

Critical Inquiry in Engineering

Module 06 - Ethics and Professionalism



LAN029

Code of Ethics

A code of ethics is a guiding set of principles intended to instruct professionals to act in a manner that aligns with the organization's values of honesty, integrity, and professionalism, and is beneficial to all stakeholders involved

**Professional Ethics for
Engineers**

**Ethics of Critical Inquiry
in Engineering**

The National Society of Professional Engineers (NSPE) Code of Ethics for Engineers

Political, economic, social, and even personal factors can influence technical decisions.

Therefore the code provides:

- Fundamental canons
- Rules of practice
- Professional obligations

(NSPE) Code of Ethics for Engineers

Fundamental Canons

Engineers, in the fulfillment of their professional duties, shall:

1. Hold paramount the **safety, health, and welfare** of the public.
2. Perform services only in areas of their **competence**.
3. Issue public statements only in an objective and **truthful** manner.
4. Act for each employer or client as **faithful** agents or trustees.
5. Avoid **deceptive** acts.
6. Conduct themselves **honorably, responsibly, ethically, and lawfully** so as to enhance the honor, reputation, and usefulness of the profession.

Reporting unsafe
practices to supervisor or
proper Authority

Not engaging in business
with person or a firm
known to be dishonest

Signing documents only
when conforming to
standards



**Do no
Harm**

Not aiding the unlawful
practice of engineering
by a person or firm

Getting consent before
revealing any data or
information

Reporting code
violations to supervisor
or proper Authority

Undertake assignments only
when qualified by education
or experience



Not to affix signatures to any
plans or documents in which they
lack competence

Engineers may sign and seal the engineering documents for the entire project, provided
that each technical segment is signed and sealed by the qualified engineers who
prepared the segment.

Be objective and truthful in professional reports, statements, or testimony.

Express publicly technical opinions that are founded upon knowledge and facts



Engineers shall issue no statements, criticisms, or arguments on technical matters that are inspired or paid for by interested parties, unless they have prefaced their comments by explicitly identifying the interested parties on whose behalf they are speaking

Disclose all known or potential conflicts of interest that could influence judgment or the quality of services.

Not to solicit or accept a contract from a governmental body on which a principal or officer of the organization serves as a member.



**Be
Faithful**

Not to accept financial or other valuable consideration, from outside agents in connection with the work for which they are responsible.

Not accept compensation, financial or otherwise, from more than one party for services on the same project, unless disclosed and agreed by all parties.

Not to falsify own qualifications
or permit misrepresentation of
their associates' qualifications.

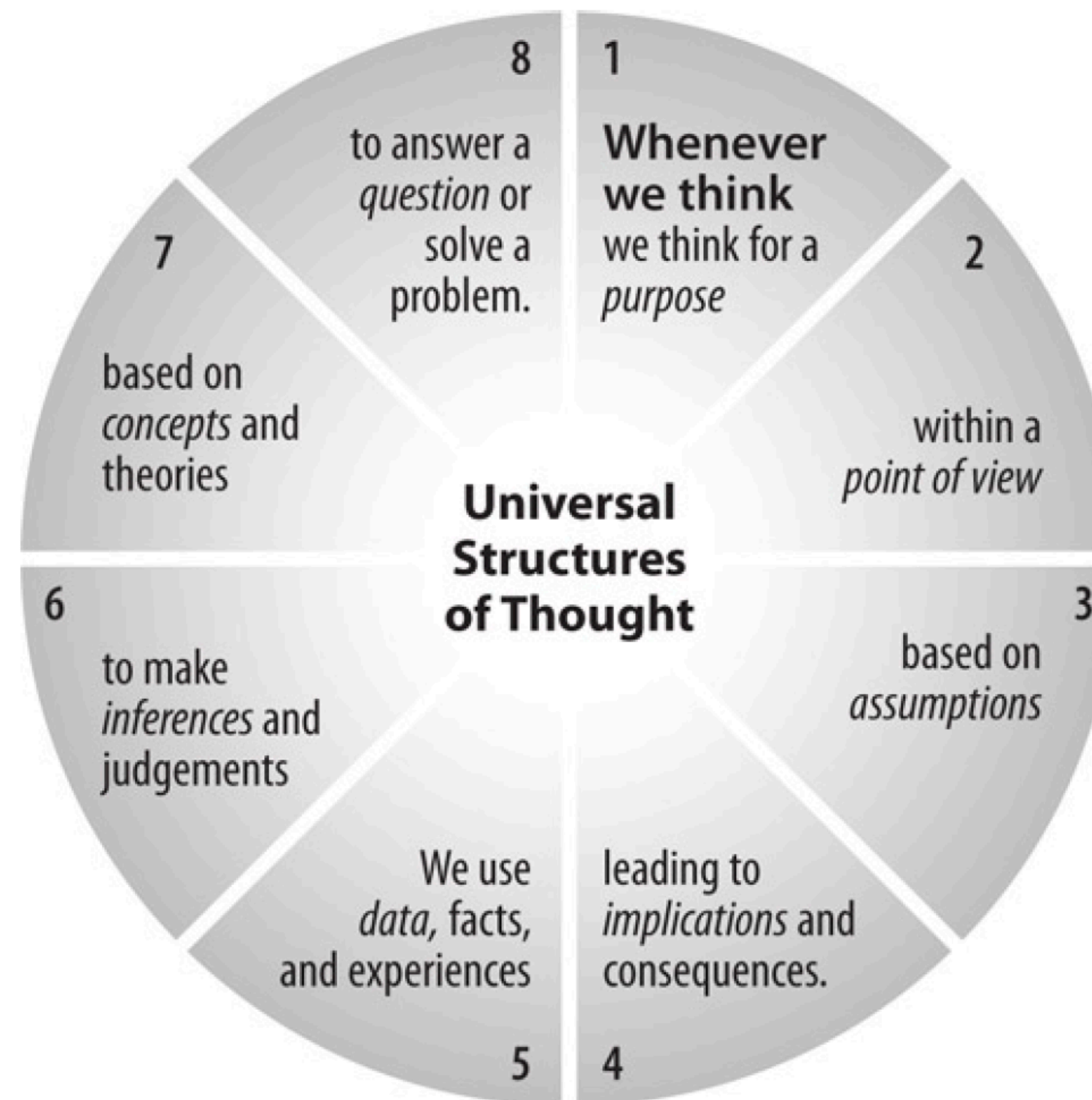
Not to misrepresent or
exaggerate their responsibility
in prior assignments.



Not offer, give, solicit, or receive, any
contribution to influence the award of a
contract by public authority

Ethics of Critical Inquiry in Engineering

- Data collecting, analysis, and reporting
- Avoiding bias and treat stakeholders fairly
- Acknowledge limitations
- Acknowledge all viewpoints
- ...
- **Ethical decision making**



Clarity
Accuracy
Precision
Concision
Relevance
Depth
Breadth
Logic
Fairness
Significance

Ethical Decision Making

Harms Test	Do the benefits outweigh the harms, short term and long term?
Publicity Test	How would my choice look on the front page of tomorrow's newspaper?
Reversibility Test	Would I think this was a good choice if I traded places?
Legality Test	Would my choice violate a law or policy of my employer?
Colleague Test	What would my professional colleagues say?
Wise Relative Test	What would my wise old aunt or uncle do? and/or Would I want them to know what I'm doing?
Common Practice Test	What if everyone behaved this way?
Professional test	what might my profession's governing body or ethics committee say about this option?
The Self-Respect Test	How will I feel about myself after making this choice?

The ethical story of Henry's Daughters

Watch the [Henry's Daughters Video](#) (Source from Vimeo).

