

Course code	Course Name	L-T-P - Credits	Year of Introduction
HS482	PROFESSIONAL ETHICS	3-0-0-3	2016
Prerequisite: NIL			
Course Objectives			
<ol style="list-style-type: none"> To create awareness on professional ethics and Human Values To inculcate knowledge and exposure on Safety and Risk, Risk Benefit Analysis To provide basic familiarity about Engineers as responsible Experimenters, Research Ethics, Codes of Ethics, Industrial Standards. 			
Syllabus			
Morals, values and Ethics - Senses of 'Engineering Ethics' - Kohlberg's theory – Gilligan's theory - Engineering as Experimentation - Research Ethics - Safety and Risk – case study - Collegiality and Loyalty - Intellectual Property Rights (IPR) - Multinational Corporations – Business Ethics - Environmental Ethics – Computer Ethics			
Expected outcome.			
The students will			
<ol style="list-style-type: none"> Understand the importance of ethics, morals and values in life Be able to assess safety and risk and do risk benefit analysis Be guided to become responsible engineers, experimenters, researchers or business men 			
Text Books:			
<ol style="list-style-type: none"> Charles E Harris, Michael S Pritchard and Michael J Rabins, "Engineering Ethics Concepts and Cases", Thompson Learning, 2000. Jayasree Suresh and B. S. Raghavan, Human Values and Professional Ethics, 3rd Edition, S. Chand Publications Mike Martin and Ronald Schinzinger, "Ethics in Engineering", McGraw-Hill, New York, 2005. 			
References:			
<ol style="list-style-type: none"> Charles D Fledderman, Engineering Ethics, Prentice Hall, New Mexico, 1999. David Ermann and Michele S Shauf, Computers, Ethics and Society, Oxford University Press, 2003 Edmund G Seebauer and Robert L Barry, Fundamentals of Ethics for Scientists and Engineers, Oxford University Press, Oxford, 2001. Govindarajan M, Natarajan S, Senthil Kumar V S., Engineering Ethics, Prentice Hall of India, New Delhi 2004. John R Boatright, Ethics and the conduct of Business, Pearson education, New Delhi, 2003. Prof. (Col) P S Bajaj and Dr. Raj Agrawal, Business Ethics – An Indian Perspective, Biztantra, New Delhi, 2004. 			
Course Plan			
Module	Contents	Hours	Sem. Exam Marks
I	Morals, values and Ethics – Integrity – Work ethic – Service learning – Civic virtue – Respect for others – Living peacefully – Caring – Sharing – Honesty – Courage – Valuing time – Cooperation – Commitment – Empathy – Self-confidence – Character – Spirituality – Introduction to Yoga and meditation for professional excellence and stress management	7	15%

II	Senses of 'Engineering Ethics' – Variety of moral issues – Types of inquiry – Moral dilemmas – Moral Autonomy – Kohlberg's theory – Gilligan's theory – Consensus and Controversy – Professions and Professionalism – Professional Ideals and Virtues – Uses of Ethical Theories	7	15%
FIRST INTERNAL EXAMINATION			
III	Engineering as Experimentation – Engineers as responsible Experimenters – Research Ethics -Codes of Ethics – Industrial Standards - A Balanced Outlook on Law – The Challenger Case Study	7	15%
IV	Safety and Risk – Assessment of Safety and Risk – Risk Benefit Analysis – Reducing Risk – The Government Regulator's Approach to Risk - Chernobyl Case Studies and Bhopal	7	15%
SECOND INTERNAL EXAMINATION			
V	Collegiality and Loyalty – Respect for Authority – Collective Bargaining – Confidentiality – Conflicts of Interest – Occupational Crime – Professional Rights – Employee Rights – Intellectual Property Rights (IPR) – Discrimination	7	20%
VI	Multinational Corporations – Business Ethics - Environmental Ethics – Computer Ethics - Role in Technological Development – Weapons Development – Engineers as Managers – Consulting Engineers – Engineers as Expert Witnesses and Advisors – Honesty – Moral Leadership – Sample Code of Conduct	7	20%
END SEMESTER EXAM			

Note: Internal assessment – 10 marks for case study/micro projects and 40 marks for two internal tests each of **20 marks**.

QUESTION PAPER PATTERN (End Sem Exam)

Maximum Marks : 100

Exam Duration: 3 hours

Part A

Answer any two out of three questions uniformly covering Modules 1 and 2 together. Each question carries 15 marks and may have not more than four sub divisions.

(15 x 2 = 30 marks)

Part B

Answer any two out of three questions uniformly covering Modules 3 and 4 together. Each question carries 15 marks and may have not more than four sub divisions.

(15 x 2 = 30 marks)

Part C

Answer any two out of three questions uniformly covering Modules 5 and 6 together. Each question carries 15 marks and may have not more than four sub divisions.

(20 x 2 = 40 marks)