



# Bachelor of Engineering in Information Technology

## ITM301 Professional Practices in IT

### Unit VIII: Professional Ethics

Mr. Yeshi Jamtsho  
Lecturer

## Overview

- Environmental What is a Profession?
- Professional Ethical Guidelines

Sources: Baase: *A Gift of Fire* and Quinn: *Ethics for the Information Age*

## What is a Profession?

- **Profession** is a disciplined group of individuals who possess specialized knowledge and skills, and often require long intensive academic preparation.
- **Professionals** have a **special obligation** to ensure their actions are for the good of those who depends on them.
  - code of ethics governs the activities of each Profession

## Characteristics of Fully developed Profession

According to **Gary Ford** and **Norman Gibbs**, a mature profession has **8 Attributes**

- (1)Initial Professional Education : Formal higher Education
- (2) Accreditation : formal higher education meets standards of the profession
- (3)Skills Development: to gain practical skills needed to practice the profession
- (4)Certification : to evaluate their readiness to enter the profession

## Characteristics of Fully developed Profession (cont..)

According to **Gary Ford** and **Norman Gibbs**, a mature profession has **8 Attributes**

- (5)Licensing : to provide legal right to practice the profession
- (6)Professional Development: to maintain/develop their knowledge & Skills
- (7)Code of Ethics : to ensure professional use their knowledge & skills for the benefits of society
- (8)Professional Society: to promote the welfare of the profession

## Computer/Software Engineers

Certification and licensing NOT needed

- Consequently,
  - No college education required
  - No apprenticeship required
  - No membership in professional society required
  - No continuing education required
- Most C/S engineers are part of a team; they don't work directly with clients
- Yet, C/S engineers have ability to harm public

## Ethical Guidelines for Computer Professionals

- **ACM Code of Ethics and Professional Conduct**

- Adopted in October 1992
- Consists of **24 imperatives** formulated as **statements** of personal responsibility

## Ethical Guidelines for Computer Professionals

- IEEE/ACM Software Engineering Code of Ethics and Professional Practice
  - Adopted by IEEE-CS and ACM joint task force in 1999
  - Based on 8 general principles related to the following subjects:
    - ✓ Public
    - ✓ Client & Employer
    - ✓ Product
    - ✓ Judgement
    - ✓ Management
    - ✓ Profession
    - ✓ Colleagues
    - ✓ Self
  - Each Principle consist of some clauses
  - List of principles and clauses are not exhaustive

## ACM Code highlights

1. Contribute to society and human well-being
2. Avoid harm to others
3. Be honest and trustworthy
4. Be fair and take action not to discriminate
5. Honor property rights including copyrights and patent
6. Give proper credit for intellectual property
7. Respect the privacy of others
8. Honor confidentiality

## IEEE/ACM SE code

### ***Preamble:***

- Software engineers have opportunities to do good or do harm
- Software engineers ought to be committed to doing good
- Eight principles identify key ethical relationships and obligations within these relationship:
  - Public, Client and employer, Product, Judgment, Management, Profession, Colleagues, Self
- Code should be seen as a whole, not a collection of parts
- Concern for the public interest is paramount

## SE Code highlights

1. Be impartial
2. Disclose information that others ought to know
3. Respect the rights of others
4. Treat others justly
5. Take responsibility for your actions and inactions
6. Take responsibility for the actions of those you supervise
7. Maintain your integrity
8. Continually improve your abilities
9. Share your knowledge, expertise, and values

## Discussion Question

Your company has 25 licenses for a computer program, but you discover that it has been copied onto 80 computers.

- You informed your supervisor, but he/ she is not willing to take any action. What would you do next?
  - Give up; you did your best to correct the problem
  - Call the software vendor and report the offense
  - Quit your job
- Are “whistleblowers” heroes or traitors?

# Thank you