

Profession is defined as a paid occupation that required specialized knowledge, skill and often formal education and training.

Eg. Doctor, Engineer, Lawyer, Teacher - These are all professions because they require formal study, licensing ~~the~~ and ethical responsibilities.

Professional Right

- 1) Respect → To be treated politely and fairly.
- 2) Fair Pay → To be paid properly ~~an~~ for the work.
- 3) Safe workplace → To work in a safe and healthy place.
- 4) Learn and Grow → To get chance to improve skills.
- 5) Do the Right Job - To work in areas they are trained for.
- 6) Join in Decisions - To give opinions on work-related matters.
- 7) Keeping Private - To protect the private info (like in health care or law).

Responsibilities

- 1) Do Good work - keep learning and do the job well.
- 2) Be honest - Tell the truth and act fairly.
- 3) Take responsibility - Accept and correct mistake.
- 4) Keep secrets - Don't share private info.
- 5) Respect other - Treat everyone kindly & equally.
- 6) Help people - Put the needs of other (client, patient) first.
- 7) Follow rules - Obey law and workplace policies.

Why engineer is termed as profession :

1) Specialized knowledge

Engineers study math, science and technology to solve real world problem. It requires formal education like a Bachelor degree or higher.

2) Training and Qualification

Engineers go through practical training and someone must pass licensing exam.

3) Ethical standards

Engineers follow a code of ethics (e.g. safety, honesty, responsibilities). They must avoid harming people or environment.

4) Responsibility to society

Engineers build roads, machines, bridges and systems that people rely on everyday. Their work directly affect public safety and development.

5) Recognition

Engineers is recognized worldwide as an important & skilled field.

Job

- A job is a specific work a person does to earn money
 - It usually refers to a particular position or role at a company
- Eg: A person working as a cashier at a supermarket has a job.
A person working as a math teacher at ABC college has a job.

Occupation

- An occupation is a general category of work that people do.
 - It includes many types of jobs under the same field or skill.
- Eg: Teaching is an occupation - it includes school teacher, college professors, tutor etc.

Engineering is an occupation. It includes civil, IT, electrical, software.

Conflict of interest (COI)

- A conflict of interest happens when a person's personal interest (like money, family or friendships) might influence their professional decisions. It means someone may not act fairly because they are trying to benefit themselves or someone else.
- Eg: A manager hires his own brother for a job, even though someone else is more qualified.

A COI is a situation in which a person or organization involved in multiple interests (financial interest or others), one of which could possibly corrupt the motivation of the individual or organization.

Whistleblowing

- Whistleblowing is the process of exposing any kind of info or activity that is illegal, dishonest or not correct within an organization that is either private or public.
- A whistleblower is someone (usually an employee) who tells the truth about bad practice or wrongdoing like fraud, corruption or safety violations.

Eg: If a worker see their company dumping waste in a river and report it to the environment department that's whistleblowing.

Types

Internal whistleblowing

- The employee report the wrongdoing inside the organization
- They tell someone like a manager, supervisor or HR.

Eg:

A worker see a coworker stealing company property and report it to the boss.

External whistleblowing

- The employee report the issue to someone outside the company
- This could be police, media, government or public

Eg: An engineer see the company breaking safety laws and report it to government.

When should we blow a whistle : Condition

1) Need

- There must be a clear and serious harm that can be avoided by whistle blowing.
- In deciding whether to go public, the employee need to understand the importance of the issue, only blow the whistle if major problem.
- The issue should be important, not just small thing.

2) Proximity

- The whistleblower must be in a very clear position to report on the problem.
- Rumors or second hand info are not enough.
- You must have firsthand knowledge to make a proper report.
- The whistleblower must have enough knowledge to judge the situation.

3) Capability

- The whistleblower must have a reasonable chance of stopping the harm.
- If can't finish what you start or don't have access to right channels, you may risk your job or family security.

4) Last Resort

- Whistle blowing should only happen when there are no other way left to solve the problem
- Only after you tried all possible action inside the organization & nothing worked

Code of Ethics

- It is the set of principles and guidelines designed to help professionals conduct business honestly and with integrity.

Code of ethics of Nepal Engineering Council

- The profession code of conduct ethics of NEC provide a set of professional and moral guidelines that all registered engineers in Nepal must follow which binding under the Nepal Engineering council Act 2055(1999)

1) Discipline and Honesty

Engineer must work in a disciplined way & honest way. They should always maintain professional dignity and avoid doing anything or ^{wrong} harmful.

2) Politeness and confidentiality

Engineers should be polite to customer and keep all info private unless the customer give permission to share it.

3) Non-discrimination

Engineers should treat everyone equally. No discrimination should be made based on religion, race, gender, caste etc.

4) Professional work

Engineers should only work in areas where they have knowledge and skills. If the task is outside their expertise, it should be done by the expert in that field.



5. Avoiding corruption or Harm

Engineer should not take extra money, gifts or favors apart from their salary. They should avoid anything that can harm the image of the engineering profession.

6. Personal Responsibility

Engineers are fully responsible for the quality and result of their work. If anything goes wrong they must take responsibility.

7. Proper Signing and Registration

When engineers sign official document, they must include their name, signature, and NEC registration no. clearly.

8) No False publicity

Engineers should not make fake or misleading statement about their services.

Code of Ethics of IEEE and ACM.

Q. Professional consciousness and Right of Conscience
Refusal are vital professional practices. Discuss the statement on the basis of Code of IEEE and ACM.

- Professional Consciousness means that professional (like engineer & computer scientist) must:
 - Be honest and dedicated to doing the right thing.
 - Follow ethical rules strictly.
 - Always act in the public's best interest, even it's hard or unpopular.

Based on IEEE code of ethics

- IEEE members agree to "accept the responsibility of making decision consistent with the safety, health, & welfare of the public."
- It encourage professional to maintain the technical competence, honesty and integrity.
- Member must also report unethical or illegal conduct even if it is inconvenient or difficult.

Based on ACM.

- ACM calls professional to "contribute to society and human well being" & "avoid harm".
- It demand honest, trustworthy & transparent conduct in all professional activities.
- Professional must maintain professional competence.

and only perform task they are qualified to do.

2 Right of Conscientious Refusal

→ The ethical right to refuse to participate in a task that violates moral, legal or professional standards even if ordered by an employee or superior.

IEEE

- Encourages professionals to "avoid injuring others, their property, reputation, employment".
- Support reporting unethical practice and refusing to engage in them.

ACM

- Clearly support "avoiding harm" and "respecting privacy and confidentiality".
- ACM members are expected to "reject the task that involve unethical conduct"
- Allows engineer to say 'No' to any project or request that is harmful, discriminatory or illegal.

Summary

- Engineers and computing professional must act ethically (Professional Conscientiousness)
- They have rights to refuse any task that violates ethical norms (right to conscientious refusal)

Hacker ethics and - Netiquette

- **Hacker Ethics** is the set of moral value and principle followed by responsible computer user, especially programmer and ethical hackers. It is not about breaking the law but about using skill ethically and creatively.

Netiquette.

- Netiquette is the network etiquette, the do's and don'ts of online communication.
- It means rules and polite behaviour people should follow while using internet, emails, social media or any online communication.