

# Engineering Ethics

## Lecture 4



# Moral Frameworks

- ❑ An ethical theory seeks to provide a comprehensive perspective on morality that clarifies, organizes, and guides moral reflection.
- ❑ If successful, it provides a framework for making reasonable moral choices and resolving moral dilemmas—not a simple formula, but rather a unifying way to identify and integrate moral reasons.
- ❑ We discuss five types of ethical theories (and traditions) that have been especially influential:
  - ❑ Rights Ethics,
  - ❑ Duty Ethics,
  - ❑ Utilitarianism,
  - ❑ Virtue Ethics, and
  - ❑ Self-Realization Ethics.



- ❑ Rights ethics says we ought to respect human rights;
- ❑ The ethical theory called rights ethics is distinctive in that it makes human rights the ultimate appeal - the moral bottom line.
- ❑ Rights ethics applies to engineering in many ways; It provides a powerful foundation for the special ethical requirements in engineering and other professions.
- ❑ Most rights ethicists affirm that both *liberty* and *welfare human rights* exist.
- ❑ ***Liberty rights*** are rights to exercise our liberty, and they place duties on other people not to interfere with our freedom.
- ❑ ***Welfare rights*** are rights to benefits needed for a decent human life, when we cannot earn those benefits, perhaps because we are severely handicapped, and when the community has them available.



# Duty Ethics

- ❑ Duty ethics says we ought to respect individuals' rational autonomy.
- ❑ Autonomy—moral self-determination or self-governance—means having the capacity to govern one's life in accordance with moral duties.
- ❑ Duty ethics reverses the order of priority by beginning with duties and deriving rights from them.
- ❑ **Immanuel Kant** (1724–1804), the most famous duty ethicist, argued that *all specific duties derive from one fundamental duty to respect persons*.
- ❑ Persons deserve respect because they are moral agents - capable of recognizing and voluntarily responding to moral duty.
- ❑ Immorality occurs when we merely use persons as means to our goals, rather than as autonomous agents who have their own goals.
- ❑ We also have duties to ourselves, for we too are rational and autonomous beings.



- ❑ Kant conflated three ideas:
  - (1) **Universality**—moral rules apply to all rational agents;
  - (2) **Categorical imperatives**—moral rules command what is right because it is right; and
  - (3) **Absolutism**—moral rules have no justified exceptions.
- ❑ Engineers have a duty to maintain confidentiality about information owned by their corporations, but that duty can be overridden by the paramount duty to protect the safety, health, and welfare of the public.
- ❑ Hence many moral dilemmas are resolvable only by recognizing some valid exceptions to simple principles of duty.
- ❑ Therefore nearly all ethicists reject Kant's absolutism.



- ☐ Utilitarianism says that we ought to maximize the overall good, taking into equal account all those affected by our actions.
- ☐ Rights ethics and duty ethics are obligatory for reasons independent of their consequences.
- ☐ In contrast, utilitarianism says the sole standard of right action is good consequences.



- ❑ Virtue ethics says that good character is central to morality.
- ❑ Virtues are desirable habits or tendencies in action, commitment, motive, attitude, emotion, ways of reasoning, and ways of relating to others.
- ❑ Virtues are tendencies to find the ***reasonable*** (golden) mean between the extremes of too much (excess) and too little (deficiency) with regard to particular aspects of our lives.
- ❑ The most comprehensive virtue of engineers is responsible professionalism. This umbrella virtue implies four (overlapping) categories of virtues:
  - ❑ public well-being,
  - ❑ professional competence,
  - ❑ cooperative practices, and
  - ❑ personal integrity.



# Self-Realization Ethics

- ❑ Self-realization ethics emphasizes the moral significance of self-fulfillment.
- ❑ Self-realization ethics, gives greater prominence to self-interest and to personal commitments that individuals develop in pursuing self-fulfillment.
- ❑ Self-realization ethics points to the highly personal commitments that motivate, guide, and give meaning to the work of engineers and other professionals.

