

SNS COLLEGE OF TECHNOLOGY



Coimbatore-35. An Autonomous Institution

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

COURSE NAME : 19GET201 PROFESSIONAL ETHICS & HUMAN VALUES

IV YEAR/ VII SEMESTER

UNIT – I ENGINEERING ETHICS

Topic: Vareity of moral issues – Types of Inquiry

Senses of Engineering Ethics/19GET201 -Professional Ethics and Human Values/Mrs.R.Poornima/ECE/SNSCT





Safety and Risk:

Example: Designing a structure that meets safety standards versus one that saves costs but may be less safe.

Moral Issue: Balancing cost and safety to protect human lives.

Environmental Impact:

Example: Developing a project that could harm the environment or choosing a more sustainable approach.

Moral Issue: Weighing the environmental consequences of engineering decisions.

Privacy and Data Security:

Example: Handling user data in a way that respects privacy versus using it for profit. **Moral Issue**: Balancing business interests with individuals' rights to privacy. **Equity and Fairness**:

Example: Providing access to technology or services in underprivileged communities. **Moral Issue**: Ensuring equitable access and avoiding discrimination.





Conflict of Interest:

Example: An engineer working on a project where they have a personal financial interest.

Moral Issue: Maintaining objectivity and avoiding decisions influenced by personal gain.

Professional Integrity:

Example: Reporting accurate results versus manipulating data to meet client expectations.

Moral Issue: Upholding truthfulness and honesty in professional work. **Responsibility to Society**:

Example: Working on projects that benefit society versus those that may have harmful social effects.

Moral Issue: Balancing societal benefits with potential harm.





VARIETIES OF MORAL ISSUES

- MICRO-ETHICS This approach stresses more about some typical and everyday problems which play an important role in the field of engineering and in the profession of an engineer
- MACRO-ETHICS This approach deals with all the social problems which are unknown and suddenly burst out on a regional or national level.



Types of Inquiry





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Types of Inquiry



Normative Inquiry:

Focus: What should be done in a given situation? This type involves assessing actions based on ethical theories like utilitarianism, deontology, or virtue ethics.

Example: Determining the ethical obligations of an engineer to report unsafe practices.

Conceptual Inquiry:

Focus: Clarifying the meaning of concepts such as "safety," "risk," "responsibility," or "sustainability." **Example**: Analyzing what it means for a project to be "sustainable" and how this concept applies in different contexts.

Factual or Descriptive Inquiry:

Focus: Gathering facts about a situation to understand the context and implications of moral issues. **Example**: Investigating the potential environmental impact of a new construction project.

Applied Inquiry:

Focus: Applying ethical principles to specific cases or real-world scenarios.

Example: Examining case studies of engineering failures to draw lessons on ethical decision-making. **Meta-Ethical Inquiry**:

Focus: Investigating the nature of moral judgments and the language used in moral discussions. **Example**: Exploring whether moral values are universal or culturally relative.







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