Lecture 5 – Ethics in Engineering

* Meaning:
  + Set of standards of human behavior
  + Code of professional conduct
  + Values of right and wrong, or set of moral principles
* Types of Ethics
  + Professional Ethics
    - Honest and impartial
    - Not publishing false reports
  + Patient Ethics
    - Confidentiality
    - Full disclosure of patient details
  + Natural & Human Ethics
    - Not interfering with nature and life
    - Not pulling the “playing God” act
* Codes of Biomedical Engineering Ethics
  + Hippocratic oath – medical ethics
  + ABET & IEEE codes – engineering ethics
  + Biomedical engineers – indirect practitioners (works closely with clinical practitioners)
  + Associations with these codes ^:
    - Accreditation Board of Engineering Technology (ABET – USA)
    - Engineers Australia
    - IEEE (Institute of Electrical and Electronics Engineers)
    - Biomedical Engineering Society (BMES)
    - American Society of Mechanical Engineers (ASME)
* Consequence of breaking code of ethics
  + Despite not being the law; legal prosecution focused on the outcomes of such behavior can happen

Eg. Personal injury or class action lawsuits

* + Lose reputation, credibility, employment and research funding (such as; peers, elite organizations, government and funding agencies)