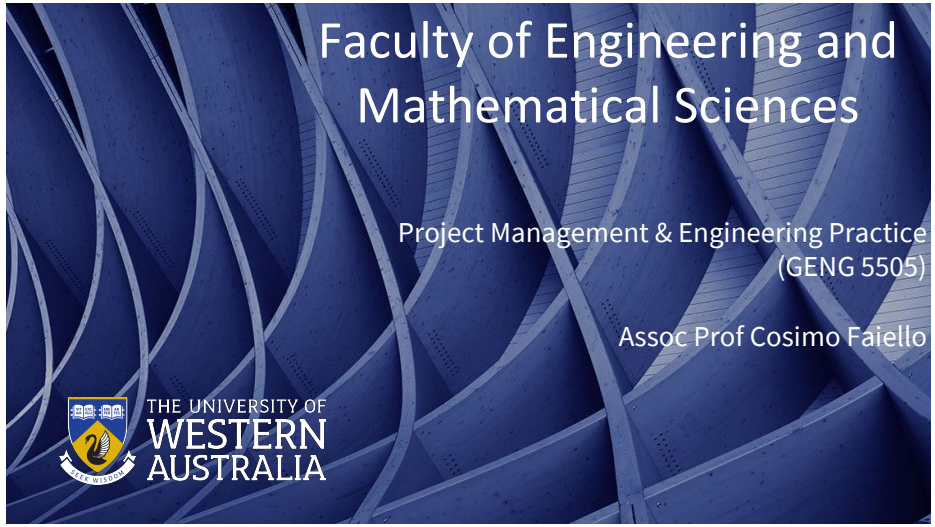


# Project Management & Engineering Practice (GENG5505)

Ethics and professionalism: Moral reasoning & Code of Ethics

(Week 10b) - Lecture 17th, 9 May, 2024

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## Moral reasoning

- Ethical dilemmas arise in engineering (and other professions), as moral values are many and varied and can make competing claims;
- Ethical dilemmas: Situations in which moral reasons come into conflict or when the application of moral values are unclear;
- Moral judgement is then required;
- Moral judgement: Is a process where the formulation of the 1) "moral problem", 2) possible ''solutions'', and 3) the "ethical judging of these solutions" are interlinked.



## Case examples

Case 1: "A cafeteria in an office building has comfortable tables and chairs, indeed too comfortable: They invite people to linger longer than the management desire"

You are asked to design uncomfortable ones to discourage such lingering.

(Norman, 1988).

Case 2: A project manager discovers faulty construction equipment and applies a violation tag, preventing its continued use. The project manager's boss, a construction manager, views the situation as a minor infraction of safety regulations and orders the tag removed so the project will not be delayed.

What should she do?

(Adapted from Schinzinger et al., 2010)

## Moral reasoning: The Ethical Cycle

(I. van de Poel and L. Royakkers, 2007)

1. Case
2. Moral problem statement: i.e. Precise/specific formulation
3. Problem analysis: Clear identification of relevant elements i.e. a) stakeholders; b) moral values involved; c) relevant facts
4. Options for action i.e. All possible options be identified (thinking creatively is essential)
5. Ethical judgement: i.e. Thorough application of moral concepts, ethical theories, models and frameworks;
6. Reflection: i.e. Reflect on the outcome of previous stage
7. Morally accepted action/s: i.e. Is/Are chosen to solve the case/ethical dilemma.

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## Code of ethics

➢Engineering has a direct impact on the quality of life for all people. Subsequently engineers should maintain: Honesty and integrity, impartiality, fairness and equity, and must be dedicated to the protection of the public health, safety and welfare;

➢Engineers must perform under a standard of professional behaviour and adhere to highest principles of ethical conduct. Hence, code of ethics for engineers;

➢Code of ethics defined: “Code of ethics state the moral responsibilities of engineers as seen by the profession and as represented by a professional society”, (Schinzinger et al., 2010);

➢“Values and principles that shape the decisions we make in engineering practice” (Engineers Australia, refer to the website);

➢In essence, a code of ethics functions as a commitment by the profession as a whole, that engineers will serve the public health, safety and welfare.

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## Roles of codes of ethics for engineers

(Schinzinger et al., 2010)

1. Serving and protecting the public: Engineering involves advanced expertise that professionals have and the public lacks. Accordingly, professionals stand in a fiduciary relationship with the public: Trust and trustworthiness are essential.

2. Guidance: Codes provide helpful guidance by articulating the main obligations of engineers.

3. Inspiration: Since 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.

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## Roles of codes of ethics for engineers continues…

4. Shared standards: The diversity of moral viewpoints among individual engineers makes it essential that professions establish explicit standards, in particular minimum (but 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.

5. 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…..”.

6. Education and mutual understanding: Codes encourage a shared understanding among professionals, the public, and government organizations about the moral responsibilities of engineers.

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## Roles of codes of ethics for engineers continues...

7. Deterrence and discipline: Codes can serve as the formal basis for investigating unethical conduct. 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.

8. Contributing to the profession's image: Codes can present a positive image to the public of an ethically committed profession. The reputation of a profession, like the reputation of an individual professional, is essential in sustaining the trust of the public.

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## Limitations of codes

- No substitute for individual responsibilities in dealing with real world ethical dilemmas;
- Codes may include only general wording leaving areas of vagueness;
- Despite the value of guiding professional conduct, codes are not always the complete and final word.
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## Reading week 10b

Van de Poel I. & Royakkers L., 2007, The Ethical Cycle, *Journal of Business Ethics* 71 : 1–13

Engineers Australia Code of Ethic: http://www.engineersaustralia.org.au/

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