



### Topic: 1.7.1 Ethics

We may not think about it often, but there are several ethical and legal issues that surround our computer usage. It is our responsibility to ensure that our computer usage will not negatively affect the other users.

#### What Are Ethics?

Ethics can be defined as "moral principles that govern a person's or a group's behaviors". Ethical behavior is not necessarily related to the law. For example, just because something is not against the law doesn't mean it is okay to do it.

#### What are Computer Ethics?

Computer ethics are concerned with standards of conduct applying to the use of computers.

Computer ethics can be understood as the branch of applied ethics which studies and analyzes social and ethical impact of information technology.

The Computer Ethics Institute has published their "Ten Commandments of Computer Ethics" to guide responsible computer use. They are as follows:

1. Thou shalt not use a computer to harm other people.
2. Thou shalt not interfere with other people's computer work.
3. Thou shalt not snoop around in other people's computer files.
4. Thou shalt not use a computer to steal.
5. Thou shalt not use a computer to bear false witness (aka Lie).
6. Thou shalt not copy or use proprietary software for which you have not paid.
7. Thou shalt not use other people's computer resources without authorization or proper compensation.
8. Thou shalt not appropriate other people's intellectual output.
9. Thou shalt think about the social consequences of the program you are writing or the system you are designing.
10. Thou shalt always use a computer in ways that ensure consideration and respect for your fellow humans.





## Topic: 1.7.1 Ethics

### IEEE CS/ACM Code of Ethics and Professional Practice

The Software Engineering Code of Ethics and Professional Practice, produced by the Institution of Electrical and Electronic Engineers Computer Society (IEEE CS) and the Association for Computing Machinery (ACM), acts as a professional standard for teaching and practicing software engineering. It specifies ethical and professional obligations of software engineers and states the standards that standards society at large expects them to meet and what they should expect of one another. The code also tells the public what they should expect from software engineers. The code was produced by a multinational task force which considered input from a variety of sources including industrial, government and military installations and educational professions. An informative article of about the development of the code, which includes a full copy of the code itself was published in the October 1999 issue of ACM Computer.

According to the shortened version of the code:

Software engineers shall commit themselves to making the analysis, specification, design, development, testing and maintenance of software a beneficial and respected profession. In accordance with their commitment to the health, safety and welfare of the public, software engineers shall adhere to the following Eight Principles:

**Public:** Software engineers shall act consistently with the public interest.

**Client and Employer:** Software engineers shall act in a manner that is in the best interests of their client and employer, consistent with the public interest.

**Product:** Software engineers shall ensure that their products and related modifications meet the highest professional standards possible.

**Judgment:** Software engineers shall maintain integrity and independence in their professional judgment.

**Management:** Software engineering managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance.

**Profession:** Software engineers shall advance the integrity and reputation of the profession consistent with the public interest.

**Colleagues:** Software engineers shall be fair to and supportive of their colleagues.

**Self:** Software engineers shall participate in lifelong learning regarding the practice of their profession and shall promote an ethical approach to the practice of the profession.





## Topic: 1.7.1 Ethics

### Professional code of conduct for a computer system developer:

A Code of Conduct is not law, but it is a set of rules that apply when you are in an organization such as your college. Examples might include "Don't watch pornography at the office". This would be legal at home, but if you did it at the office, you could be fired. In addition, a code of conduct may contain laws such as "Don't install pirated software".

The British Computer Society has produced a list of standards for the training and development of Information Technology workers.

It covers the following issues:

**The Public Interest** - safeguarding public health; respecting rights of 3rd parties, applying knowledge of relevant regulations.

**Duty to employers and clients** - carrying out work according to the requirements, and not abusing employers' or clients' trust in any way.

**Professional duty** - uphold the reputation of the profession through good practice, support fellow members in professional development.

**Professional Integrity and Competence** - maintain standards of professional skill and practice, accepting responsibility for work done, avoiding conflicts of interest with clients.

An example of a code of conduct in use in an office is as follows:

- Don't play games
- Don't watch pornography
- Don't gamble
- Don't plug your own peripherals into your computer
- Don't install software on work machines without permission

(Each of these might be perfectly legal at home, but they might get you fired at work)

