#### **CONSENSUS AND CONTROVERSY**

- × Consensus means agreement.
- **×** Controversy means Disagreement.
- The ethics make the engineers realize the importance of tolerance among them in case of disagreement while applying moral autonomy.

# OCCUPATION VS. PROFESSION

Profession can only be applied to certain occupations which meet the following criteria -

- Knowledge: The work involves exercising sophisticated skills, theoretical knowledge and judgment and discretion that is not entirely routine or subject to mechanization.
- Organization: Special societies and organizations controlled by members of the profession are allowed by the public to play a major role in setting standards for admission to the profession.
- Public Good: The occupation serves some important aspects of public good as indicated in the codes of ethics.

### MEMBERSHIP CRITERIA

- Earning bachelor's degree in engineering at a school approved by the ABET.
- Performing commonly recognized as what engineers do.
- Being officially registered and licenses as a Professional Engineer(PE).
- Acting in morally responsible ways while practicing engineering.

### **MODELS OF PROFESSIONAL ROLES**

- Savior: The representative engineer is a savior who will redeem society from poverty, inefficiency, waste and drudgery of manual labor.
- Guardian: The representative engineer knows the directions in which and pace at which, technology should develop. Accordingly they should be given positions of high authority based on their expertise in determining what is in the best interest of the society.

#### **MODELS OF PROFESSIONAL ROLES**

- Bureaucratic servant: The role of engineer is to be a servant who receives and translates the directives of the management into concrete achievements.
- Social servant: The role of engineers' lies in obedient service to others but their true master is society.
- Social enabler or catalyst: Ultimate power lies with the management. Nevertheless, the engineer plays a vital role beyond mere compliance with orders.
- Game Player: Engineers are neither servants nor masters. They play by the economic game rules that happen that happen to be in effect at a given time.

# VIRTUE ETHICS

- \*Actions are considered right if they support good character traits (virtues) and wrong if they support bad character traits (vices)
- Closely tied to personal honor

# **THEORIES ABOUT VIRTUES**

#### Aristotle: Virtue and the Golden Mean

- + Aristotle, the most influential of all virtue ethicist, defined the virtues as acquired habits that enable us to engage effectively in rational activities.
- + Moral virtues are tendencies, acquired thro' habit formation, to reach a proper balance between extremes in conduct, emotion, desire and attitude.
- + Virtues are tendencies to find "The Golden Mean" between the extremes of too much and too little.
  - E.g. Truthfulness is the mean between revealing all information in violation of tact and confidentiality and being secretive.

### **THEORIES ABOUT VIRTUES**

- Macintyre: Virtues and Practices
  - Macintyre is a contemporary ethicist who has stimulated a renewed interest in virtue ethics and applied it to thinking about professional ethics.
  - + Macintyre begins with the idea of social practices.
  - + Cooperative activities aimed toward achieving public goods that could not otherwise be achieved, at least not to the same degree.
  - + These goods are internal to the practices in that they define what the practices are all about.
  - + They differ from external goods.
    - E.g. The primary internal good of medicine is the promotion of health.

#### PROFESSIONAL RESPONSIBILITY

- \* is being morally responsible as a professional.
- is an umbrella virtue that encompasses a wide variety of more specific virtues that acquire importance in particular situations
- Many of the virtues can be grouped into four categories
  - + Self-direction virtues
  - + Public-spirited virtues
  - + Team-work virtues
  - + Proficiency virtues

# INTEGRITY

- \* is the unity of character on the basis of moral concern, and especially on the basis of honesty.
- \* The unity is consistency among our attitudes, emotions and conduct in relation to justified moral values.
- Integrity makes possible the virtues of selfrespect and pride in one's work.

### HONESTY

- Honesty has two aspects:
  - + Truthfulness
    - Meeting responsibilities concerning truth-telling
  - + Trustworthiness
    - × Meeting responsibilities concerning trust.
- List of specific virtues that truthfulness and trustworthiness imply:
  - + Honesty in acts
  - + Honesty in speech
  - + Honesty in beliefs
  - + discretion

# **SELF RESPECT**

- \* is valuing oneself in morally appropriate ways.
- \* takes two forms:
  - + Recognition self-respect
  - + Appraisal self-respect
- Specific virtues for self respect
  - + A sense of honor
  - + Self-control
  - + Courage
  - + Good judgment

# **SENSES OF RESPONSIBILITY**

- Characteristic quality
- **\* Obligations**
- General moral capacity
- Liability and accountability

### TYPES OF RESPONSIBILITY

- Moral responsibility
  - +Obligations
  - + Accountability
  - + Praiseworthy/Blameworthy
- Casual responsibility
- Legal responsibility

### THEORIES ABOUT RIGHT ACTION

- **×**Utilitarianism
- Duty Ethics
- **\*Rights Ethics**
- **×Virtue Ethics**

#### UTILITARIANISM JOHN STUART MILL (1806-1873)

- Considers a balance of good & bad consequences for everyone affected (society)
- Actions are good that serve to promote human well-being
- Cost-Benefit analysis is an application
- Consideration of most benefit to the most people outweighs needs of a few individuals

### DUTY ETHICS IMMANUEL KANT (1724-1804)

There are duties that should be performed (e.g.. Duty to treat others fairly or not to injure others) regardless of whether these acts do the most good or not.

### RIGHTS ETHICS JOHN LOCKE (1632-1704)

\*People have fundamental rights (like life, liberty, & property) that others have a duty to respect.

# **USES OF ETHICAL THEORIES**

- \*Ethical theories are useful:
  - +for justifying moral obligations.
  - +for resolving moral dilemmas.
  - +in relating professional and ordinary morality.