

ME 370: The Mechanical Engineering Profession

Lecture 07: Professional Codes of Ethics

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Purpose

Introduce the ASME Code of Conduct and
practice discussion of engineering ethics
cases.

Main Topics

- ASME Codes of Conduct
- Conflict of Interest
- Moral and ethical reasoning as a problem-solving procedure
- Leave room for a case study

Resources

Books

1. Charles E. Harris, Jr., Michael S. Pritchard, Michael J. Rabins, 2009, *Engineering Ethics: Concepts and Cases*, Wadsworth, Belmont, CA.
2. Mike W. Martin and Roland Schinzinger, 2010, *Introduction to Engineering Ethics*, 2nd ed., McGraw-Hill, Boston, MA.
3. Mike W. Martin and Roland Schinzinger, 2005, *Ethics in Engineering*, 4th ed., McGraw-Hill, Boston, MA
4. Caroline Whitbeck, 2011, *Ethics in Engineering Practice and Research*, 2nd ed., Cambridge University Press

Web sites

1. <http://www.onlineethics.org/>
2. <http://ethics.tamu.edu/>
3. <http://www.nspe.org/Ethics/>
4. <http://www.asme.org/groups/educational-resources/engineers-solve-problems/code-of-ethics-of-engineers>
5. <http://files.asme.org/asmeorg/governance/3675.pdf>

ASME Code of Ethics

The code consists of

- Three Fundamental Principles
- Ten Fundamental Canons

[ASME Code of Ethics](http://files.asme.org/ASMEORG/Governance/3675.pdf) <http://files.asme.org/ASMEORG/Governance/3675.pdf>

Fundamental Principles

Engineers uphold and advance the integrity, honor and dignity of the engineering profession by:

1. using their knowledge and skill for the enhancement of human welfare;
2. being honest and impartial, and serving with fidelity their clients (including their employers) and the public; and
3. striving to increase the competence and prestige of the engineering profession.

[ASME Code of Ethics](http://files.asme.org/ASMEORG/Governance/3675.pdf) <http://files.asme.org/ASMEORG/Governance/3675.pdf>

Fundamental Canons

1. Engineers shall hold paramount the safety, health and welfare of the public in the performance of their professional duties.

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Fundamental Canons

1. Engineers shall hold paramount the safety, health and welfare of the public in the performance of their professional duties.
 - ▶ **Definition:** Paramount means more important than anything else, supreme.

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Fundamental Canons

2. Engineers shall perform services only in the areas of their competence; they shall build their professional reputation on the merit of their services and shall not compete unfairly with others.

[ASME Code of Ethics](http://files.asme.org/ASMEORG/Governance/3675.pdf) <http://files.asme.org/ASMEORG/Governance/3675.pdf>

Fundamental Canons

3. Engineers shall continue their professional development throughout their careers and shall provide opportunities for the professional and ethical development of those engineers under their supervision.
 - ▶ Engineers are expected to stay current in their field
 - ▶ Engineers should contribute to the professional and ethical development of the people they supervise

ASME Code of Ethics <http://files.asme.org/ASMEORG/Governance/3675.pdf>

Fundamental Canons

4. Engineers shall act in professional matters for each employer or client as faithful agents or trustees, and shall avoid conflicts of interest or the appearance of conflicts of interest.
 - ▶ ASME policy on conflict of interest states:

The potential for a conflict of interest exists whenever a person owes a loyalty to multiple interests or organizations. Having different interests or loyalties does not constitute a conflict of interest when the action desired by each interest is the same. This situation may be described as a community of interest.
 - ▶ More on this later

ASME Code of Ethics <http://files.asme.org/ASMEORG/Governance/3675.pdf>
<http://files.asme.org/ASMEORG/Governance/3676.pdf>

Fundamental Canons

5. Engineers shall respect the proprietary information and intellectual property rights of others, including charitable organizations and professional societies in the engineering field.
6. Engineers shall associate only with reputable persons or organizations

ASME Code of Ethics <http://files.asme.org/ASMEORG/Governance/3675.pdf>

Fundamental Canons

- 7. Engineers shall issue public statements only in an objective and truthful manner and shall avoid any conduct which brings discredit upon the profession.
- 8. Engineers shall consider environmental impact and sustainable development in the performance of their professional duties.

ASME Code of Ethics <http://files.asme.org/ASMEORG/Governance/3675.pdf>

Fundamental Canons

- 9. Engineers shall not seek ethical sanction against another engineer unless there is good reason to do so under the relevant codes, policies and procedures governing that engineer's ethical conduct.

ASME Code of Ethics <http://files.asme.org/ASMEORG/Governance/3675.pdf>

Fundamental Canons

- 10. Engineers who are members of the Society shall endeavor to abide by the Constitution, By-Laws and Policies of the Society, and they shall disclose knowledge of any matter involving another member's alleged violation of this Code of Ethics or the Society's Conflicts of Interest Policy in a prompt, complete and truthful manner to the chair of the Committee on Ethical Standards and Review.

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Conflict of Interest

A Conflict of Interest occurs when

- A person is in a position of trust that requires judgement that will affect others, and
- That person has obligations, responsibilities or commitments that might interfere with judgement

C. Whitbeck, 2011, *Ethics in Engineering Practice and Research*, pp. 35–36

COI and Conflicting Interests

We all have *conflicting interests*.

conflicting interests ≠ **conflict of interest**

Consider these simultaneous interests or responsibilities

2. An invitation to a friend's birthday party
3. Tickets to championship sporting event
4. Assignment due for class tomorrow
5. Need to catch up on sleep

These interests are in conflict, but do not constitute a conflict of interest.

COI is about Risk, not Fault

Example: Being asked to referee a soccer game in which your child is playing.

Risks:

1. Being lenient to your child's team
2. Being too critical of your child's team

The conflict exists whether or not you make either of those mistakes.

In some cases there is a distinction between a "real" and a "perceived" COI.

Michael Davis, "Conflict of Interests in the Profession", *Perspectives on the Professions*, Vol. 17, No. 1,

Dealing with Conflicts of Interest

1. Awareness
 - ▶ Recognize and acknowledge the conflict
2. Transparency and Currency
 - ▶ Bring the conflict to attention of all parties
 - ▶ Make sure new information is kept in view
3. Independence
 - ▶ Maintain independence of external influences that would interfere with doing your duty as a faithful agent of your employer, while keeping safety paramount and interest of public in mind.

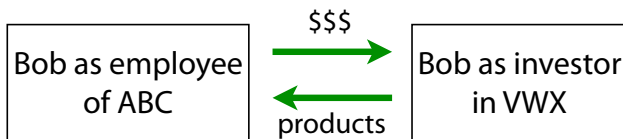
International Federation of Consulting Engineers, <http://fidic.org/node/752>

Unethical actions that can arise from a Conflict of Interest

1. Gifts, Bribes or Kickbacks
 - Gifts are common: "small" gifts are OK. Your employer may have a numerical limit on "small".
 - Bribes are explicit payments with the expectation of influencing an outcome. No "small" bribes are OK.
 - Kickbacks involve sharing the benefit of manipulating and outcome.
2. Financial benefits from success of other companies
 - Subcontractors, owners, family members
3. Trading on Insider information
 - Financial and strategic information
 - Betraying vendor confidence

Example: Conflict of Interest

Example: Bob works for company ABC. Bob is also a co-owner or investor in vendor VWX. Bob is in a position to recommend to ABC whether to buy a product from VWX



Bob has an obligation to be a faithful employee of ABC
Bob has an interest in the financial success of VWX

Example: Conflict of Interest

Example: Bob works for company ABC. Bob is also a co-owner or investor in vendor VWX. Bob is in a position to recommend to ABC whether to buy a product from VWX.

- Is this a conflict of interest?
- What is the specific ethical issue?
- What solutions/actions are available?
