

3/4 B.Tech. FIRST SEMESTER

EE5T7 PROFESSIONAL ETHICS Credits: 2

Lecture: 2 periods/week

Internal assessment: - marks

Tutorial: 0 period /week

Semester end examination: - marks

Objective : To impart ethics and to inculcate professionalism in the students

Learning outcomes : Students are able to cultivate

- 1. Ethical values**
- 2. Team culture**
- 3. Responsibility**
- 4. Professionalism**

UNIT I

Ethics and Professionalism - What Is Engineering Ethics - Engineering as a Profession

UNIT II

Moral Reasoning and Codes of Ethics - Moral Choices and Ethical Dilemmas -Codes of Ethics

UNIT III

Moral Frameworks - Rights Ethics, Duty Ethics, Utilitarianism - Virtue Ethics, Self-Realization
Ethics - Computer Ethics

UNIT IV

Engineering as Social Experimentation - Engineering as Experimentation - Engineers as
Responsible Experimenters

UNIT V

Commitment to Safety - Safety and Risk - Assessing and Reducing Risk

UNIT VI

Workplace Responsibilities and Rights - Confidentiality and Conflicts of Interest - Teamwork
and Rights

UNIT VII

Truth and Truthfulness - Whistle-Blowing - Honesty and Research Integrity

UNIT VIII

Environmental Ethics - Engineering, Ecology, and Economics – Global Issues

Learning Resources

Reference Books:

1. Engineering Ethics – Govindarajan Natarajan and Senthil Kumar, Eastern Economy Edition, PHI
2. Engineering Ethics – Harris Pitchard And Rabbins, Cengage
3. Mike Martin and Roland Schnzinger, Ethics in Engineering. Mc Graw Hill
4. PSR Murthy “Indian culture values and professional ethics” – BS publications
5. Edmund G. Seebaner and Robert L. Barry ‘Fundamentals of Ethics for Scientists and Engineers’ – Oxford
6. Caroline Whitback – Ethics in Engineering Practice and Research - Cambridge