ME2T6   **PROFESSIONAL ETHICS**   **Credits: 2**

Lecture: 2 periods/week   **Internal assessment: 30 marks**
Tutorial: - -   **Semester end examination: 70 marks**

Objectives:

1. Increase ethical sensitivity

2. Increase ethical Knowledge

3. Raise ethical issues in class a few times, allow some discussion, point out pitfalls of students proposals, and conclude by describing some standard ways of handling them, explaining advantages and disadvantages.

4. Include hard ethical issues in design problems and advise them to seek advice from "professionals" (list of practitioners, professional committees, other experts). This is a chance to learn about resources other then the code.

Learning outcomes:

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

1. Students can understand and analyze healthcare ethics theory and methods as well as major applied topics.

2. Students can critically relate healthcare ethics with multi-disciplinary fields in health care as a diverse and global enterprise (e.g., empirical research, law, medicine, philosophy, religion, science).

3. Students can research and write scholarly essays, teach and communicate effectively, and present academic papers that present cogent arguments (s), engage scholarly literature, and demonstrate critical thinking and analysis.

4. Students can integrate academic learning with experimental learning in clinical/organizational rotations as a function of service-learning and development as a healthcare ethics professional.

5. Students can function with expertise in healthcare ethics and provide ethical leadership with the knowledge, skills, and competencies that characterize professional services (e.g., ethics consultations, membership on ethics committees and institutional review boards.

UNIT I
PROFESSION :
Definition, engineering and professionalism, Engineering Ethics – Definition, three types of ethics

UNIT II
CONNOTATIONS OF ENGINEERING ETHICS:
code of ethics- Role of Code – Kohlberg's theory – Gilligan theory

UNIT III
ENGINEERING AS SOCIAL EXPERIMENTATION:
Engineers social responsibility – Promises and perils of technology (Technological Pessimism, Technological optimism)

UNIT IV
COMPUTER ETHICS:
Computer hacking – Computer privacy - Computer as an instrument for unethical behaviour

UNIT V
ENVIRONMENTAL ETHICS:
Criteria for clean Environment – Respect for nature.

UNIT VI
HUMAN VALUES:
Morals, values and ethics, Work Ethics, Respect for others – Mutual Co-existance – Honesty, courage, valuing time – Empathy

UNIT VII
TRUST AND RELIABILITY:
Dishonesty – Confidentiality

UNIT VIII
ENGINEERS RESPONSIBILITY AND RIGHTS:
Respect for authority Moral autonomy – Employee Rights

Learning resources

Text books
1. Mike Martin and Roland Schinzinger. Ethics in Engineering, (3rd edition), McGraw Hill Publications, 2012.
2. Charles E Harris and Micheal J Rabins. Engineering Ethics, (4th edition), Cengage Learning, 2009.

Reference books:

1. Seebauer Edmund, G. and Robert L Barry. "Fundamentals of Ethics for Scientists and Engineers", Oxford University Press, 2001.
2. Murthy, P.S.R. "Indian Culture Values and Professional Ethics", (2nd edition), BS Publications, 2012.
3. Caroline Whitback. "Ethics in Engineering Practice and Research", (2nd edition), Cambridge University Press, 2012.