Engineering Ethics

Lecture 3

Codes of Ethics

- **Codes of ethics** state the moral responsibilities of engineers as seen by the profession and as represented by a professional society.
- Codes of ethics play at least eight essential roles:
  - Serving and protecting the public,
  - Providing guidance,
  - Offering inspiration,
  - Establishing shared standards,
  - Supporting responsible professionals,
  - Contributing to education,
  - Deterring wrongdoing, and
  - Strengthening a profession's image.

Serving and protecting the public

- Engineering involves advanced expertise that professionals have and the public lacks, and also considerable dangers to a vulnerable public.
- Accordingly, professionals stand in a fiduciary relationship with the public: **Trust and trustworthiness** are essential.
- A code of ethics functions as a commitment by the profession as a whole that engineers will serve the public health, safety, and welfare.
- In one way or another, the remaining functions of codes all contribute to this primary function..

Guidance

- Codes provide helpful guidance by articulating the main obligations of engineers.
- Because codes should be brief to be effective, they offer mostly **general guidance**.
- Nonetheless, when well written, they identify **primary responsibilities**.
- More specific directions may be given in supplementary statements or guidelines, which tell how to apply the code.

Inspiration

- Because codes express a profession's collective commitment to ethics, they provide a **positive stimulus (motivation)** for ethical conduct.
- In a powerful way, they voice what it means to be a member of a profession committed to responsible conduct in promoting the safety, health, and welfare of the public.
- Although this paramount ideal is somewhat *vague*, it expresses a collective commitment to the public good that inspires individuals to have similar aspirations.

Shared standards

- The **diversity of moral viewpoints** among individual engineers makes it essential that professions establish explicit standards, in particular minimum (but hopefully high) standards.
- In this way, the public is assured of a standard of excellence on which it can depend, and professionals are provided a **fair playing field** in competing for clients.

Support for responsible professionals

- Codes give positive support to professionals seeking to act ethically.
- A publicly proclaimed code allows an engineer, under pressure to act unethically, to say: “I am bound by the code of ethics of my profession, which states that…”
- This by itself gives engineers some group backing in taking stands on moral issues.
- Moreover, codes can potentially serve as legal support for engineers criticized for living up to work-related professional obligations.

Education and mutual understanding

- Codes can be used by professional societies and in the classroom to prompt discussion and reflection on moral issues.
- Widely circulated and officially approved by professional societies, codes encourage a shared understanding among professionals, the public, and government organizations about the moral responsibilities of engineers.
- A case in point is NSPE's BER, which actively promotes moral discussion by applying the NSPE code to cases for educational purposes.

Deterrence and discipline

- Codes can also serve as the formal basis for investigating unethical conduct.
- Where such investigation is possible, a deterrent for immoral behavior is thereby provided. Such an investigation generally requires paralegal proceedings designed to get at the truth about a given charge without violating the personal rights of those being investigated.
- Engineering societies cannot by themselves revoke the right to practice engineering in the United States.
- Yet some professional societies do suspend or expel members whose professional conduct has been proven unethical, and this alone can be a powerful sanction when combined with the loss of respect from colleagues and the local community that such action is bound to produce.

Contributing to the profession's image

- Codes can present a positive image to the public of an ethically committed profession.
- Where warranted, the image can help engineers more effectively serve the public.
- It can also win greater powers of self-regulation for the profession itself, while lessening the demand for more government regulation.
- The reputation of a profession, like the reputation of an individual professional or a corporation, is essential in sustaining the trust of the public.

Abuse of Codes

- When codes are not taken seriously within a profession, they amount to a kind of window dressing that ultimately increases **public cynicism** about the profession.
- Probably the **worst abuse** of engineering codes is to restrict honest moral effort on the part of individual engineers to preserve the profession's public image and **protect the status quo (to maintain existing social structure and values)**.
- Preoccupation with keeping a shiny public image may silence healthy dialogue and criticism. And an excessive interest in protecting the status quo may lead to a distrust of the engineering profession on the part of both government and the public.
- The best way to increase trust is by encouraging and helping engineers to speak freely and responsibly about public safety and well-being. This includes a tolerance for criticisms of the codes themselves, rather than allowing codes to become sacred documents that have to be accepted uncritically.
- On rare occasions, abuses have discouraged moral conduct and caused serious harm to those seeking to serve the public.

Limitations of Codes

- Codes are no substitute for individual responsibility in grappling with concrete dilemmas.
- Most codes are restricted to general wording, and hence inevitably contain substantial areas of vagueness. Thus, they may not be able to straightforwardly address all situations.
- At the same time, vague wording may be the only way new technical developments and shifting social and organizational structures can be accommodated.
- Other uncertainties can arise when different entries in codes come into conflict with each other. Usually codes provide little guidance as to which entry should have priority in those cases.
- Most important, despite their authority in guiding professional conduct, codes are not always the complete and final word. Codes can be flawed, both by omission and commission.