



SNS COLLEGE OF TECHNOLOGY

(AN AUTONOMOUS INSTITUTION)

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Recognized by UGC saravanampatti (post), Coimbatore-641035.



Department of Biomedical Engineering

Course Name: 19GET201 PROFESSIONAL ETHICS AND HUMAN VALUES

IV Year : VII Semester

UNIT II

ENGINEERING AS RESPONSIBLE EXPERIMENT



ENGINEERING AS RESPONSIBLE EXPERIMENT



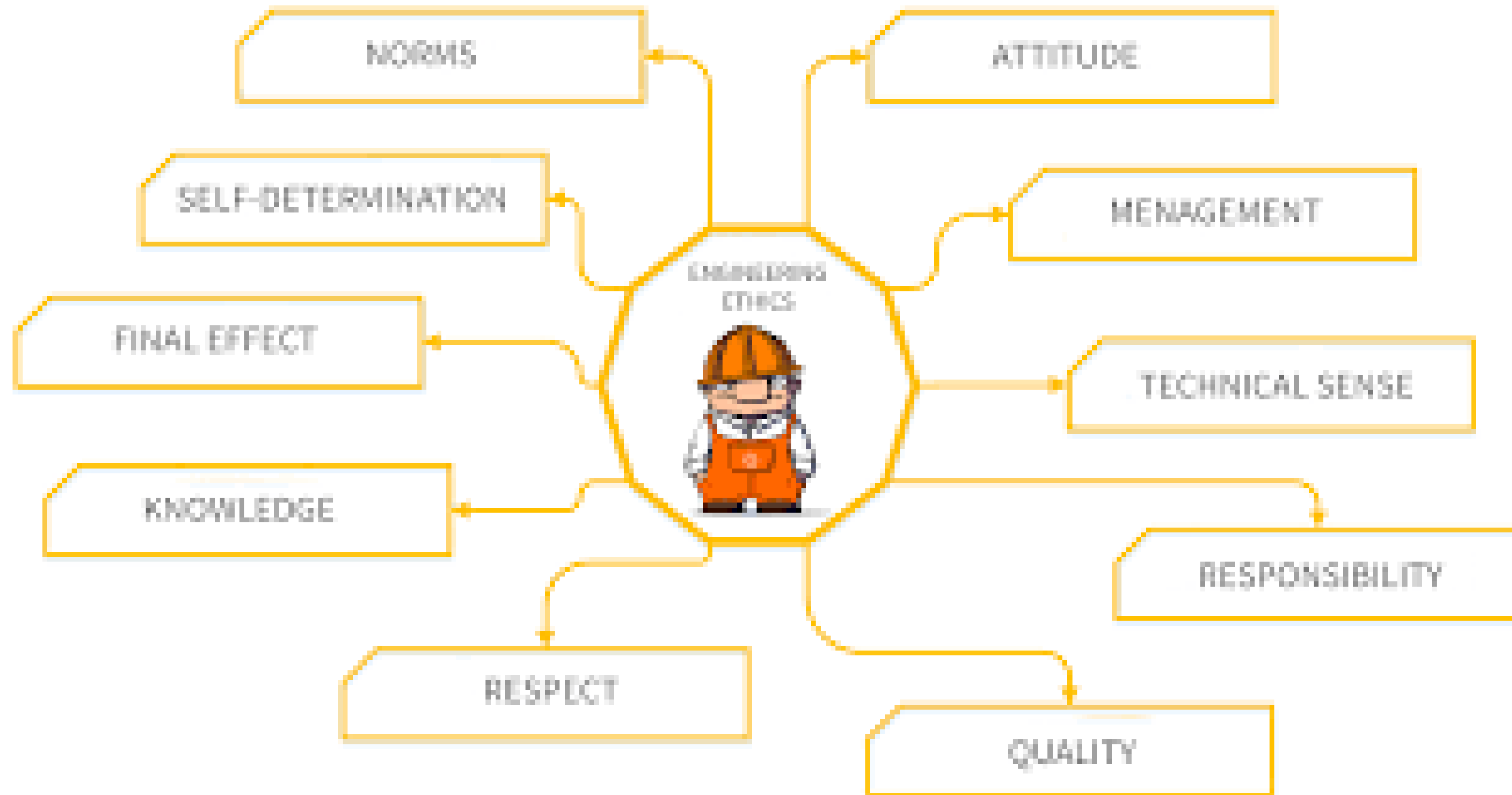
- Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct. Engineers, in the fulfillment of their professional duties, shall: Hold paramount the **safety, health, and welfare of the public**. Perform services only in areas of their competence.



- **The role of engineers as responsible experimenters:**
- To maintain the safety of human beings.
- To procure their rights of consent.
- To keep them aware regarding the experimental nature of the project.
- To warn them about the probable safety hazards.



- **Three engineering ethics:**
- Engineers have a significant impact on society, and their work can affect **public health, safety, and the environment.**
- Ethical engineering practices ensure that engineers take responsibility for the potential consequences of their work and strive to make the world a better place.





- Ethics are principles followed depending upon the moral responsibility that a person feels. The study of related questions about moral ideals, character, policies and relationships of people and organizations involved in technological activity, can be termed as Engineering ethics.





Principal of ethics:

- Honesty
- Integrity
- Accountability
- Respect for life and property
- Concern for public safety and welfare



- **Steps to Deal with Issues**

- Whenever there occurs an issue, one should possess a few skills in order to sort out the problem. The issues that engineers face, have to be dealt with patience and few moral goals have to be kept in mind while dealing with such issues. They are as follows :
- **Moral Awareness** – One should be able to recognize the moral problems and issues that occur in Engineering. The analysis on the problem is necessary in order to differentiate and judge according to ethics or according to the rules to follow.
- **Cogent Moral Reasoning** – In order to come to a conclusion on an issue, the argument has to be assessed and comprehended. The argument on both sides has to be considered with all the probabilities and the nature of the argument should be logical and moral



- **Moral Coherence** – After having gone through all the logical and moral facts, consistent and comprehensive view points are to be formed based upon a consideration of relevant facts.
- **Moral Imagination** – The moral issues and the practical issues have to be dealt separately. Alternative responses are to be found out for dealing with moral issues while creative solutions should be found out for practical difficulties.
- **Moral Communication** – The language to communicate about one's moral views should be so precise and clear, that the expression or words should not alter the original meaning.



Thank You!