding and fostering responsible conduct	understand	T1,R1
41.		responsible authorship	understand	T2,R2
42.		reviewing & editing	knowledge	T2,R2
		Bridge class #7		
UNIT-V				
43.	12	Global issues in Professional Ethics:, , Intellectual Property Rights	Understand	T1,R1
44.		Introduction – Current Scenario,	Knowledge	T2,R2
45.		Technology	Understand	T1,R2
46.		Globalization of MNCs,	Evaluate	T1,R1
47.		International Trade	Understand	T2,R2
		Bridge class #8		
48.		13	World Summits,	
49.	Business Ethics		Knowledge	T2,R2
50.	Corporate Governance		Understand	T2,R2
51.	Sustainable Development Ecosystem		Understand Analyze	T1,R1
	MOCK TEST-2			
52.	14	Energy Concerns	Understand	T1,R1
53.		Ozone	Evaluate	T1,R1
54.		Pollution,	Understand	T1,R1
55.		Ethics in Manufacturing	Understand	T2,R2
		Bridge class #9		
56.	15	Ethics in Marketing	Evaluate	T1,R1



57.		Media Ethics	Understand	T1,R1
58.		War Ethics	Understand	T2,R2
59.		Bio Ethics	Understand	T1,R1
		Bridge class #10		
60.	16	Intellectual Property	Knowledge	T2,R2
61.		Intellectual Rights	Understand	T1,R1
62.		Revision of Unit I, II and III		
63.		Revision of Unit VI and V		
		Bridge class #11		
		MID EXAMS -2		

SUGGESTED BOOKS:

Text books:

1. Professional Ethics: R. Subramanian, Oxford University Press, 2015.
2. Ethics in Engineering Practice & Research, Caroline Whitbeck, 2e, Cambridge University Press 2015.

REFERENCES:

1. Engineering Ethics, Concepts Cases: Charles E Harris Jr., Michael S Pritchard, Michael J Robins, 4e, Engage learning, 2015.
 1. Business Ethics concepts & Cases: Manuel G Velasquez, 6e, PHI, 2008.

IX. MAPPING COURSE OUTCOME LEADING TO THE ACHIEVEMENT OF

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	P O1	P O2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PSO 3
CO1	2	2	2	2	3	2	2	-	2	2	2	2	1	2	2
CO2	3	3	2	3	2	1	1	-	2	2	2	2	1	2	2
CO3	2	2	3	2	2	2	1	-	3	1	3	3	1	1	2



CO4	3	3	2	3	3	1	2	-	2	2	2	2	1	2	2
CO5	3	3	3	2	2	2	2	-	3	2	3	3	2	2	3
CO6	3	2	3	3	3	2	2	-	3	3	3	3	2	3	2
Average	2.67	2.5	2.5	2.5	2.5	1.67	1.67	-	2.5	2	2.5	2.5	1.33	2	2.17
Avg (Rounded)	3	3	3	3	3	2	2	-	3	2	3	3	1	2	2

I. PROGRAMME OUTCOME AND PROGRAMME

X. QUESTION BANK: (JNTUH)

DESCRIPTIVE QUESTIONS:

UNIT – I

SHORT QUESTIONS

S no	Questions	Blooms Taxonomy Level	Course Outcomes
1	Define professional ethics?	knowledge	1
2	What are called governing ethics?	understand	2
3	What are ethical dilemmas	analyze	4
4	Define value education?	understand	2
5	What are called life skills	knowledge	1

LONG QUESTIONS:

S no	Questions	Blooms taxonomy level	Course outcomes
1	Elaborate the concept of value education?	Knowledge	1
2	What are various dimensions of ethics	evaluate	5
3	Explain how professional associations help professionals in organizations	evaluate	5
4	Bring the basic difference between the ethics and profession	analyze	4

SHORTQUESTIONS

S.no	Question	Blooms Taxonomy Level	Course Outcomes
1	Define basic ethical principles, how principles govern profession?	knowledge	1
2	Explain various theories of professional ethics?	knowledge	1
3	Define feminist consequentialism in detail?	understand	2



4	What are called moral issues and how they influence profession?	create	6
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LONG QUESTIONS:

S.No	Question	Blooms Taxonomy Level	Course Outcome
1	What are called ethical principles?	Knowledge	1
2	What are called moral developments	Knowledge	1
3	Define deontology?	Knowledge	1
4	What is casuist theory?	Analyze	4
5	What is moral absolution?	Knowledge	1
6	What is moral rationalism?	Analyze	4
7	What is called moral pluralism?	Knowledge	1
8	Define ethical egoism?	Analyze	4
9	What are called moral dilemmas?	Analyze	4
10	Define moral autonomy?	Knowledge	1

UNIT-3

SHORT QUESTIONS

S No	Question	Blooms Taxonomy Level	Course Outcomes
1.	Define the norms of professional conduct?	knowledge	1
2	What are professional responsibilities?	knowledge	1
3	What are professional codes of ethics?	evaluate	5
4	What are professional obligations?	knowledge	1
5	What are moral values in professional ethics?	evaluate	5

LONG QUESTIONS

S No	Question	Blooms Taxonomy Level	Course Out come
1	Define various norms of professional ethics?	Understand knowledge	2
2	Bring out the basic differences between responsibilities and obligations?	evaluate	5
3	Explain the differences between the moral and ethical values?	evaluate	5
4	Elaborate the professional codes of ethics?	understand	2
5	What are the central responsibilities of engineering profession?	Knowledge	1

UNIT-4
SHORT QUESTIONS

S no	Question	Blooms Taxonomy Level	Course outcomes
1	What are the changing domains of ethics?	knowledge	1
2	What is professional judgment?	understand	2
3	What is nuclear regulatory commission?	knowledge	1
4	What is research misconduct?	understand	2
5	Define the term errors?	evaluate	5
6	What are called mistakes?	evaluate	5
7	What is responsible authorship?	knowledge	1
8	What is called reviewing?	understand	2
9	Define the term editing?	knowledge	1
10	Who are called as managers?	understand	2

LONG QUESTIONS

S no	Questions	Blooms Taxonomy Level	Course outcomes
1	What are the rights and responsibilities of work place?	understand	2
2	Bring out the basic differences between managers and engineers?	Evaluate	5
3	What is compliant? Explain the organizational complaint?	knowledge	1
4	Explain the US government wide definition of research misconduct?	knowledge	1
5	Bring out the basic difference between errors and mistakes?	Evaluate	5
6	What is the recent history of attention to misconduct?	Understand	2

UNIT-5
SHORTQUESTIONS

S no	Question	Blooms Taxonomy Level	Course Outcome
1	What is globalization	Understand	2
2	What is world summit	knowledge	1
3	What is international trade?	Understand	2
4	Define corporate governance?	Knowledge	1
5	What is ozone deflection?	knowledge	1
6	Define ecosystem?	Knowledge	1
7	Explain about media ethics?	analyze	4
8	What are war ethics?	understand	2



9	Define bio-ethics?	knowledge	1
10	What are intellectual property rights?	Knowledge	1

LONG QUESTIONS

S no	Questions	Blooms Taxonomy Level	Course Outcomes
1	Explain the global issues in professional ethics	Knowledge	1
2	Explain how MNC's came in to existence?	Understand	2
3	What are intellectual property rights? Explain its importance?	Knowledge	1
4	Explain what are the reasons for pollution and ozone deflection?	Understand	2
5	What are the terms business ethics and energy concerns?	Knowledge	1
6	What are the ethics related to marketing and manufacturing?	knowledge	1

OBJECTIVE QUESTIONS

UNIT-1

- Ethics is very important for today's environment of _____ (conflicts & stress) in profession.
- Professional has knowledge and skills that he/she keeps updating with the time through reading and practicing innovating is referred to as _____ (professional success)
- _____ (accountability) is a concept used in ethics to denote an organization or individual's ability to shoulder the responsibility of their actions.
- If the risks arise because of unethical practices or conduct, the professional is to be blamed it is known as _____ (professional risks).

UNIT-2

- _____ (profession) a type of job that requires special training and skill especially one that needs a high level of education such as medical, legal, teaching.
- Ethics is the only means to an end is a thought given by _____ (swami Vivekananda).
- _____ is high standard that you expect from a person who is well trained in a particular job.
- Respect the rights of others is _____ (moral autonomy).
- _____ (deontology) defined as duty ethics by CD Board the theory which is created by _____ (Immanuel Kant).

6. _____(utilitarianism) which is greatest happiness principle, of that an action is judged by consequences of the action.
7. Good judgment and wisdom are at the core of rational life is called _____(virtue theory).
8. People have rights and these form the basis for deciding the morality of ,actions is _____(right theory).

UNIT-3

1. The professionals has to create his/her own norms and standards for professional conduct and follow them scrupulously is known as _____(professional responsibility).
2. As an employee professional gets a lot of information ,some such information may have to be kept confidential which is known as _____(professional confidentiality).
3. An employee needed to bound to obey orders issued to employee and perform the duties assigned by superiors is called _____(respect for authority).
4. One must lead, inspire, influence, encourage the team members to strive better is known as _____(professional accountability).
5. Companies, having good business practices And strong ethical policies do well by gaining investor confidence is _____(corporate governance).

UNIT-4

1. Disclosure of information about unethical acts in an organization to an authority with in or outside the organization which help to prevent such an unethical acts by an motive of an employee is known as _____(whistle blowing)
2. Right to refusal bound to confidentiality ,right to talk freely about professional matters professional judgments are known as _____(rights of professional)
3. Appreciation of professional expertise commitment to profession ,shared vision are said to be _____(collegiality of professions)
4. Reflecting on experience, get more from work life and recreation and matching the ambitions is known as _____(reviewing).
5. _____(editing) process can involve correction, condensation, organization, and many other modifications performed with an intention of producing a correct, consistent, accurate and complete work

UNIT-5

1. Information, entertainment, education, and analysis are part of _____(media ethics).



2. Which can be never justified and can bring term to humanity and completely ravaging the countries which will leave no winner referred to _____(war ethics).
3. _____(bio-ethics) deals with ethics in medicine and biology.

WEBSITES:

1. www.universalhumanvalues.info
2. www.uptu.ac.in
3. www.storyofstuff.com

EXPERT DETAILS:

1. Prof. RR Gaur, Professor of Mechanical Engineering (Retd.), PhD, IIT Delhi
2. Prof. Rajeev Sangal, Professor & Director, IIIT Hyderabad
3. Shri Ganesh Prasad Bagaria, Associate Professor, HBTI Kanpur

JOURNALS:

1. The Journal Of Ethics
2. The Journal of Management Development – Emerald
3. International Journal of Human Values

LIST OF TOPICS FOR STUDENT SEMINAR:

1. Ethical Living in a county like India
2. Women professional more ethical than men
3. Ethical values in different cultures
4. Professional values like companies like Infosys, Wipro, GE and Tata

LIST OF TOPICS FOR STUDENT SEMINARS.

1. Understanding of Professional Ethics.
2. Different Theories of Ethics.
3. Professional Responsibilities.
4. National and International scenario of Ethics.

PROJECTS:

1. Ethical practices in IT industries.
2. Ethical Practices in Banks
3. Good governance in government in and Fortune five hundred companies