

Indian Institute of Information Technology Bhagalpur

Electronics and Communication Engineering (ECE)

B.Tech. Curricula and Syllabus

Semester-VII

Curricula:

HS401	Professional Ethics for Engineers	2	0	0	2
	Elective – II	3	1	0	4
	Elective – III	3	1	0	4
	Open Elective	3	1	0	4
HS45X	Foreign Language	0	0	2	2
EC491	Minor Project	0	0	6	4
SAI-S-III	Industry Internship	0	0	0	2

Syllabus:

Course Code	Course name	L	T	P	C	Year	Semester
HS401	Professional Ethics in Engineers	2	0	0	2	4 th	7 th
Course objective: To enable the students to create an awareness on Engineering Ethics and Human Values, to instil Moral and Social Values and Loyalty and to appreciate the rights of others.							
Topic	Contents						No. of Lectures
Module-I	HUMAN VALUES: 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.						05
Module-II	ENGINEERING ETHICS: Senses of Engineering ethics, Variety of moral issues, types of inquiry- Moral dilemmas, Moral Autonomy, Kohlberg's theory, Gilligan's theory, Consensus and Controversy, Models of professional roles, Theories of right action, Self-interest, Customs and Religion, Uses of Ethical theories.						05
Module-III	ENGINEERING AS SOCIAL EXPERIMENTATION: Engineering as Experimentation, Engineers as responsible experimenters, Code of ethics, A Balanced Outlook on Law						04
Module-IV	SAFETY, RESPONSIBILITIES AND ETHICS: Safety and Risk, Assessment of Safety and risk, Risk Benefit Analysis and Reducing Risk, Respect for authority, Collective Bargaining, Confidentiality, Conflict of interest, Occupational crime, Professional Rights, Employee Rights, Intellectual Property Rights (IPR), Discrimination						05

Module-V	GLOBAL ISSUES: Multinational Corporations, Environmental Ethics, Computer ethics, Weapons Development, Engineers as managers, Consulting engineers, Engineers as Expert Witnesses and Advisors, Moral Leadership, Code of conduct, Corporate Social Responsibility	05
Total		24
Text	<ol style="list-style-type: none"> 1. Mike W Martin and Roland Schinzinger, <i>Ethics in Engineering</i>, Tata McGraw Hill, 2003. 2. Govindarajan M, Natarajan S, Senthil Kumar V S, <i>Engineering Ethics</i>, Prentice Hall of India, 2004. 	