SNS COLLEGE OF TECHNOLOGY

Coimbatore-35.
An Autonomous Institution

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COURSE NAME : 19GET201 PROFESSIONAL ETHICS & HUMAN VALUES

IV YEAR/ VII SEMESTER

UNIT – I ENGINEERING ETHICS

Topic: Senses of Engineering Ethics

What is Professional Ethics?

Professional ethics are principles that govern the behaviour of a person or group in a business environment.

Like values, professional ethics provide rules on how a person should act towards other people and institutions in such an environment.

Unlike values, professional ethics are often codified as a set of rules, which a particular group of people use.

This means that all those in a particular group will use the same professional ethics, even though their values may be unique to each person.

What is Professional Ethics?

Professional Responsibility: Engineers have a duty to prioritize public safety, health, and welfare in their work. This includes adhering to legal regulations, industry standards, and best practices to ensure that engineering solutions do not harm people or the environment.

Integrity and Honesty: Engineers must be truthful in their communications, transparent in their work, and avoid deceptive practices. This includes providing accurate information, avoiding conflicts of interest, and giving credit where it's due.

Fairness and Justice: Engineering decisions should be fair and equitable, ensuring that the benefits and burdens of engineering projects are distributed justly. Engineers should avoid discrimination and ensure that their work does not unfairly disadvantage any group or community.

Respect for Intellectual Property: Engineers must respect the intellectual property rights of others, including patents, copyrights, and trade secrets. This also includes properly acknowledging the contributions of others in their work.

What is Professional Ethics?

Confidentiality: Engineers often have access to sensitive information, whether it is related to their clients, employers, or the public. Maintaining confidentiality is crucial, except when disclosure is necessary to prevent harm.

Sustainable Development: Engineers are responsible for considering the long-term impacts of their work on the environment and society. This involves promoting sustainable practices, minimizing waste, and considering the future implications of engineering projects.

Professional Competence: Engineers must maintain and improve their knowledge and skills to ensure that they are competent in their field. This includes engaging in lifelong learning and staying updated with advancements in technology and best practices.

Ethical Leadership: Engineers in leadership positions have an obligation to foster an ethical work environment, mentor others in ethical practices, and lead by example.

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Ethical principles

Ethical principles underpin all professional codes of conduct. Ethical principles may differ depending on the profession; for example, professional ethics that relate to medical practitioners will differ from those that relate to lawyers or real estate agents.

Some universal ethical principles that apply across all professions, including:

- honesty
- trustworthiness
- loyalty
- respect for others
- adherence to the law
- doing good and avoiding harm to others
- accountability.

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Senses of Engineering Ethics

- Set of specific moral problems and issues related to Engineering
- It is based on Justified moral principles
- Activity of understanding Moral Problems
- Set of Belief and Attitude for a group displays concerning morality

SENSES OF ENGINEERING ETHICS

There are two different senses (meanings) of engineering ethics, namely the Normative and the Descriptive senses. The normative sense include:

(a) Knowing moral values, finding accurate solutions to moral problems and justifying moral judgments in engineering practices,

(b) Study of decisions, policies, and values that are morally desirable in the engineering practice and research, and

(c) Using codes of ethics and standards and applying them in their transactions by engineers.

- The descriptive sense refers to what specific individual or group of engineers believe and act, without justifying their beliefs or actions.


Thank
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