CH2- Profession and Ethics

- 2.1 Profession: Definition and Characteristics
- 2.2 Professional Institutions
- 2.3 Relation of an Engineer with Client, Contractor and Fellow Engineers
- 2.4 Ethics, Code of Ethics and Engineering Ethics
- 2.5 Moral Dilemma and Ethical Decision Making
- 2.6 Detailed Duties of an Engineer and Architect
- 2.7Liability and Negligence

society



Ethics



Professionalism



Chapter II

2.2 Professional institutions

- Regulation of the practice of the profession,
- licensing,
- guidance for training new entrants into the profession,
- advice and assistance to engineering colleges,
- upgrading and maintaining the professional and technical competence of members,
- providing technical expertise as requested for the guidance and assistance of legislators,
- seeing to the matter of safety and general welfare of the public in engineering works.

Chapter II

- professional engineering is any act of designing, composing, evaluating, advising, reporting, directing or supervising where in the safeguard of life, health, property or the public welfare is concerned and that requires the application of engineering principles,
- but does not include practicing as a natural scientist.
- Engineering Profession means the profession to be practiced by the engineers who have acquired the technical knowledge and skills in the subjects. (NEC 2054)

Chapter II Professional Body:

- The professional Engineering body is an independent body that regulates the practice of professional engineering and governs its members in accordance with the statute of the body and rules, regulation and bylaws of the country in order to serve and protect the public interest.
- NEA<SOPHEN, SONA< MONA< SOMEN etc.

Role of professional association

- 1. Regulation of the practice of the profession
- 2. Licensing
- 3. Guidance for training new entrants into the profession
- Set Norms and standards
- 5. To grant permission / approval
- 6. monitoring
- 7. Advice, assistance and monitoring to engineering colleges
- Upgrading and monitoring the professional and technical competence of member
- Providing technical expertise as requested for the guidance and assistance of legislators.
- 10. Seeing to the matter of safety and general welfare of the public in engineering works

Chapter II

Regulation of the practice of the profession

- Constitution of civil service:
- Government shall constitute the civil services as follows:
- (a) Nepal Economic Planning and Statistics Service;
- (b) Nepal Engineering Service;
- (c) Nepal Agricultural Service;
- (d) Nepal Judicial Service;
- •(d1) Nepal Foreign Service;
- (e) Nepal Administration Service;
- •(e1) Nepal Audit Service;
- (f) Nepal Forestry Service;
- (g) Nepal Miscellaneous Service;
- (h) Nepal Education Service;
- (i) •-----
- (j) ♥-----

Engineering Professional Practice Sectors in Nepal

- Public sectors (organisation that are run with the budget sanctioned by government).
- Private sector (organisation that are run with the budget sanctioned by private).
- 3. NGO./CBO sector (organisation that are run with the budget sanctioned by Mon government.

Public sectors

- Government organisation (ministries) Department, Regional, district office,
- Board, project,
- Constitutional body
- commission, parliament, court, CIAA, Office of attorney general, Centre for national vigilance,
- Corporation , Municipalities, DDC, VDC
- Universities, institute etc
- Ministries enlisted

Engineering Professional Practice Sectors in Nepal

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- NGO./CBO sector (organisation that are run with the budget sanctioned by non government.

General Job description of engineers

- An engineer has following responsibilities
- 1. Vision
- Mission
- 3. Program
- 4. Implement
- 5. Supervision
- 6. Monitoring
- 7. Training
- 8. Enhance profession
- 9. An engineer involve one of
- 10. Private sector
- 11. Public sector
- 12. Free consultant

An engineer assign one of

- 1. Consultant
- Contractors
- 3. An engineer serve as
- 4. Designer
- 5. Programmer
- 6. execution
- 7. Surveyor
- 8. Supervisor/ monitoring
- Administrative
- 10. Researcher/ analyzer
- 11. Academician (teacher/professor/trainer)
- 12. Preliminary survey, prefeasibility, feasibility, detail design, estimate

Typical TOR of a private sector Engineers

- 1. To coordinate works between stake holders
- 2. To layout, survey, estimate,
- 3. Supervisory work, schedule, monitor, time, quality, cost control
- 4. Reporting to concern agency
- 5. Quantity survey and bill preparation
- 6. To plan project and progress report
- 7. Technical report and claims
- 8. Training and guide for new entrants and worker
- 9. Overall management, (site in charge)

Public Service commission provide job description of engineer

3rd Class

- Preliminary survey, prefeasibility, feasibility, detail design, estimate
- **2.** Execution of project works
- 3. Reporting
- 4. Pre activities
- 5. Interim progress
- 6. Monitoring
- 7. Evaluation
- 8. Post implementation report
- Job assigned by immediate boss (superiors)
- 10. To facilitate donor agency
- **11.** Job specific for engineers

2nd class

- Planning, programming, and execution of works
- Research on technology, cases, various skill upgrade
- 3. Monitoring and evaluation
- 4. Supervision of project
- 5. Administrative works
- Financial planning a and administration

Chapter II

Regulation of the practice of the profession

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Licensing

Chapter-2

Provisions Regarding the Registration of Name

11. Prohibition to Practice Engineering Profession without Getting Registered name:

After one year from the date of commencement of this Act, no person shall practice the engineering profession without getting his name registered in the Council.

OBJECTIVE OF PROFESSIONAL ASSOCIATION

 purpose of the association should be to regulate the practice of professional engineering and to govern its member, holders of certificate of authorization, holders of temporary licenses and holders of limited licenses in accordance with the act of the country or provinces in order that the public interest can be served and protected.

- The principal objective:
- Centre of learning; library, network
- Provider of professional status with responsibility for the ethics of the engineering profession
- Voice of profession;
- lobbying government,
- promoting engineering
- A facilitator of best practice;
- providing training, requirement

OBJECTIVE OF PROFESSIONAL ASSOCIATION

- Additional objective:
- To establish, maintain and develop standards of knowledge and skill among its member
- To establish, maintain and develop standards qualification and standards of practice for the practice of professional engineering
- To establish, maintain and develop standards of professional ethics to the members
- To promote public awareness of the role of the association
- To perform such other duties and exercise such other powers as are imposed or conferred the association by or under rule

General Requirements for membership of professional body

- Citizenship (nationality)
- 2. Educational qualification
- 3. Experience
- 4. Character
- 5. Knowledge of law and ethics
- 6. Language and competency

NEA

- Nepal Engineers' Association is an independent nonprofit organization of Nepalese engineers. It was established in 1968.
- NEA is governed by an executive body of 15 members
- elected by members of the association.
- Executive Council, supported by its various 17 committees decides major policy issues and NEA's overall direction.
- Members are encouraged to participate in the affairs of the association.
- The noble aim of developing engineering professionals to promote the development process by application of engineering sciences and technologies and at the same time increasing the interaction, goodwill and cooperation among engineers in Nepal and protect their professional rights.

NEA

- 1. It is the generic national apex body of Nepalese Engineers of various disciplines.
- 2. It is independent and nonprofit organization
- 3. It attempts to regulate effectively the practice of professional engineering in the national development
- 4. It governs its member in accordance with the statute of the body and law of the country in order to serve and protect the public interest
- It safeguards the rights and strengths the professional capacity of engineer

The Nepal engineer's Association Preamble: - (from its constitution)

• Where, it is expedient to make timely amendments to the Statute prepared in the year 2024 B.S. (1967) under which the Nepal Engineers Association, established in the year 2025 B.S. (1968) with the objects to establish an Association to make the role of the engineer community of the professional interest and progress of the Community, has carried out its business, this third amendment having been adopted by the Extra-ordinary. General Assembly held on 051/01/31 (14 May 1994) is brought into force since 051/03/20 (4 July 1994).

objectives of Nepal engineer's Association

- 1. To help in proper development and mobilization of the engineering science and technology in Nepal.
- 2. To increase mutual consultation, good faith and assistance among the Nepalese engineers and safeguard their rights and interests.
- 3. By utilizing, to the highest extent possible, the participation of the engineering manpower of the country in the national development activities of Nepal, to make effort to put an end on foreign dependency in this regard.
- 4. To continuously enhance the highest professional ideals among the members and make it wider.
- 5. To make relations, mutual help and good –faith with international Engineering Association, institutions.

major activities of NEA.

- 1. Publish journals, Manuals, articles and newsletters on various fields of Engineering.
- 2. Organize conferences, workshop and paper presentation programs to foster interaction of engineers of various fields.
- 3. Conduct major talk programs form highly acclaimed professionals on engineering issues.
- Recognize and award distinguished professionals for their contribution.
- 5. Enhance safeguard of professional right of engineers
- 6. Cooperate and organize joint activities with foreign and domestic professional organizations.

Benefit of membership

There are numerous benefits to the member by association

Benefit of professional nature

- 1. Provides a focus for the profession maintaining professional standards and complying with international rules of professional conduct.
- 2. Offers worldwide recognised qualifications and support and advice required to achieve them (such as: Establish routes to membership to suit EMF)
- 3. Allocates fund local activities
- 4. Gives training, advises and conduct generic training courses
- 5. Arranges regular meetings and visit to centers and chapters to heart local views
- 6. Proceeding, Information share, journal publication, newsletter etc
- 7. Offers library as a room of learning
- Offers national/international level conference, seminar, workshop, lecture, and movement of awareness
- 9. Arbitration, conciliation services

Benefit of personnel nature:

- 1. Participate in a comprehensive technical program of your field of interest
- 2. Enjoy a wide range of technical visits and social functions
- 3. Contribute to the future of your profession
- 4. Have your views included in major responses to draft policy
- 5. Have comprehensive guidance to become professional engineer
- 6. Have a basis for continue professional development
- 7. Have access in the international recognition, status and networking opportunities through overseas partnership and reciprocal agreements
- 8. Give views on professional issues to the politician, governments, and civil society
- 9. Participate in short term and long term training
- 10. Meet professional colleagues at all level

Benefit of personnel nature:

- 11. Keep up to date with what is happening in the profession
- 12. Initiate technical papers or articles about projects you are working on
- 13. Maintain good contact with the media and promote wide; image with public
- **14.** Assist in the training of other engineers
- 15. Support school, college and university visits
- 16. Benefit from excellent awards
- 17. Utilizing the services and facilities of association
- 18. Get member benefits from the discounts and other services from different sectors in the society
- 19. Have wider range of linkage, opening a new horizon for career advice and employment opportunities
- 20. Be proud of your profession

Nepal engineering Council

Nepal engineering council is an autonomous body formed under government act (NEC act 2054). It regulates engineering profession effectively and scientifically.

It also undertakes licensing of engineering accordance with their qualification.

NEC

- Nepal Engineering Council Rules, 2057 has also been prepared and approved by Nepal Government as per the provision of Clause 37 of the Act.
- registration of engineers into three categories as well as the formats for application:
- a) General Registered Engineer
- b) Professional Engineer
- c) non Nepali Registered Engineer
- NEC Rules 2057 also lays down the professional code of conduct for engineers registered with the Council.

Objectives of NEC

- The objective of Nepal Engineering Council is to make the engineering profession effective by mobilizing it in a more systematic and scientific and also to register the engineers as per their qualifications. Its duties and
 - 1) To prepare policies, plans and programs for the smooth functioning of the engineering profession and to execute them
 - 2) To set norms and standards for engineering education in Nepal

Objectives of NEC

- 3) To grant permission and approval to carry out engineering education to those engineering colleges and institutions that meet the required norms and standards and to honor their degrees and certificates
 - 4) To monitor and inspect the quality of engineering education provided by the engineering colleges and institutions
 - 5) To fix the qualification necessary in order to practice engineering profession and to register their name in the Council
 - 6) To remove their name from the registration of the engineering council if found to violate the code of ethics.

Jurisdiction of NEC

Licensing of engineers

- 1. Accreditation of certificates of academic qualification
- 2. Recognition of the academic institution
- 3. Professional code of conduct

Disciplinary

Registration categories

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- professional engineer
- 3. Foreign engineer C

Registration requirement

- 1. Application in approved format
- 2. Copies of certificate of academic qualification
- 3. Enclosed registration fee as lat
- Other relevant document

Disciplinary Action

- 1. With the aim of uphold high professional standards
- 2. and deal with situation,
- 3. in which the public safety or welfare may be endangered, a disciplinary action process is formed.
- 4. This process is not an alternative to civil court.
- 5. It deals solely with professional and ethical practice.
- 6. Anyone with concern about the conduct of a member of the association is encouraged to contact the association.
- 7. Complaints provide facts and written summary of the allegations (claim).

Disciplinary Action

The process of disciplinary action

- 1. Gathering evidence of complaint
- 2. Investigation of the complaint
- 3. Disciplinary hearing
- 4. If professionals found not doing wrong during practice, the complaint is dismissed and no further action is taken. But if proved professional misconduct or misbehaviors, than she/he has to undergo following action
- 5. Is asked for further clarification
- 6. Right to practice is suspended for certain period
- 7. Right to practice is cancelled completely
- 8. Subject to fine
- 9. May be ordered to pass professional standards examination,
- 10. Complete a course of study obtain experience in particular field

Code of ethics for engineer Professional code of conduct

The professional code of conduct to be followed by the registered engineers
of the council, subject to the provision of Nepal Engineering Council Act,
2055 (1998) and Nepal Engineering Council Regulation, 2057 (2000),

NINE POINT CODE OF CONDUCT

NEA Adopted code of ethics for its fellow since 2025 as per NEA

- 1. Fundamental principle of professional engineering ethics
- 2. Upholding and advancing engineering profession
- 3. Keeping high standard of ethical conduct
- 4. Quality of engineer
- 5. Will be honest and fair and serve employer, clients and public
- 6. Will dedicated to the advancement of competence of engineering profession and to disseminate engineering knowledge
- 7. Will use his knowledge and skill in the service of humanity

- 1. Knowledge of technology
- 2. Social understanding
- 3. Economical realities
- 4. Legal awareness
- 5. Environmental skills
- 6. Management skills
- 7. Leadership and innovation

Relation with public

• The Engineer,

- 1. Will have proper regard for the for the health, safety, and welfare of public
- 2. Will endeavor to extend public knowledge and appreciation of engineering profession and to dissemination engineering knowledge
- 3. Will be dignified and modest in explaining his work and merit and refrain from misrepresentative self-laudatory advertisement
- 4. Will express an opinion on an engineering subject

Relation with public

- Relation with client, with employer
- 1. Will act as faithful agent or trustee for employee or client.
- 2. Will not accept compensation or remuneration from more than one party for same services or service pertaining same work, without the consent of all interested parties.
- 3. Will inform his employer o client of his financial interest in any vendor or contractor and this should not affect to his services.
- 4. Will indicate employer the adverse consequences if his judgment is overruled.
- 5. Will undertake only those engineering assignments for which he is qualified.
- 6. Will not disclose information concerning business affairs or technical process.
- 7. Will not divulge any confidential findings of studies or action of any commission or broad in which he is member.
- 8. Will not exert undue influence or offer solicit or accept compensation for the purpose of affairs negotiations for an engineering engagement.

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Relation with engineers

- 1. Will take care that credit for engineering works is given to those directly responsible for.
- 2. Will provide complete information on working conditions and status of employment.
- 3. Will uphold the principle of appropriate and adequate compensation for those engaged in engineering works.
- 4. Will endeavor opportunity for professional development and advancement of fellow engineer under his supervision.
- 5. Will not attempt to injure falsely or maliciously professional reputation, prospects or practice of other engineer
- 6. However, he has proof that engineer has been unethical, illegal or unfair in his practice, he should so advise to proper authority.
- 7. Will not use the advantage of salaried position to compete unfair with other engineer.
- 8. Should give due regards to all professional aspects of the engagement.
- 9. Will not attempt to supplant other engineer in a particular engagement.
- 10. Will not review the work of other engineer for the same client except with the knowledge of such engineer.
- 11. Will cooperate in advancing the engineering profession by interchanging information and experience with other engineers by contributing to public communication media.

Responsibilities of engineers

- Will be honest and fair, will serve the client and e the public with devotion
- Will dedicate himself to the advancement of the competence of the engineering profession
- Will use the knowledge and skill in the favor of humanity
- RESPONSIBILTY TOWARDS THE NATION
- MORAL RESPONSIBILITY
- INVOLVEMENT IN COMMUNITY DEVELOPMENT
- REFRAIN FROM WORKS WHICH ARE AGAINST NATIONAL INTEREST

Responsibilities of engineers

- RESPONSIBILTY TOWARDS THE CLIENT
- TO GAIN AND MAINTAIN CLIENT CONFIDENCE
- TO BE LOYAL TO THE CLIENTS
- TO PROTECT INTEREST OF CLIENT
- TO SAFEGUARD CLIENT COFIDENTIAL INFORMATION
- TO DISCLOSE THE CONFLICT OF INTEREST

Responsibilities of engineers

- RESPONSIBILTY TOWARDS THE PROFESSION
- THE NECESSITY OF FORMER QUALIFICATION
- REFRAIN FROM CLAIMING SKILL NOT IN HIS/HER PROFESSION
- THE NEED TO EXERCISE GREATER SKILL IN SPECIALISED JOBS
- THE NEED FOR HIGH QUALITY OF SKILL
- ELIGIBILTY FOR agreed remuneration only
- Refrain from holding position where there is conflict of interest
- The need for professional development

Relationship of engineering profession to basic science and technology; relationship to other professions

- Engineering itself is an application of knowledge and skills acquired through a specialized training, education and experiences and practicing the same as an occupation in the areas of public safety, health and property protection. In short it is a systematic application of knowledge and skill.
- The basic science teaches us the law of nature, properties of matters and sources of power that are available around us. Technology teaches us the best application of those laws of nature and utilization of the properties of matters and sources of power by which, engineer can make new facilities and create new services.

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