16HS301 PROFESSIONAL ETHICS

Hours Per Week :

L	T	P	C
2	-	-	2

Total Hours :

L	T	P	WA/RA	SSH/HSH	CS	SA	S	BS
30	-	-	5	30	-	5	-	2

Course Description and Objectives:

This course offers insight into workplace rights of people, their safety concerns and more importantly the ethics that are to be followed by professionals and corporates. The objective of the course is to bring in awareness among the students about human values, social responsibility and the ethics to be followed by engineering professionals.

Course Outcomes:

The student will be able to:

- understand professional responsibilities and ethics in the workplace.

- have knowledge of contemporary issues related to personal and professional interactions at the workplace.

- understand the impact of engineering solutions in global and societal context.

SKILLS:

✓ *Analyze the issues faced by society and business world related to safe technologies/ practices, employee rights, resource sharing and allocation, team work, organizational dynamics, legislations related to business and technology, discrimination.*

✓ *Appreciate the need for workplace etiquette and proper code of conduct.*

✓ *Construct and evaluate arguments during decision making by considering viewpoints of all the stakeholders.*

✓ *Analyze one's own beliefs and values during interpersonal and intra-organizational conflicts.*

✓ *Detect inconsistencies and common errors in reasoning during discussions and practices.*

UNIT - 1   **L- 06**

HUMAN VALUES : Morals, Values and Ethics, Integrity, Work Ethic, Service Learning, Civic Virtue – Respect for Others – Living Peacefully – Caring – Sharing – Honesty – Courage – Valuing Time – Co-operation – Commitment – Empathy – Self-Confidence – Character – Spirituality.

UNIT - 2   **L- 06**

ENGINEERING ETHICS & **ENGINEERING AS SOCIAL EXPERIMENTATION :** Engineering Ethics - Variety of moral issues – types of inquiry moral dilemmas – moral autonomy – The problems of Many Hands – Kohlburg's theory – Gilligan's theory Impediments to Responsible Action; Engineering as social experimentation - Codes of ethics - A balanced outlook on law - The challenger case study.

UNIT - 3   **L- 06**

ENGINEER'S RESPONSIBILITY FOR SAFETY : 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.

UNIT - 4   **L- 06**

WORKPLACE RIGHTS AND RESPONSIBILITIES & WORK ENVIRONMENT : Workplace Rights and Responsibilities - Engineers and Managers, Oganizational complaint procedures, Government agencies, Resolving Employee concerns, Limits on acceptable behaviour in large corporation; Work Environment - Ethical and legal considerations, Organizational responses to offensive behaviour and harassment, Ethics in a Global Context.

UNIT - 5   **L- 06**

GLOBAL ISSUES : 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.

TEXT BOOK:

1.   Mike Martin and Roland Schinzinger, "Ethics in Engineering", McGraw Hill, New York, 2005.

REFERENCE BOOKS:

1.   Prof. (Col) P S Bajaj and Dr. Raj Agrawal, "Business Ethics – An Indian Perspective", Biztantra, New Delhi, 2004.

2.   Charles E Harris, Michael S. Protchard and Michael J Rabins, "Engineering Ethics – Concepts and Cases", Wadsworth Thompson Learning, United States, 2000.

3.   Edmund G Seebauer and Robert L Barry, "Fundamentals of Ethics for Scientists and Engineers", Oxford University Press, Oxford, 2001.