

## UNIT - II

### PROFESSIONALISM AND CODE OF ETHICS

Engineering code of ethics is a framework for understanding ethical problems

One part of this framework will be the code of ethics that have been established by professional engineering organizations. These codes of ethics help guide engineers in the course of their professional duties and give them insight into ethical problems.

The engineering code of ethics hold that engineers should not make false claims or represent a product to be something that is not.

The code of ethics serve to guide practitioners of the profession in making decisions about how to conduct themselves and how to resolve ethical issues that might confront them.

Is engineering a profession?

Job and Occupation are synonymously used with profession.

**Job:** Any work for hire can be considered a job, regardless of the skill level involved and the responsibility granted.

Engineering is thus a job, but the skills and responsibilities involved in engineering make it more than a just a job.

**Occupation:** Employment through which someone makes a living.

**Profession:**

**Attributes of profession:**

1. Work that requires sophisticated skills, the use of judgment, and the exercise of discretion. Also, the work is not routine and is not capable of being mechanized.
2. Membership in the profession requires extensive formal education, not simply practical training or apprenticeship.
3. The public allows special societies or organizations that are controlled by members of the profession to set standards for admission to the profession, to set standards of conduct for members, and to enforce these standards.
4. Significant public good results from the practice of the profession.

“Judgment” refers to making significant decisions based on formal training and experience. In general, the decisions will have serious impacts on people’s lives and will often have important implications regarding the spending of large amounts of money.

“Discretion” can have two different meanings. The first definition involves being discrete in the performance of one’s duties by keeping information about customers, clients, and patients confidential. This confidentiality is essential for engendering a trusting relationship and is a hallmark of professions. While many jobs might involve some discretion, this definition implies a high level of significance to the information that must be kept private by a professional. The other definition of discretion involves the ability to make decisions autonomously. When making a decision, one is often told, “Use your discretion.” This definition is similar in many ways to that of the term “judgment” described previously. Many people are allowed to use their discretion in making choices while performing their jobs. However, the significance and potential impact of the decision marks the difference between a job and a profession.

### **Other aspects of professional societies:**

Professional societies also serve less noble purposes. There are two different models of professional societies based on the nature of professional societies.

1. Social contract model
2. Business model

### **Social contract model:**

1. Social contract model views professional societies as being setup primarily to further the public good.
2. There is an implicit social contract involved with professions.
3. For the services provided by the profession, society grants the professions perks such as high pay, high status in the society and ability to self regulate.

### **Business model:**

1. Provides more cynical view of professions.
2. Professions function as a means of furthering the economic advantage of the members.
3. Professional organizations are the labour union of the elite
  - a. Limiting the number of practitioners of the profession
  - b. Controlling the working conditions for profession
  - c. Artificially inflating the salaries of its members.

Engineering is certainly a service oriented profession and very nicely fit into the social contract model. Engineering societies have virtually no clout with major engineering employers to set working conditions or help engineers resolve ethical disputes with their employees.

## **CODE OF ETHICS:**

### **NSPEC code of ethics**

#### **Preamble**

Engineering is an important and learned profession. As members of this profession, engineers are expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness, and equity, and must be dedicated to the protection of the public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct.

#### **I. Fundamental Canons**

Engineers, in the fulfillment of their professional duties, shall:

1. Hold paramount the safety, health, and welfare of the public.
2. Perform services only in areas of their competence.
3. Issue public statements only in an objective and truthful manner.
4. Act for each employer or client as faithful agents or trustees.
5. Avoid deceptive acts.
6. Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession.

#### **II. Rules of Practice**

##### **1. Engineers shall hold paramount the safety, health, and welfare of the public.**

- a. If engineers' judgment is overruled under circumstances that endanger life or property, they shall notify their employer or client and such other authority as may be appropriate.
- b. Engineers shall approve only those engineering documents that are in conformity with applicable standards.
- c. Engineers shall not reveal facts, data, or information without the prior consent of the client or employer except as authorized or required by law or this Code.

- d. Engineers shall not permit the use of their name or associate in business ventures with any person or firm that they believe is engaged in fraudulent or dishonest enterprise.
- e. Engineers shall not aid or abet the unlawful practice of engineering by a person or firm.
- f. Engineers having knowledge of any alleged violation of this Code shall report thereon to appropriate professional bodies and, when relevant, also to public authorities, and cooperate with the proper authorities in furnishing such information or assistance as may be required.

**2. Engineers shall perform services only in the areas of their competence.**

- a. Engineers shall undertake assignments only when qualified by education or experience in the specific technical fields involved.
- b. Engineers shall not affix their signatures to any plans or documents dealing with subject matter in which they lack competence, nor to any plan or document not prepared under their direction and control.
- c. Engineers may accept assignments and assume responsibility for coordination of an entire project and sign and seal the engineering documents for the entire project, provided that each technical segment is signed and sealed only by the qualified engineers who prepared the segment.

**3. Engineers shall issue public statements only in an objective and truthful manner.**

- a. Engineers shall be objective and truthful in professional reports, statements, or testimony. They shall include all relevant and pertinent information in such reports, statements, or testimony, which should bear the date indicating when it was current.
- b. Engineers may express publicly technical opinions that are founded upon knowledge of the facts and competence in the subject matter.
- c. Engineers shall issue no statements, criticisms, or arguments on technical matters that are inspired or paid for by interested parties, unless they have prefaced their comments by explicitly identifying the interested parties on whose behalf they are speaking and by revealing the existence of any interest the engineers may have in the matters.

**4. Engineers shall act for each employer or client as faithful agents or trustees.**

- a. Engineers shall disclose all known or potential conflicts of interest that could influence or appear to influence their judgment or the quality of their services.
- b. Engineers shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.
- c. Engineers shall not solicit or accept financial or other valuable consideration, directly or indirectly, from outside agents in connection with the work for which they are responsible.
- d. Engineers in public service as members, advisors, or employees of a governmental or quasi-governmental body or department shall not participate in decisions with respect to services solicited or provided by them or their organizations in private or public engineering practice.
- e. Engineers shall not solicit or accept a contract from a governmental body on which a principal or officer of their organization serves as a member.

**5. Engineers shall avoid deceptive acts.**

- a. Engineers shall not falsify their qualifications or permit misrepresentation of their or their associate's qualifications. They shall not misrepresent or exaggerate their responsibility in or for the subject matter of prior assignments. Brochures or other presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, joint ventures, or past accomplishments.
- b. Engineers shall not offer, give, solicit, or receive, either directly or indirectly, any contribution to influence the award of a contract by public authority, or which may be reasonably construed by the public as having the effect or intent of influencing the awarding of a contract. They shall not offer any gift or other valuable consideration in order to secure work. They shall not pay a commission, percentage, or brokerage fee in order to secure work, except to a bona fide employee or bona fide established commercial or marketing agencies retained by them.