

# *Ethical Issues*

**Abdulaziz M. El-Tamimi**



Industrial Engineering Department  
College of engineering  
King Saud university



## Topics

- Ethics: defined
- **Ethical Issues**
  - ✓ Technical writing ethics
  - ✓ Engineering ethics



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## *Ethics: defined*



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### *Ethics: defined*

- It is the human philosophy to *determine moral values* (attitudes or behaviors giving priority to social values, e.g. ethics or morals), and
- It is concerned with the *studies of the moral behavior in humans and how one should act.*
- It involves systematizing, defending and recommending *concepts of right and wrong conduct* brought by appropriate and rational decision based on common sense.

<http://en.wikipedia.org/wiki/Ethics>

<http://www.thefreedictionary.com/Ethical+issues>



## Ethical Issues

- There are many human social and societal issues in societies (these issues are related to values of religion, social, professional, etc.).

Hence, for an ethical issue, a set of rules and standards of moral behavior are developed intending of using them to behave in good well.

We are concerned with two important issues:


- (1) **Technical writing ethics**
- (2) **Engineering ethics**

## Technical writing ethics



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## Technical writing ethics

- *A set of rules and standards for using communication skills and resources by writer morally related to societal values*

*The writer is concerned with communicating his writing based on following questions:*

- *What you say*
- *How you say it*
- *Who you say it to*

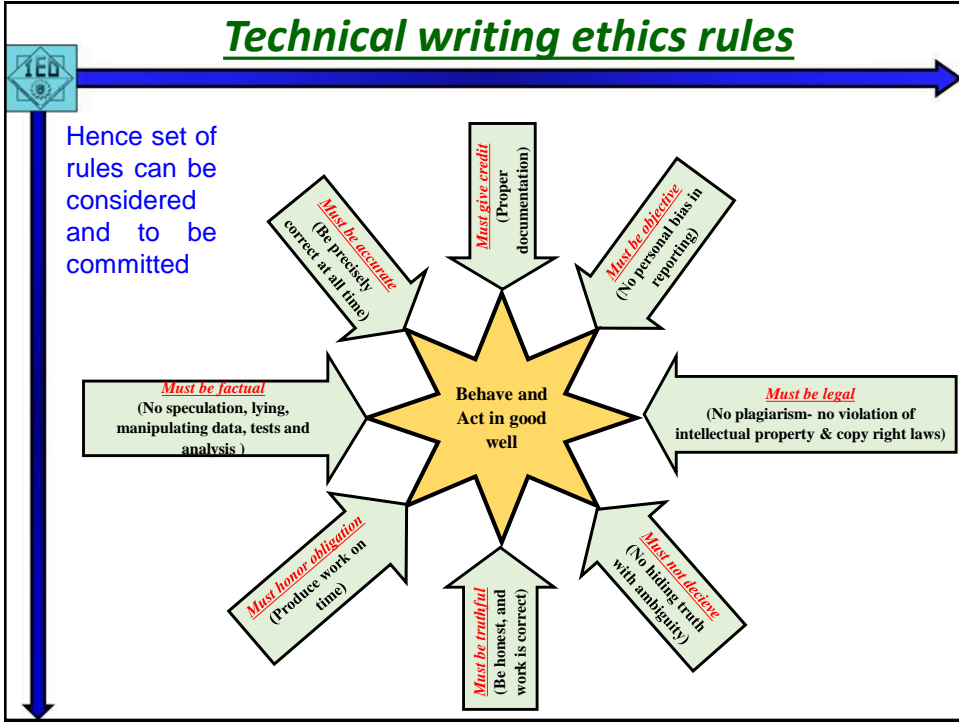


## Technical writing ethics principles


*The writer commit him self to set of ethics. The principles are:*

- *Legality*
- *Honesty*
- *Confidentiality*
- *Quality*
- *Fairness*
- *Professionalism*
- *Culture diversity*
- *Respect*

<http://www.allbestessays.com/English/Ethics-Technical-Communication/2470.html>  
<http://wiz.cath.vt.edu/tw/TechnicalWriting/Ethics/stcguidelines.htm>  
<http://fie-conference.org/fie98/papers/1360.pdf>  
<http://astcnsw.org.au/codeofethics>

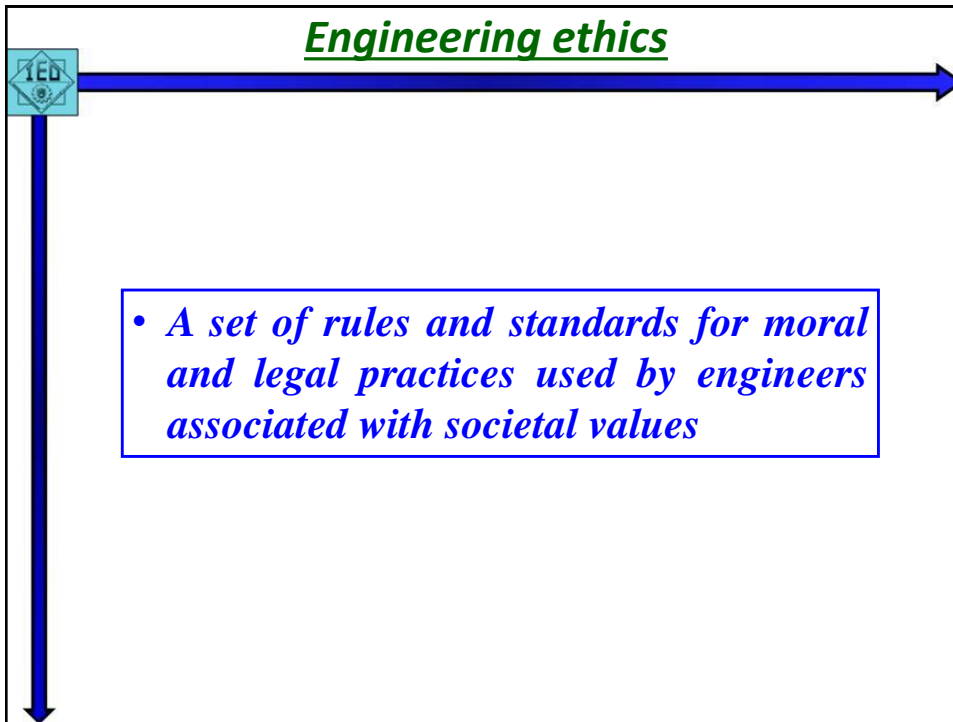


## Engineering ethics




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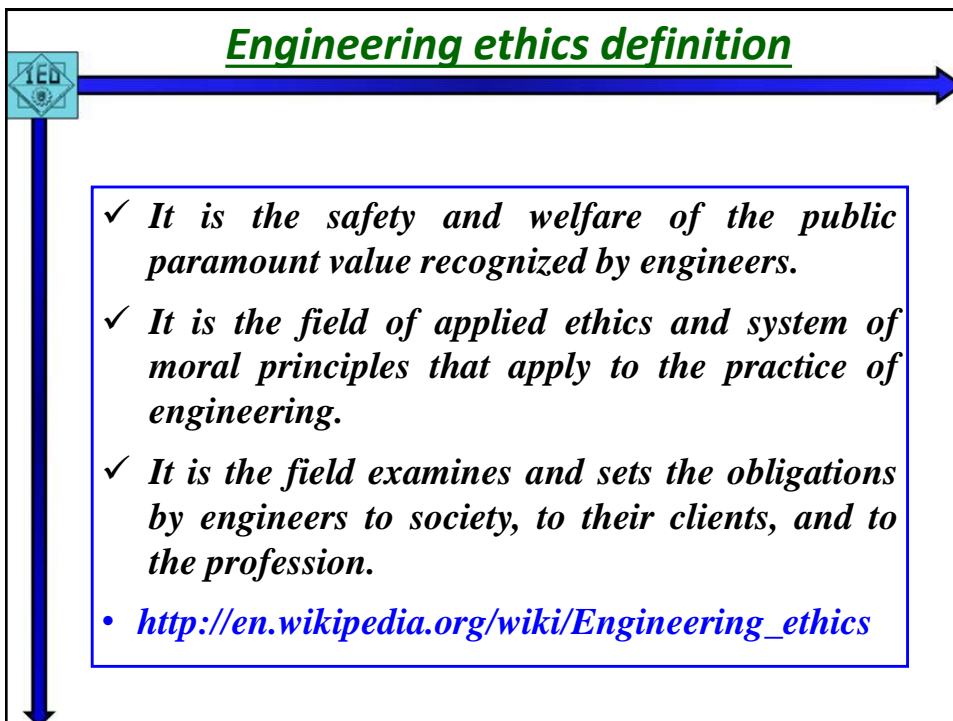


**Engineering ethics**




- *A set of rules and standards for moral and legal practices used by engineers associated with societal values*

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**Engineering ethics definition**



- ✓ *It is the safety and welfare of the public paramount value recognized by engineers.*
- ✓ *It is the field of applied ethics and system of moral principles that apply to the practice of engineering.*
- ✓ *It is the field examines and sets the obligations by engineers to society, to their clients, and to the profession.*
- *[http://en.wikipedia.org/wiki/Engineering\\_ethics](http://en.wikipedia.org/wiki/Engineering_ethics)*

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## Engineering ethics code definition



- ✓ *Codes of engineering ethics identify a specific precedence with respect to the engineer's consideration for the public, clients, employers, and the profession.*
- ✓ *“Engineers, in the fulfillment of their professional duties, shall hold paramount the safety, health, and welfare of the public”*
- *[[National Society of Professional Engineers](#)]*

## Engineering ethics code Adaptation



- ✓ *Formal codes of ethics are adopted by engineering societies in technical and construction practice, as well as ethical standards.*
- ✓ *The codes have been incorporated to a greater or lesser degree into the regulatory laws of several jurisdictions.*
- ✓ *While these statements of general principles served as a guide, engineers still require sound judgment to interpret how the code would apply to specific circumstances.*

## Engineering ethics code Adaptation



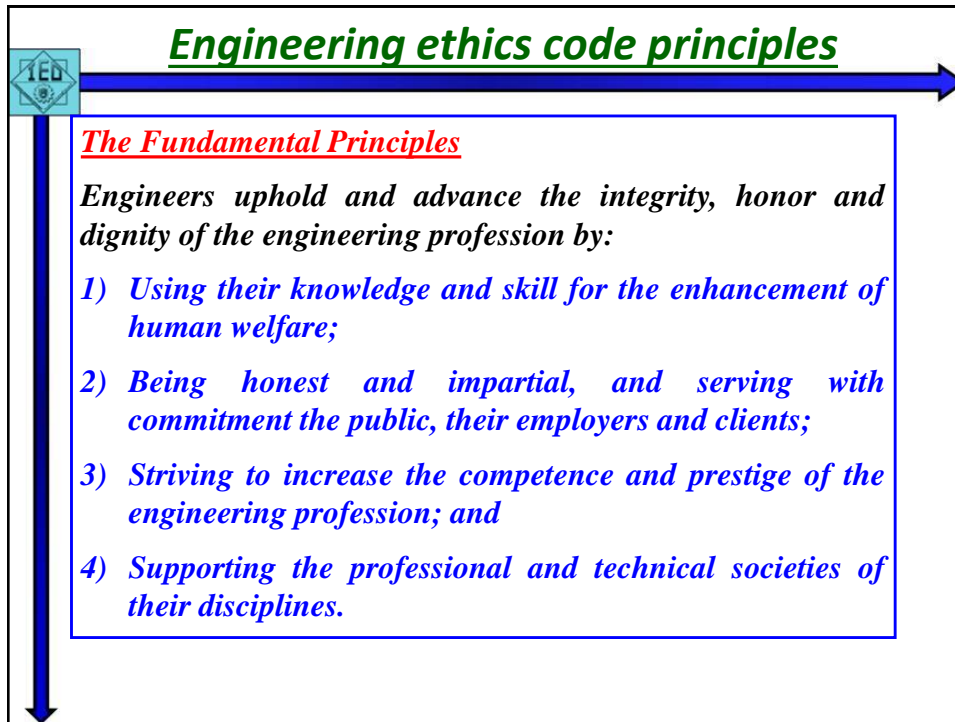
- ❑ *Professional societies have adopted generally uniform codes of ethics. On the other hand technical societies have generally not adopted these, but instead sometimes offer ethics education and resources to members similar to those of the professional societies.*
- ❑ *Formal credentials (Licensing) is a requirement to practice. This involves meeting some combination of educational, experience, and testing requirements.*
- ❑ *Hence, it is required engineers to be licensed, or passed special legislation reserving title rights to organization of professional engineers.*

## Engineering ethics code principles



- *The general principles of the codes of ethics are largely similar across the various engineering societies and chartering authorities of the world, which further extend the code and publish specific guidance.*



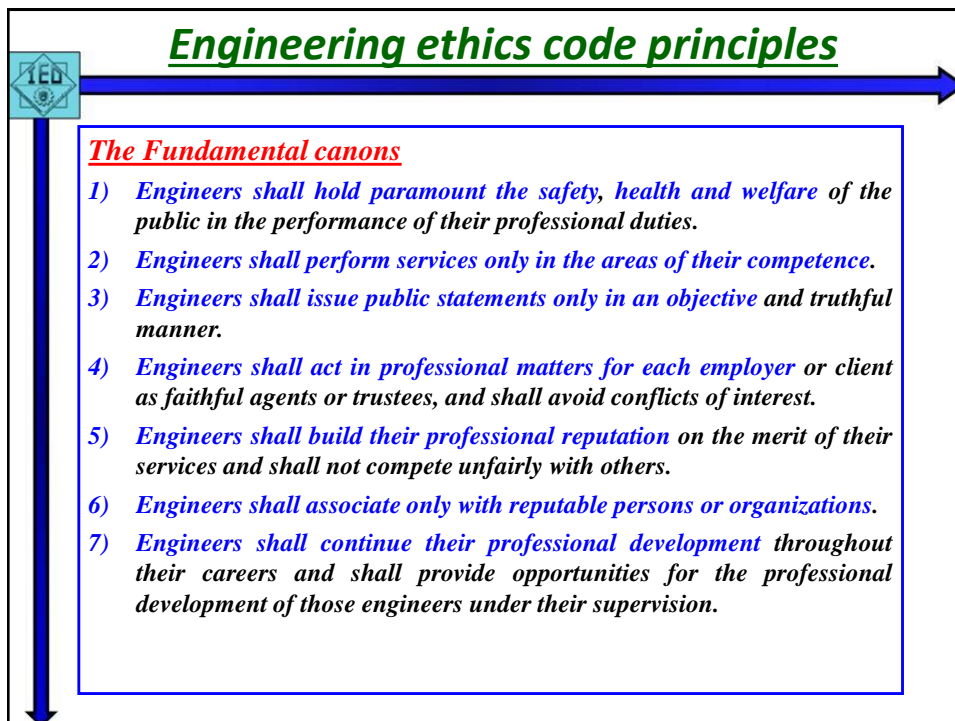


**Engineering ethics code principles**

**The 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 commitment the public, their employers and clients;*
- 3) *Striving to increase the competence and prestige of the engineering profession; and*
- 4) *Supporting the professional and technical societies of their disciplines.*



**Engineering ethics code principles**

**The Fundamental canons**

- 1) *Engineers shall hold paramount the safety, health and welfare of the public in the performance of their professional duties.*
- 2) *Engineers shall perform services only in the areas of their competence.*
- 3) *Engineers shall issue public statements only in an objective and truthful manner.*
- 4) *Engineers shall act in professional matters for each employer or client as faithful agents or trustees, and shall avoid conflicts of interest.*
- 5) *Engineers shall build their professional reputation on the merit of their services and shall not compete unfairly with others.*
- 6) *Engineers shall associate only with reputable persons or organizations.*
- 7) *Engineers shall continue their professional development throughout their careers and shall provide opportunities for the professional development of those engineers under their supervision.*

## Engineering ethics code principles



### Responsibility of Engineers

- 1) *Able to recognize the merit of his profession in serving society, attending to the welfare, benefiting mankind and progress of the majority.*
- 2) *Increase his awareness of the world as the abode of man, the universe, and knowledge of reality to make the world fairer and happier.*
- 3) *Reject any harm, thus avoiding a situation that might be hazardous or threatening to the environment, life, health, or other rights of human beings.*
- 4) *High standards of conduct is expected to be committed by an engineer.*
- 5) *Carry out his work efficiently and to support the law. In particular, he must ensure compliance with the standards of worker protection as provided by the law.*
- 6) *Uphold the prestige of the profession, to ensure its proper discharge, and to maintain a professional demeanor rooted in ability, honesty, fortitude, temperance, magnanimity, modesty, honesty, and justice; with the consciousness of individual well-being subordinate to the social good.*
- 7) *Must ensure the continuous improvement of his knowledge, particularly of his profession, disseminate his knowledge, share his experience, provide opportunities for education and training of workers, provide recognition, moral and material support to the school where he studied, thus returning the benefits and opportunities he and his employer have received.*

## What should be known by engineer about ethics?



- 1) *Enough knowledge about the legal aspects of engineering practice to recognize when you need to take certain actions or to know when to seek legal counsel.*
- 2) *Realize that the engineering profession has expectations for your conduct and that a true professional recognizes responsibilities to the employer, the profession, and society, not just those to himself or herself.*