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# Professional Judgment: What, How, When?

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# Judgment - Definition

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- Main Entry: **judg-ment**
  - Variant(s): or **judge-ment** \ˈjəj-mənt\
    - Function: *noun*
    - Date: 13th century
    - **1 a** : a formal utterance of an authoritative opinion
      - b** : an opinion so pronounced
    - 4 a** : the process of forming an opinion or evaluation by discerning and comparing
      - b** : an opinion or estimate so formed
    - 5 a** : the capacity for judging : ***discernment***
      - b** : the exercise of this capacity
- synonyms see *sense***





# Professional - Definition

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- Main Entry: **pro-fes-sion-al**
- Pronunciation: \prə-'fesh-nəl, -'fe-shə-nəl\
- Function: *adjective*
- Date: 1606
- **1 a** : of, relating to, or characteristic of a profession  
**b** : engaged in one of the learned professions  
**c (1)** : characterized by or conforming to the technical or ethical standards of a profession  
**(2)** : exhibiting a courteous, conscientious, and generally businesslike manner in the workplace

[www.m-w.com](http://www.m-w.com)





# Profession - Definition

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- Main Entry: **pro-fes-sion**
- Pronunciation: \prə-'fe-shən\
  - Function: *noun*
  - Etymology: Middle English *profession*, from Anglo-French *profession*, from Late Latin & Latin; Late Latin *profession-*, *professio*, from Latin, public declaration, from *profitēri*
  - Date: 13th century
  - **4 a** : a calling requiring specialized knowledge and often long and intensive academic preparation
  - **b** : a principal calling, vocation, or employment
  - **c** : the whole body of persons engaged in a calling





# Professional Judgment

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The process of forming an opinion or evaluation (characterized by or conforming to the technical or ethical standards of a a calling requiring specialized knowledge and often long and intensive academic preparation) by discerning and comparing.





# Problem Solving

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- Decisions are based on:
  - Technical information
  - Public / Societal impact
  - Professional judgment bridging the gap where information is not available or does not provide clear direction





# Professional Judgment

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- What you need when you can't get all the information
- Developed through:
  - Academic training
  - Professional experience (on-the-job)
  - Professional Development
  - Mistakes





# Mistakes

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- OK in a peer-reviewed environment
- Typically contextual – but may be generalized





# Learning from Mistakes

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- Admission of mistake
- Understanding of what happened
- How to avoid it in the future



“Experience is the name every one gives to their mistakes.”

Oscar Wilde quotes (Irish Poet, Novelist, Dramatist and Critic, 1854-1900)





# Licensure and Judgment

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- Currently most states do not license by specific engineering discipline, but rather provide generalized licensure, and trust engineers to use professional judgment regarding their individual competencies; this is the favored approach of the professional societies.

wikipedia





# Professional Engineering Decisions

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Professional Engineering decisions:

- are impartial.
- give priority to the safety and wellbeing of the community.
- are based on an assessment of risks to the public.
- try to minimize adverse public impact and maximize public benefit.





# Engineering Decisions

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- Engineering like other professions calls for morally complex decisions
- It requires autonomous moral judgment in trying to uncover the most morally reasonable courses of action, and the correct courses of action are not always obvious

**Ethics in engineering (4<sup>th</sup> ed. – 2004)**

By Mike W. Martin, Roland Schinzinger





# Easy Decisions?

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- If the duties of an engineer were so clear that it was obvious to every sane person what was morally proper in every situation, there would be little point in speaking of “conscience”

**Ethics in engineering (4<sup>th</sup> ed. – 2004)**

By Mike W. Martin, Roland Schinzinger





# Other Professions

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- Miller asserts that professional judgment lies at the heart of the accounting profession, in part because few measurements, recognitions, and aggregations of accounting data can be undertaken in an objective fashion.
- Accounting is essentially subjective; thus, accountants must hone their individual professional judgment to carry out the tasks they take on.
- Society holds accountants responsible for their decisions, whatever their roles; hence they need to exercise good professional judgment so they can meet their responsibilities.

Herb Miller, “Collectivization of Judgment”





# Collectivization of Judgment

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- "Judgment develops from the interaction of education and experience."
- However, "the quality of the judgment developed by the interaction of education and experience is not automatically assured."
- Accounting firms and professional associations such as the American Institute of CPAs engage in various activities that help increase the quality of a person's judgment.

Herb Miller, "Collectivization of Judgment"





# Add for an Engineer

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- Independently addresses and reconciles a broad range of complex engineering problems which may or cannot be adequately assessed and determined from measurement or observation alone;
- Deals extensively with controversial economic and public policy issues which are likely to hinder progress of construction or operating permits;
- **Applies professional judgment where a variety of conflicting engineering related conditions present a major problem;**
- Represents department with authority on technical engineering matters;
- Applies professional registration seal to plans and specifications prepared;
- Develops procedures and standards for multiple engineering projects that are significantly technical and complex.







# Professional Judgment

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- Professional judgment allows us to know what we don't know ...
- And to move forward anyhow



“Thinking you know when in fact you don't is a fatal mistake, to which we are all prone”

Bertrand Russell quotes (English Logician and Philosopher 1872-1970)

