

Engineering Ethics

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Engineering Ethics

Communitising Technology



Chapter 4 The Rights and Responsibilities of Engineers



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Chapter Description

• Aims

- Define what is rights and responsibilities
- Expected Outcomes
 - Differentiate the professional engineer and code of ethics.
- Other related Information



Subtopics

4.1 Professional Responsibilities4.2 Professional Rights



4.1 Professional Responsibilities

- Engineers exercise their rights and responsibilities.
 Develop framework for understanding
- When necessary, blow whistle to protect the public i.e. potential design flaws.
- Professional rights
 - Confidentiality and Proprietary Information
 - Conflict of Interest
 - Competitive bidding



4.1 Professional Responsibilities

- Confidentiality and Proprietary Information
 - Keep certain information secret and confidential.
 - Proprietary. Engineers required to sign the nondisclosure agreement.
 - When necessary, blow whistle to protect the public i.e. potential design flaws.
- Conflict of Interest
 - Keep away from his obligations



4.1 Professional Responsibilities

- Competitive bidding
 - Code of ethics included a prohibition on competitive bidding.
 - Prevent engineers to compete. Based on submitting price proposals.



4.2 Professional Rights

- Engineers have rights and responsibilities.
- Most fundamental right, professional conscience.
- Exercise judgement.
- Right to refuse unethical behavior.



4.3 Whistle blowing

- Employer informs the public on unethical (employers or supervisors).
- Engineers to blow whistle on act harm health and safety.



4.3 Whistle blowing

- Internal and external whistle blowing.
- Internal –over immediate supervisor higher level of management.
- External goes to newspapers /law enforcing authorities.



4.3 Whistle blowing

- When to blow whistle;
- Need clear & important harm can be avoided by blowing whistle. *Proximity* – clear position to report. *Capability* – Chance of success of stopping. *Last resort* – No one else more capable or proximate.



References

- Charles B. Fleddermann. 4th Edition. Engineering Ethics.Prentice Hall 2012.
- P. Aarne Vesilind, Alastar S. Gunn. Hold Paramount. The Engineer's Responsibility to Society. Third Edition. Cengage Learning 2016, 2012.





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