ECE 481

Ethics in
Electrical and Computer Engineering

Lecture #7: Engineer’s Responsibilities and Rights

Prof. K.M. Passino
Ohio State University
Department of Electrical and Computer Engineering
Professionalism at the workplace…

• Professionalism at work involves competence, a sense of fun and excitement, good conduct, and personal commitments
• Engineer’s main responsibility: Top performance and professionalism
• What are the key issues at work?
• Some things matter, some do not? Which ones? Many different perspectives...
• Example: Dress code?
• Example: Office space/decor “code”? Tech-inspire
Teamwork

- **Ethical corporate climate:**
  - Ethical values in full complexity are acknowledged
  - Responsibilities to constituencies affirmed (other teams, departments, administration, clients/customers)
  - Ethical language is acceptable (you can say what you think is right and wrong)
  - Management (you?) sets moral tone in words, policies, and personal examples, and each person does too.
  - **Examples:** Lunch/break lengths, work diligence, time sheets
  - Procedures for conflict resolution in teams are important

Ethics is not just doing what makes the company money!
• **Loyalty and collegiality:**
  - **Example:** Acceptance of job offer, what do you owe the company? Can you interview? Take another offer?
  - As an employee, fulfill contractual duties to employer (get the job done to your best abilities)
  - **Example:** Has corporate loyalty to employees degraded? How easily can you get fired if you are performing well? Does this imply that your loyalty should degrade? Creates a bad tone!
  - **Attitude (collegiality)**
    - Willingly seek to perform duties
    - Enthusiastic, not “forced”
    - Closely related to loyalty
    - Over long time periods good attitude can be difficult to maintain
• Managers and engineers
  – Respect authority, but…
  – Your demands for professionalism, and appropriate professional tone set by the boss and in the workplace, are important!
  – **Example:** Porn in the workplace
  – Expert authority is important, a key aspect of professionalism, and something that should be respected (even if someone is not your boss)
  – “Company-orientation” (engineering, customer, finances, marketing). What *mix* is best? You may decide this if you are the boss.
  – How does the company manage conflict? Managers? Ombudsperson? Organizational structures?
Confidentiality and Conflict of Interest

- **Confidentiality**
  - What to keep secret?
  - “Proprietary information” - disclosure to competitors would hurt the company. The company has a right to some secrets.
  - What about a right to secrecy about poor practice, unethical policies and practices, etc.?

- **Changing jobs:**
  - Confidentiality to old employer does not cease!
  - But, there is a *soft boundary* as you always bring along your expertise and experiences (i.e., your brain)!
• **Management policies?**
  
  – Mark documents as “proprietary”?! Make clear statements about what is and is not confidential.
  
  – “Employment contracts”
    • Have you signed one?
    • Did you read the fine print?
    • **Example:** Do you own work that you do at home at night on unrelated projects?

• **Clear policies are critical!** They help set a professional tone since they set clear boundaries. *Everyone then knows what is right or wrong.*
Conflicts of Interest

• Situations that if pursued could keep employees from meeting obligations to employer:
  – Gifts, bribes, kickbacks? Have you done this? Is is always unacceptable? When/where is it acceptable?
  – Interests in other companies (suppliers?)
  – Insider information (impact on stocks)
Rights of Engineers

• Professional rights
  – Right of professional conscience (moral autonomy)
  – Right of conscientious refusal (can refuse to be unethical just because you view it to be that way)
  – Right to recognition, fair pay
Employee rights…

• Privacy (e.g., in computers). To what extent can the company pry?

• **Equal opportunity, nondiscrimination**
  – Have you seen discrimination in the workplace?
  – Have you seen sexual harassment in the workplace?

• What should you do about it? Just because you see it, are you responsible?

• **Examples:** Should you date co-workers? Is it a good idea to date the boss?
Whistle-Blowing

- What is whistle-blowing?
- Disclosure by employee outside approved channels, to group that may take action
- Topic is a significant moral problem (e.g., public safety)
- **Examples:** BART case, Virginia Edgerton phone case, etc.
IF YOU REFUSE TO DO SOMETHING ABOUT OUR PRODUCT'S SAFETY FLAW, I WILL BE FORCED TO CONTACT OUR CEO!

TRY IT.

THIS E-MAIL WILL MAKE HIM DROP EVERYTHING AND CALL ME.

HUNDREDS WILL DIE... BLAH, BLAH, BLAH... WHATEVER. FORWARD THE MESSAGE TO THAT POINTY-HAIRED GUY.
Moral guidelines for whistle-blowing…

• “Permissible and obligatory” if:
  – Actual or potential harm is serious
  – Harm is documented
  – Concerns have been reported to superiors
  – Do not get satisfaction, explore all other organizational channels to the top
  – Reasonable hope that whistle-blowing will help prevent or remedy the harm
  – **Example:** Challenger case

• **But, specific cases raise problems with such guidelines**
Commonsense procedures...

1. Except in rare emergency, work through channels
2. Know the rules for making appeals
3. Be prompt in objecting
4. Be tactful, low-key, avoid getting emotional (stay professional, focus on objective issues)
5. Be considerate of feelings, avoid personal criticisms
Additional commonsense approaches…

1. Keep supervisors informed (discussions and memos)
2. Be accurate, document
3. Consult trusted colleagues
4. Before going outside, consult ethics committee of professional society
5. Consult a lawyer
Issues we did not cover…
see the book

- Research integrity:
  - Universities
  - Government labs, corporations
- Consulting engineers (unique due to independence)
- Engineers as expert witnesses and expert advisors (law/engineering interface)
Attendance Question

• For those of you who have had an engineering job, describe unprofessional behavior you have seen in the workplace.
  – Do not use names of people/companies
  – I reserve the write to publicly speak/write about the cases and will not pursue cases. This is only for education!
  – Can put your name on a different sheet

Please: Put your name on the sheet of paper and turn it in...