BM 301 Social Responsibility and Professional Ethics in Engineering (L: 3 T 0 P 0 CH 3 CR 3)

Engineering and Society: What is Engineering? The Engineering view, The Engineering Image; The Engineer's Challenge: Cost, Deadline, and Safety

Moral Dilemmas in Engineering: Engineering and Business.

Frameworks for Engineering ethics: Moral Thinking and moral theories, codes of Engineering ethics, support for ethical engineers.

Engineering ethics and public policy: Risk Assessment and Communication, product liability, engineering, and sustainable development.

Intellectual property: Foundations of intellectual property, copyrights, patents, and trade secrets, software piracy, software patents, transnational issues concerning intellectual property. Entrepreneurship: prospects and pitfalls, Monopolies and their economic implications, Effect of skilled labor, supply and demand of the quality computing products, pricing strategies.

Case studies in Engineering ethics: Challenger Disaster, Hyatt Regence Walkway collapse, The Pfizer Heart Valve Case, The Therac-25 case, etc.

Reference:

1. Computers, Ethics and Social Values, Johnson &Nissenbaum, Prentice Hall

2. Social Issues in Computing: Putting Computing in Place, Huff &Finholt, McGraw Hill.

3. A Gift of Fire: Social, Legal and Ethical Issues in Computing, Prentice-Hall.

 4. Cyber Ethics: Morality and Law in Cyber Space, Jones & Bartlett.