1/4 B.Tech. SECOND SEMESTER PROFESSIONAL ETHICS (Common to all branches during I B.Tech., II Semester) Course Code(s): CE2T2, ME2T2, CS2T2, IT2T2, AE2T2, EE2T2, EC2T2

Lecture: 3 periods/week

Credits: 3 Internal assessment: 30 marks Semester end examination: 70 marks

Course Objectives:

- To inculcate the sense of social responsibility.
- To develop a firm ethical base
- To make the students realize the significance of ethics in professional environment.

Course Outcomes:

At the end of course the student will have:

- 1. Improved knowledge of ethics
- 2. High sense of responsibility
- 3. Environmental awareness
- 4. Professional outlook
- 5. Development of a broad culture.

Unit I

Profession-----Definition Three types of ethics. Engineering ethics Rights and responsibilities of an engineer.

Unit II

Evolution of engineering ethics Code of ethics Kohlberg's theory Gilligan's theory

Unit III

Engineering as social experimentation Engineer's social responsibility

Unit IV

Computer ethics Ethical hacking Privacy

UNIT V

Environmental ethics. Livable environment Technology assessment.

Learning Resources

Reference Books:

- 1. Ethics in engineering: Mike W.Martin Roland, Mac Grow Hill.Schinzinger
- 2. Engineering ethics-----M.Govindarajan, S.Natarajan&V.S.Senthil Kumar. Eastern economy Edn.PHI
- 3. Engineering ethics---Harris pitch and Rabbins, cengage.
- 4. Caroline whit back---Ethics in engineering practice and research-----Cambridge.

Web Resources:

- 1. <u>http://nptel.ac.in/courses.php</u>
- 2. <u>http://jntuk-coeerd.in/</u>