

II Year MCA II Semester

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**MC212 PROFESSIONAL ETHICS  
ELECTIVE- I**

**Objective of the Course:**

*This course makes an engineering professional aware of human, moral and ethical implications of technology.*

**UNIT - I (12 Hrs)**

**Engineering Ethics:** Scenses of 'Engineering Ethics' – variety of moral issues – types of inquiry – moral dilemmas – moral autonomy – kohlberg's theory – giligan's theory – consensus and controversy – professions and professionalism – professional ideals and virtues – theories about right action – self –interest – customs and religion – uses of ethical theories.

**UNIT - II (12 Hrs)**

**Engineering As social Experimentation:** Engineering as experimentation – engineers as responsible experimenters – codes of eiths – a balanced outlook on law – the challenger case study.

**UNIT - III (12 Hrs)**

**Engineer's Responsibility for Safety:** Safety and risk – assessment of safety and risk – risk benefit analysis – reducing risk – the three mile island and Chernobyl case studies.

**UNIT - IV (12 Hrs)**

**Responsibilities and Rights:** Collegiality and loyalty – respect for authority – collective bargaining – confidentiality – conflicts of interest – occupational crime – professional rights – employee rights – intellectual property rights (IPR) – discrimination.

**UNIT - V (12 Hrs)**

**Global Issues:** Multinational corporations – environmental ethics– computer ethics– weapons development – engineers as managers – consulting engineers – engineers as expert witnesses and advisors – moral leadership – sample code of conduct.

**Text Books:**

1. Engineering Ethics – Charles D. Fleddermann – Prentice Hall
2. Engineering Ethics – Charles E Harris, Michael S. Partchard Concepts & Cases and Michael J Rabins

**Reference Books:**

1. "Ethics and the conduct of Business" – Pearson Education,
2. Fundamentals of Ethics for Scientists and Engineers – Edmund G Seebauer and Roert L Barry.