SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35

Accredited by NBA-AICTE and Accredited by NAAC – UGC with A+ Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

COURSE NAME: 16GE301 Professional Ethics

III YEAR / V SEMESTER

Unit 1 – Engineering Ethics

Topic 1: Sense of Engineering Ethics

What We'll Discuss

TOPIC OUTLINE

Engineering Ethics

Ethical Issues

Morality

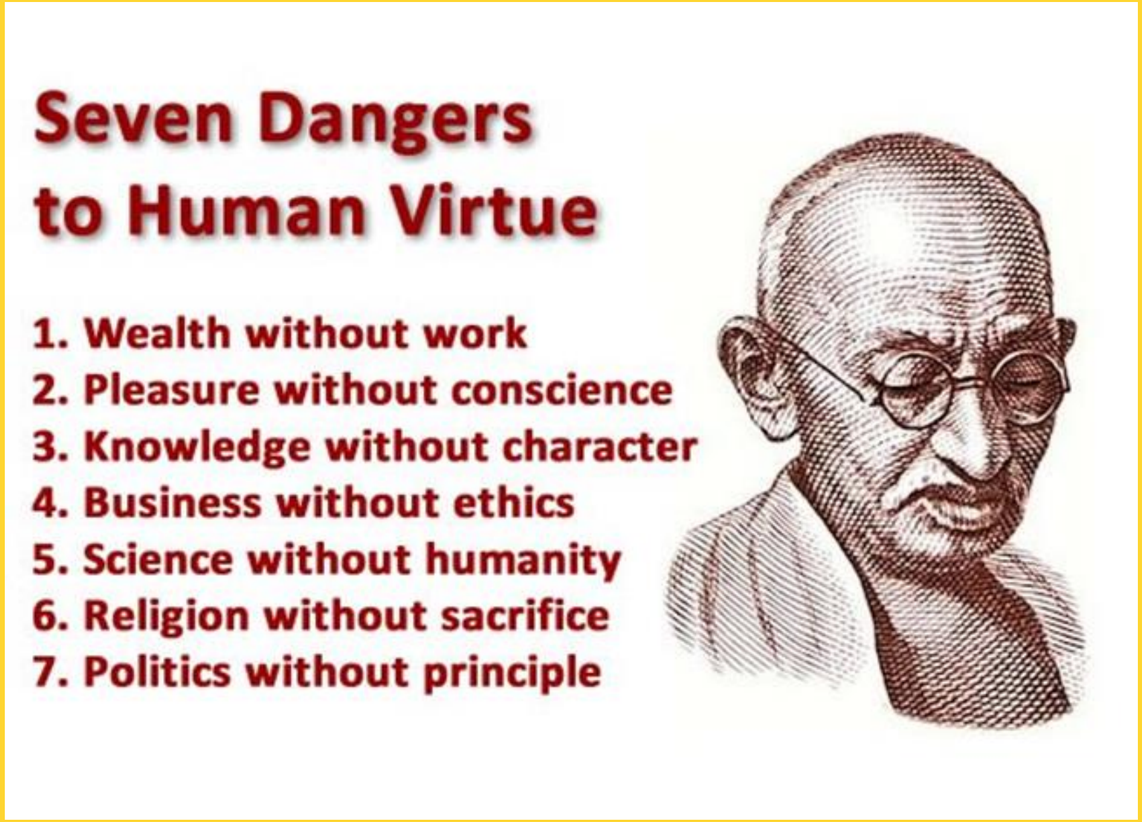
Sense of Engineering Ethics

ENGINEERING ETHICS

- The study of moral issues and decisions confronting individuals and organizations involved in engineering
- The study of related questions about moral ideals, character, policies and relationships of people and organizations involved in technological activity.
- {* Confronting – Challenging
  * ideals - Principles}

ETHICAL ISSUES FACED BY ENGINEERS

- Bribery and Fraud
- Public Safety
- Environmental Protection
- Conflicts
- Moral Dilemmas



MORALITY

Morality is concerned with principles and practices of morals such as:

- What ought or ought not to be done in a given situation?
- What is right or wrong about the handling of a situation?
- What is good or bad about the people, policies, and ideals involved?

MORALITY PROBLEMS

- Lack of vision
- Incompetence among engineers
- Lack of time or lack of proper materials
- A silo mentality
- safety engineers somewhere down the line to catch potential problems.
- Improper use or disposal of the product
- Dishonesty
- Inattention

APPROACHES OF MORAL ISSUES

There are conventionally two approaches in the study of ethics:

- **Micro-ethics** which deals with decisions and problems of individuals, professionals, and companies.
- **Macro-ethics** which deals with the societal problems on a regional/national level. For example, global issues, collective responsibilities of groups such as professional societies and consumer groups.

SENSES OF ENGINEERING ETHICS

Normative Sense

- Knowing moral values
- finding accurate solutions
- justifying moral judgments
- decisions, policies, and values

Descriptive Sense

- specific individual or group of engineers believe and act

SENSES OF ENGINEERING ETHICS

TRAINING IN PREVENTIVE ETHICS

- Stimulating the moral imagination
- Recognizing ethical issues
- Developing analytical skills
- Eliciting a sense of responsibility
- Tolerating disagreement and ambiguity

SENSES OF ENGINEERING ETHICS

IMPEDIMENTS TO RESPONSIBILITY

- Self-interest.
- Fear.
- Self-deception.
- Ignorance.
- Egocentric tendencies.
- Microscopic vision.
- Groupthink.

SENSES OF ENGINEERING ETHICS

Practical skills that will help produce autonomous thought about moral issues.

- Moral awareness
- Cogent moral reasoning
- Moral coherence
- Moral imagination
- Moral communication
- Moral reasonableness
- Respect for persons
- Tolerance of diversity
- Integrity

SENSES OF ENGINEERING ETHICS

- Ethics is an activity and area of inquiry. It is the activity of understanding moral values, resolving moral issues and the area of study resulting from that activity.
- When we speak of ethical problems, issues and controversies, we mean to distinguish them from non moral problems.
- Ethics is used to refer to the particular set of beliefs, attitudes and habits that a person or group displays concerning moralities.
- Ethics and its grammatical variants can be used as synonyms for “morally correct”.

RECALL TIME

ASSESSMENT TIME

THANK YOU