



PROFESSIONAL ETHICS

(HUT 200)

Module V
Global Ethical Issues

Syllabus

Multinational Corporations- Environmental Ethics- Business Ethics- Computer Ethics - Role in Technological Development- Engineers as Managers- Consulting Engineers- Engineers as Expert witnesses and advisors-Moral leadership.

GLOBALIZATION

- Globalization means integration of countries through commerce, transfer of technology, and exchange of information and culture.
- The flows include knowledge, science, technology, skills, culture, information, and entertainment, besides direct human resource, tele-work, and outsourcing.
- This interdependence has increased the complex tensions and ruptures among the nations.
- For the engineers, the issues such as multinational organizations, computer, internet functions, military development and environmental ethics have assumed greater importance for their very sustenance and progress.

MULTINATIONAL CORPORATIONS

- Organisations who have established business in more than one country, are called multinational corporation.
- The headquarters are in the home country and the business is extended in many host countries.

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- The Western organizations doing business in the less-economically developed (developing, and overpopulated) countries gain the advantage of
 - Inexpensive labour, availability of natural resources, conducive-tax atmosphere, and virgin market for the products.
- At the same time, the developing countries are also benefited by
 - Fresh job opportunities, jobs with higher remuneration and challenges, transfer of technology, and several social benefits by the wealth developed.
- But this happens invariably with some social and cultural disturbance.
 - Loss of jobs for the home country, and loss or exploitation of natural resources, political instability for the *host* countries



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International Human Rights

- At international level, the organizations are expected to adopt the minimum levels of Values, such as
 - Mutual support, loyalty, and reciprocity.
 - The negative duty of refraining from harmful actions such as violence and fraud.
 - Basic fairness and practical justice in case of conflicts.

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- The ten international rights to be taken care of;
 - Right of freedom of physical movement of people
 - Right of ownership of properties
 - Freedom from torture
 - Right to fair trial on the products
 - Freedom from discrimination on the basis of race or sex.
 - Physical security. Use of safety gadgets have to be supplied to the workers even if the laws of the host country do not suggest such measures.
 - Freedom of speech and forming association
 - Right to have a minimum education
 - Right to political participation
 - Right to live and exist (i.e., coexistence).

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Technology Transfer

- It is a process of moving technology to a new setting and implementing it there.
- Technology includes hardware (machines and installations) and the techniques (technical, organizational, and managerial skills and procedures).
- It may mean moving the technology applications from laboratory to the field/factory or from one country to another.
- This transfer is effected by governments, organizations, universities, and MNCs.

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Appropriate Technology

- Identification, transfer, and implementation of most suitable technology for a set of new situations.
- Technology includes both hardware (machines and installations) and software (technical, organizational and managerial skills and procedures).
- Factors such as economic, social, and engineering constraints are the causes for the modification of technology.
- The term *appropriate* is value based and it should ensure fulfilment of the human needs and protection of the environment

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MNCs and Morality

- MNCs have to adopt appropriate measures not to disturb or dislocate the social and living conditions and cultures of the home&host countries.
- A few principles are enlisted here:
 - MNC should respect the basic human rights of the people of the host countries.
 - The activities of the MNC should give economic and transfer technical benefits, and implement welfare measures of the workers of the host countries.
 - The business practices of the multinational organisations should improve and promote morally justified institutions in the host countries.
 - The multinationals must respect the laws and political set up, besides cultures and promote the cultures of the host countries.
 - The multinational organisations should provide a fair remuneration to the employees of the host countries.
 - Multinational institutions should provide necessary safety for the workers when they are engaged in hazardous activities and 'informed consent' should be obtained from them.
 - Adequate compensation should be paid to them for the additional risks undertaken.

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Ethical Balance

- **Ethical relativism:** The corporation (and the engineers) functioning in other countries must understand their law, customs, and beliefs and act in line with those prevailing in that country.
- **Ethical absolutism:** The organizations may practice laws of the home country, without adjustments to the host culture.
- **Ethical relationalism (contextualism):** Moral judgments are made in relation to the factors prevailing locally, without framing rigid rules.
- **Ethical pluralism:** accepts cultural diversity and respects the legitimate cultural differences among individuals and groups, of the host country.

ENVIRONMENTAL ETHICS

- Study of (a) moral issues concerning the environment, and (b) moral perspectives, beliefs, or attitudes concerning those issues.
- Essential of engineering activity
 - Ensure protection (safety) of environment
 - Prevent the degradation of environment, and
 - Slow down the exploitation of the natural resources, so that the future generation can survive.

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- Duties towards environmental ethics
 - *Environmental impact assessment*
 - *Establish standards*
 - *Counter measures*
 - *Environmental awareness*

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- Disasters
 - Plastic Waste Disposal
 - e-Waste Disposal
 - Industrial Waste Disposal
 - Depletion of Ozone Layer
 - Global Warming
 - Acid Rain

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- Human - centered Environmental Ethics
 - This approach assumes that only human beings have inherent moral worth duly to be taken care of.
 - Other living being and ecosystems are only instrumental in nature.
 - Rights ethicists favour the basic rights to live and right to liberty, to realise the right to a live in a supportive environment.
 - Virtue ethics stresses importance of prudence, humility, appreciation of natural beauty, and gratitude to the mother nature that provides everything.
- Nature-centered ethics
 - Ensures the worth of all living beings and organisms, seems to be more appropriate in the present-day context.

BUSINESS ETHICS

- The system of moral principles and rules of the conduct applied to business.
- Defined as the systematic study of ethical matters pertaining to the business, industry or related activities, institutions and beliefs.

Factors Considered

- A business should aim to have fair dealing with everyone dealing with it.
- Ethics should be fixed for everyone working in the organisation at any level and their implementation should be linked with reward- punishment system.
- Any violation of ethics should be detected at the earliest and remedial measures taken immediately.
- Business ethics should be based on broad guidelines of what should be done and what should be avoided.
- The ethics should be based on the perception of what is right.

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- Sources of Business Ethic
 - Religion, Culture and Law
- Importance of Business Ethics
 - Corresponds to Basic Human Needs
 - Credibility in the Public
 - Credibility with the Employees
 - Better Decision Making
 - Profitability
 - Protection of Society

COMPUTER ETHICS

- Computer ethics is defined as
 - (a) study and analysis of nature and social impact of computer technology,
 - (b) formulation and justification of policies, for ethical use of computers.
- The use of computers have raised a host of moral concerns such as free speech, privacy, intellectual property right, and physical as well as mental harm.

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- Types of Issues
 - Computer as the Instrument of Unethical Acts
 - Computer as the Object of Unethical Act: *Hacking, Spreading virus, Health hazard*
 - Problems Related to the Autonomous Nature of Computer: *Security risk, Loss of human lives*

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- Ethical problems in workplace
 - Elimination of routine and manual jobs
 - *Health and safety*
 - *Computer failure*
- Property Issues
 - Computers have been used to extort money through anonymous telephone calls.
 - Computers are used to cheat and steal by current as well as previous employees.
 - Cheating of and stealing from the customers and clients.
 - Violation of contracts on computer sales and services.
 - Conspiracy as a group, especially with the internet, to defraud the gullible, stealing the identity and to forge documents.
 - Violation of property rights

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- Computer Crime
 - Physical Security
 - Logical security
 - The privacy of the individuals or organizations, confidentiality, integrity, uninterrupted service, protection against hacking.
 - Weaknesses in this direction are: (a) the difficulty in tracing the evidence involved and (b) absence of stringent punishment against the crime

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- **Professional Responsibility**

- The computer professionals should be aware of different conflicts of interests as they transact with other at different levels.
- The IEEE and Association for Computing Machinery (ACM) have established the codes of ethics to manage such responsibilities.

- **The Big Net**

- Knowledge is internationalised
- There are no international laws to regulate the issues of freedom of speech, intellectual property rights, privacy rights etc.

ENGINEERS AS MANAGERS

- Characteristics

- Promote an ethical climate, through framing organization policies, responsibilities and by personal attitudes and obligations.
- Resolving conflicts, by evolving priority, developing mutual understanding, generating various alternative solutions to problems.
- Social responsibility to stakeholders, customers and employers

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- **Managing Conflicts**
 - Conflicts based on schedules
 - Conflicts arising out of fixing the priority to different projects or departments
 - Conflict based on the availability of personnel
 - Conflict over technical, economic, and time factors
 - Conflict arising in administration
 - Conflicts of personality, human psychology and ego problems
 - Conflict over expenditure and its deviations

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- Solving conflicts
 - People: views of all concerned should be obtained
 - Interests: Focus must be only on the ethical attitudes or motives and not on the positions.
 - Options: Generate various options as solutions
 - Evaluation: based on some specified objectives such as efficiency, quality, and customer satisfaction

CONSULTING ENGINEERS

- Work in private.
- No salary from the employers.
- Charge fees from the sponsor and they have more freedom to decide on their projects.

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- Ethical responsibilities
 - Advertising
 - Deceptive advertisings are prohibited (white lies, Half-truth, Exaggerated claims, Making false suggestions, Through vague wordings or slogans.)
 - Competitive Bidding
 - Contingency Fee
 - Fee or commission paid to the consultant,
 - Safety and Client's Needs

ENGINEERS AS EXPERT WITNESS

- Required to provide expert opinion and views in many legal cases of the past events.
- Functions of eye-witness and expert-witness

<i>Eye-witness</i>	<i>Expert-witness</i>
<ol style="list-style-type: none">1. Eye-witness gives evidence on only what has been seen or heard actually (perceived facts)	<ol style="list-style-type: none">1. Gives expert view on the facts in their area of their expertise2. Interprets the facts, in term of the cause and effect relationship3. Comments on the view of the opposite side4. Reports on the professional standards, especially on the precautions when the product is made or the service is provided

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- Expert-witnesses, are likely to abuse their positions in the following manners:
 - Hired Guns
 - Money Bias
 - Ego Bias
 - Sympathy Bias

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- Duties

- The expert-witness is required to exhibit the responsibility of confidentiality just as they do in the consulting roles.
- More important is that as witness they are not required to volunteer evidence favorable to the opponent.
- They should be objective to discover the truth and communicate them honestly.
- The stand of the experts depends on the *shared understanding* created within the society.
- The experts should earnestly be impartial in identifying and interpreting the observed data, recorded data, and the industrial standards.

ENGINEERS AS ADVISORS IN PLANNING AND POLICY MAKING

- As advisor, give their view on the future such as in planning, policy-making, which involves the technology.
- Issues and requirements
 - Objectivity: study the cost and benefits of all possible alternative means in objective manner
 - Study All Aspects: economic viability (effectiveness), technical feasibility (efficiency), operational feasibility (skills) and social acceptability
 - Values
 - Technical Complexity
 - National Security

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- Shared understanding can be effected by the following roles or models:
 - Hired Gun
 - Value-neutral Analysts - impartial engineer
 - Value-guided Advocates –honest & autonomous

MORAL LEADERSHIP

- Adopting reasonable means to motivate the groups to achieve morally desirable goals.
- Required for the engineers, for the reasons listed as follows:
 - It is leading a group of people towards the achievement of global and objectives.
 - The leadership shall direct and motivate the group to move through morally desirable ways.
 - They lead by thinking ahead in time, and morally creative towards new applications, extension and putting values into practice.
 - They sustain professional interest, among social diversity and cross-disciplinary complexity.
 - Voluntarism
 - Community service

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- The Codes of Ethics promote and sustain the ethical environment and assist in achieving the ethical goals in the following manner:
 - It creates an environment in a profession, where ethical behavior is the basic criterion.
 - It guides and reminds the person as to how to act, in any given situation.
 - It provides support to the individual, who is being pressurized or tortured by a superior or employer, to behave unethically.
 - Company specific code of ethics on the individual circumstances and specific mission of the organisations help in employees' awareness of ethical issues, establish, and nurture a strong corporate ethical culture.