DEPARTMENT
OF
ELECTRICAL AND COMPUTER
ENGINEERING
THE UNIVERSITY OF TEXAS AT EL PASO

PROFESSIONAL AND
ETHICAL CONDUCT
PROFESSIONALISM

✓ A professional must be able to properly balance competing values in making decisions that affect both society and the client, especially where personal, societal, and cultural values conflict.

✓ Engineering requires creativity (invent something new) and dedication (put the necessary effort) to succeed.

✓ Engineers must get involved with their profession and with the society.

✓ AS AN ENGINEERING STUDENT YOU ARE EXPECTED TO BEHAVE PROFESSIONALLY.
STUDENT ORGANIZATIONS WITHIN ECE DEPARTMENT

- Institute of Electrical and Electronics Engineers (IEEE) and Eta Kappa Nu (HKN) – EE Honor Society
  Office for UTEP Student branch within IEEE
  Student Lounge
- HKN has become a branch of IEEE and will now be called IEEE-HKN. Also new HKN inductees must be IEEE members as well
- Student Chapter of the IEEE Robotics and Automation Society
THE ACADEMIC CRITERIA FOR ETA KAPPA NU MEMBERSHIP:

- Junior (60 hours including Circuits II) .................... 3.35
- Senior* (90 hours) .................................................. 3.10**
- Graduate (9 hours) .................................................... 3.75
- Note: GPA to be calculated with classes that apply toward degree.

  *Must not be graduating this semester.

  ** Seniors that have at least a 3.0 GPA may be considered for initiation on a case by case evaluation by officers (please see HKN President, Elliot Gurrola, for more information).

- Qualifying students must fill an application form.
IEEE & HKN OFFER:

✓ Tutoring
  ❖ This semester they will offer:
    ❖ HKN: Tutoring for EE students.
    ❖ IEEE: workshops on MATLAB and webcasts for LabView

✓ Special speakers

✓ Competitions (IEEE-Xtreme Coding, Organized Robotic events for schools in region, etc.)

✓ Senior Banquet

✓ Opportunity to develop professional/leadership skills

✓ Mentorship of High School robotics

✓ Contacts, connections, & experience
STUDENT ORGANIZATIONS
COLLEGE-WIDE

✔ Tau Beta Pi (ΤΒΠ) – Engineering Honor Society

✔ Society of Hispanic Professional Engineers (SHPE)

✔ National Society of Black Engineers (NSBE)

✔ Society of Women Engineers (SWE)

✔ Mexican-American Engineering Society (MAES)
RESEARCH EXPERIENCES FOR UNDERGRADUATES

ON-CAMPUS OPPORTUNITIES

✓ Exposure to research
✓ Operations
✓ Source of support while
✓ Attending UTEP

EXTERNAL OPPORTUNITIES

✓ Travel costs
✓ Housing or allowance
✓ Stipend
✓ Participation in NSF-sponsored research
✓ Visit another university

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PLAN BEYOND GRADUATION

✓ Participating in an internship or in a Co-op experience in an engineering job has several benefits:
  ✓ Gain experience in your field
  ✓ Be paid a pre-professional wage
  ✓ Possibility to earn academic credit

✓ Students need an overall GPA of 2.0 or greater to graduate.
✓ Students need an in-major GPA (EE courses only) of 2.0 or greater to graduate.
✓ Graduate school requires at least a 3.0 GPA for admission.
✓ Companies and graduate programs will give priority to hire or accept a graduate with a good GPA.
✓ Students with better grades are more likely to obtain a better salary when hired.
CODE OF ETHICS

✓ Codes of ethics are the value guidelines that a professional must follow in order to remain registered as a member of the profession.

✓ Misinterpreting the codes or ignoring them can result in a person's losing his or her job, or even being expelled from the profession. Thus, understanding value issues and being able to make mature value decisions are just as important as technical knowledge.

✓ IEEE Code of Ethics:

http://www.ieee.org/about/ethics_code/index.html
IEEE CODE OF ETHICS

We, the members of the IEEE, in recognition of the importance of our technologies in affecting the quality of life throughout the world, and in accepting a personal obligation to our profession, its members and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct and agree:

1. to accept responsibility in making decisions consistent with the safety, health and welfare of the public, and to disclose promptly factors that might endanger the public or the environment;

2. to avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;
IEEE CODE OF ETHICS...

3. to be honest and realistic in stating claims or estimates based on available data;

4. to reject bribery in all its forms;

5. to improve the understanding of technology, its appropriate application, and potential consequences;

6. to maintain and improve our technical competence and to undertake technological tasks for others only if qualified by training or experience, or after full disclosure of pertinent limitations;
7. to seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and to credit properly the contributions of others;

8. to treat fairly all persons regardless of such factors as race, religion, gender, disability, age, or national origin;

9. to avoid injuring others, their property, reputation, or employment by false or malicious action;

10. to assist colleagues and co-workers in their professional development and to support them in following this code of ethics.
EXAMPLES OF ETHIC PROBLEMS

✓ Piracy

✓ Copying of homework or tests (there is a difference between “collaboration” and “cheating”)

✓ Plagiarism (Proper research and citations eliminate many problems)

✓ False reporting on financial forms

✓ “Borrowing” equipment or office supplies from employer or school, without appropriate approval (remember to return lab tools and parts)

✓ Allowing unapproved individuals to access equipment, software, or facilities Illegal copying of Videos or CD
WHY ARE ETHICS AND WHISTLE-BLOWING IMPORTANT TO ME?

✓ Professors and TAs are aware of unethical behavior and are always looking for ways to prevent it.

✓ It is your responsibility to report unethical behavior, if you know about it. If you are caught participating in academic dishonesty, this will lead to disciplinary action in conformance with the school’s policy.

✓ Whenever there is a problem try to solve the problem with the course instructor. If the problem persist or is unsolved then you might escalate through the proper hierarchy channel: Instructor → Advisors → Program Director → ECE Chair → Assoc. Eng. Dean for UG → Dean of Students office.

✓ Bottom line: Ethics is important in everyday life. Unethical behavior at school, such as plagiarism and cheating (whether it is yours or someone else’s) denigrates everyone's degree from that institution.

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