**HVPE UNIT 4**

**1. Ethics** or **moral philosophy** is a branch of [philosophy](https://en.wikipedia.org/wiki/Philosophy) that involves systematizing, defending, and recommending concepts of right and wrong [conduct](https://en.wikipedia.org/wiki/Action_%28philosophy%29). As a branch of philosophy, ethics investigates the questions "What is the best way for people to live?" and "What [actions](https://en.wikipedia.org/wiki/Action_%28philosophy%29) are right or wrong in particular circumstances?" In practice, ethics seeks to resolve questions of human morality, by defining concepts such as [good and evil](https://en.wikipedia.org/wiki/Good_and_evil), right and [wrong](https://en.wikipedia.org/wiki/Wrong), [virtue](https://en.wikipedia.org/wiki/Virtue) and [vice](https://en.wikipedia.org/wiki/Vice), [justice](https://en.wikipedia.org/wiki/Justice) and [crime](https://en.wikipedia.org/wiki/Crime). As a field of intellectual enquiry, moral philosophy also is related to the fields of [moral psychology](https://en.wikipedia.org/wiki/Moral_psychology), [descriptive ethics](https://en.wikipedia.org/wiki/Descriptive_ethics), and [value theory](https://en.wikipedia.org/wiki/Value_theory).

**2.Professional ethics** is **defined** as the personal and corporate rules that govern behavior within the context of a particular profession. Professionally accepted standards of personal and [business](http://www.businessdictionary.com/definition/business.html) [behavior](http://www.businessdictionary.com/definition/behavior.html), [values](http://www.businessdictionary.com/definition/values.html) and [guiding principles](http://www.businessdictionary.com/definition/guiding-principles.html). [Codes](http://www.businessdictionary.com/definition/codes.html) of [professional](http://www.businessdictionary.com/definition/professional.html) ethics are often [established](http://www.businessdictionary.com/definition/establish.html) by professional [organizations](http://www.businessdictionary.com/definition/organization.html) to help guide [members](http://www.businessdictionary.com/definition/member.html) in performing their [job](http://www.businessdictionary.com/definition/job.html) [functions](http://www.businessdictionary.com/definition/function.html) according to sound and [consistent](http://www.businessdictionary.com/definition/consistent.html) [ethical](http://www.businessdictionary.com/definition/ethical.html) [principles](http://www.businessdictionary.com/definition/principles.html).

3.**Engineering Ethic**s: Engineers need to be aware of ethics as they make choices during their professional practice of engineering. Engineering ethics will be defined as the rules and standards governing the conduct of engineers in their roles as professionals. t is important for engineering students to study engineering ethics so that they will be prepared to make (sometimes difficult) ethical decisions during their professional careers. Engineering practice can be defined as a “profession,” asopposed to an “occupation” or “job.” A professionhas the following attributes:

•Work requires sophisticated skills, judgment, and exercise of discretion (work is not routine)

•Membership in the profession requires formal educationSpecial societies (cont

rolled by members of the profession) establish

standards for admission into the profession and conduct of its members

•Significant positive public service results from the practice of the profession

Engineering is an important and learned profession. As members of this profession, engineers are

expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and

vital impact on the quality of life for all people. Accordingly, the services provided by engineers

require honesty, impartiality, fairness, and equity, and must be dedicated to the protection of the

public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct.

**Types of Ethics:**

**The three types of ethics include descriptive ethics, normative ethics and metaethics.** Descriptive ethics are the morals of a society. People use descriptive ethics as a way to judge particular actions as good or bad based on the social contract of a particular society. It is possible for people in one group to hold a different set of morals than people in another group. Descriptive ethics also change over time. For instance, the acceptability of racism changed in the United States over the course of generations. Normative ethics imply what should be good or bad in a society. The view of what is an acceptable ethic requires subjectivity. Normative ethics conflict with descriptive ethics at times. An example of normative ethics is the debate concerning abortion. Metaethics involves the examination of ethical terms, such as justice and morality, as broad concepts for a society. It also seeks to define a middle ground between terms such as good and evil. Emotivism, a part of metaethics, involves using a seemingly objective claim as an emotional response. An example of metaethics includes questioning the existence of free will in a society.

**Personal Ethics**:

The basic [principles](http://www.businessdictionary.com/definition/principles.html) and [values](http://www.businessdictionary.com/definition/values.html) that [govern](http://www.businessdictionary.com/definition/govern.html) interactions among individuals. Sound personal [ethics](http://www.businessdictionary.com/definition/ethics.html) are typically those that positively [impact](http://www.businessdictionary.com/definition/impact.html) the [experience](http://www.businessdictionary.com/definition/experience.html) of others when used to govern an [individual's](http://www.businessdictionary.com/definition/individual.html) social or [business](http://www.businessdictionary.com/definition/business.html) related [behavior](http://www.businessdictionary.com/definition/behavior.html), and at the very least, such ethics should not have a negative impact on others. **Personal ethics** refer to a person’s personal or self-created values and codes of conduct. From the very beginning, these ethics are instilled in an individual, with a large part having been played by their parents, friends, and family. Common examples may include honesty, openness, commitment, unbiased behavior, and sense of responsibility. What a person develops regarding fairness or learns during childhood remains with him all through his life and is reflected by his actions and words. No matter if he is talking to a friend or his relatives or an elderly, his ethics would be clear from what he says and how he says it. A person’s personal ethics are revealed in a professional situation through his behavior.

**Professional ethics** are those values and principles that are introduced to an individual in a professional organization. Each employee is meant to strictly follow these principles. They do not have a choice. Also, this approach is imperative in professional settings as it brings a sense of discipline in people as well as helps maintain decorum in offices. Some examples may include confidentiality, fairness, transparency and proficiency. These ethics make employees responsible.

**Personal vs Professional Ethics**

What’s the difference between personal and professional ethics?

The ethics that you adhere to in your personal life and those that you comply with in your professional life are different in certain aspects. Without certain ethics, human beings would be incomplete and shallow. Thus, they have different systems of ethics in different places.

The biggest difference between personal and professional codes of conduct is perhaps the strictness with which people conform to them. The values that you define for yourself are up to you to be followed or not to be followed. However, those defined in a company or by a profession must be followed by you, since breach of these principles or rules may harm your reputation and status. But if you do not adhere to your personal ethics, it might hardly make a difference, depending on the circumstances. Even then, you must keep in mind that violation of your own rules may harm others around you.

**Comparison Chart**

|  |  |
| --- | --- |
| **Personal Ethics** | **Professional Ethics** |
| Includes your personal values and moral qualities. | Rules imposed on an employee in a company, or as member of a profession, e.g. doctor or lawyer. |
| Incorporated by family, friends and surroundings since your childhood. | Learnt when you are a part of a professional setting or when you are being trained or educated for working there. |
| Examples: honesty, care, and sincerity. | Examples: no gossiping, time management, punctuality, confidentiality, transparency. |
| Not conforming to these may harm or hurt others. | Not adhering to these may harm your professional reputation. |
| Your personal needs are satisfied by following these. | Your professional needs are satisfied by following these. |

**Ethical Dilemma**:

An **ethical dilemma** is a complex situation that often involves an apparent mental conflict between moral imperatives, in which to obey one would result in transgressing another. also known as a [moral](http://www.yourdictionary.com/moral) dilemmas, are situations in which there is a choice to be made between two options, neither of which resolves the situation in an ethically acceptable fashion. In such cases, societal and personal ethical guidelines can provide no satisfactory outcome for the chooser. Ethical dilemmas assume that the chooser will abide by societal norms, such as codes of law or religious teachings, in order to make the choice ethically impossible.

### Essential Steps for Ethical Problem-Solving

1. **DETERMINE whether there is an ethical issue or/and dilemma.** Is there a conflict of values, or rights, or professional responsibilities? (For example, there may be an issue of self-determination of an adolescent versus the well-being of the family.)

2. **IDENTIFY the key values and principles involved.** What meanings and limitations are typically attached to these competing values? (For example, rarely is confidential information held in absolute secrecy; however, typically decisions about access by third parties to sensitive content should be contracted with clients.)

3. **RANK the values or ethical principles which - in your professional judgement - are most relevant to the issue or dilemma.** What reasons can you provide for prioritizing one competing value/principle over another? (For example, your client's right to choose a beneficial course of action could bring hardship or harm to others who would be affected.)

4. **DEVELOP an action plan that is consistent with the ethical priorities that have been determined as central to the dilemma.** Have you conferred with clients and colleagues, as appropriate, about the potential risks and consequences of alternative courses of action? Can you support or justify your action plan with the values/principles on which the plan is based? (For example, have you conferred with all the necessary persons regarding the ethical dimensions of planning for a battered wife's quest to secure secret shelter and the implications for her teen-aged children?)

5. **IMPLEMENT your plan, utilizing the most appropriate practice skills and competencies.** How will you make use of core social work skills such as sensitive communication, skillful negotiation, and cultural competence? (For example, skillful colleague or supervisory communication and negotiation may enable an impaired colleague to see her/his impact on clients and to take appropriate action.)

6. **REFLECT on the outcome of this ethical decision making process.** How would you evaluate the consequences of this process for those involved: Client(s), professional(s), and agency (ies)? (Increasingly, professionals have begun to seek support, further professional training, and consultation through the development of Ethics review Committees or Ethics Consultation processes.)

**Science (research)Ethics:**

There are several reasons why it is important to adhere to ethical norms in research. First, norms **promote the** [aims of research](http://www.niehs.nih.gov/about/strategicplan/index.cfm), such as knowledge, truth, and avoidance of error. For example, prohibitions against [fabricating](https://ori.hhs.gov/federal-research-misconduct-policy), falsifying, or misrepresenting research data promote the truth and minimize error.

Second, since research often involves a great deal of cooperation and coordination among many different people in different disciplines and institutions, ethical standards promote the **values that are essential to collaborative work**, such as trust, accountability, mutual respect, and fairness. For example, many ethical norms in research, such as [guidelines for authorship](http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html), copyright and [patenting policies](http://www.niehs.nih.gov/about/techtransfer/index.cfm), data sharing policies, and confidentiality rules in peer review, are designed to protect intellectual property interests while encouraging collaboration. Most researchers want to receive credit for their contributions and do not want to have their ideas stolen or disclosed prematurely.

Third, many of the ethical norms help to ensure that researchers can be held **accountable to the public**. For instance, federal policies on research misconduct, conflicts of interest, the [human subjects protections](http://www.niehs.nih.gov/research/clinical/patientprotections/index.cfm), and [animal care and use](http://www.niehs.nih.gov/health/topics/science/sya-iccvam/index.cfm) are necessary in order to make sure that researchers who are funded by public money can be held accountable to the public.

Fourth, ethical norms in research also help to build **public support** for research. People are more likely to fund a research project if they can trust the quality and integrity of research.

Finally, many of the norms of research promote a variety of other important **moral and social values**, such as social responsibility, human rights, animal welfare, compliance with the law, and public health and safety. Ethical lapses in research can significantly harm human and animal subjects, students, and the public. For example, a researcher who fabricates data in a clinical trial may harm or even kill patients, and a researcher who fails to abide by regulations and guidelines relating to radiation or biological safety may jeopardize his health and safety or the health and safety of staff and students.

#### Honesty

Strive for honesty in all scientific communications. Honestly report data, results, methods and procedures, and publication status. Do not fabricate, falsify, or misrepresent data. Do not deceive colleagues, research sponsors, or the public.

#### Objectivity

Strive to avoid bias in experimental design, data analysis, data interpretation, peer review, personnel decisions, grant writing, expert testimony, and other aspects of research where objectivity is expected or required. Avoid or minimize bias or self-deception. Disclose personal or financial interests that may affect research.

#### Integrity

Keep your promises and agreements; act with sincerity; strive for consistency of thought and action.

#### Carefulness

Avoid careless errors and negligence; carefully and critically examine your own work and the work of your peers. Keep good records of research activities, such as data collection, research design, and correspondence with agencies or journals.

#### Openness

Share data, results, ideas, tools, resources. Be open to criticism and new ideas.

#### Respect for Intellectual Property

Honor patents, copyrights, and other forms of intellectual property. Do not use unpublished data, methods, or results without permission. Give proper acknowledgement or credit for all contributions to research. Never plagiarize.

#### Confidentiality

Protect confidential communications, such as papers or grants submitted for publication, personnel records, trade or military secrets, and patient records.

#### Responsible Publication

Publish in order to advance research and scholarship, not to advance just your own career. Avoid wasteful and duplicative publication.

#### Responsible Mentoring

Help to educate, mentor, and advise students. Promote their welfare and allow them to make their own decisions.

#### Respect for colleagues

Respect your colleagues and treat them fairly.

#### Social Responsibility

Strive to promote social good and prevent or mitigate social harms through research, public education, and advocacy.

#### Non-Discrimination

Avoid discrimination against colleagues or students on the basis of sex, race, ethnicity, or other factors not related to scientific competence and integrity.

#### Competence

Maintain and improve your own professional competence and expertise through lifelong education and learning; take steps to promote competence in science as a whole.

#### Legality

Know and obey relevant laws and institutional and governmental policies.

#### Animal Care

Show proper respect and care for animals when using them in research. Do not conduct unnecessary or poorly designed animal experiments.

#### Human Subjects Protection

When conducting research on human subjects, minimize harms and risks and maximize benefits; respect human dignity, privacy, and autonomy; take special precautions with vulnerable populations; and strive to distribute the benefits and burdens of research fairly.

**Religion and Ethics:**

Religious ethics concerns teachings and practices of what is right or wrong, good or bad, virtuous or vicious, from a religious point of view. The definition of “religion” is controversial. A definition favored by the Supreme Court is that religions are traditions that are anything like Judaism, Christianity, Islam, Hinduism, or Buddhism.

A more detailed definition to consider is: *A religion is a tradition and practice based on a conception of what is real and significant (God, Allah, the Tao, Brahman, etc.), and the belief that sin, vice, disillusionment, and illusion may be overcome by grace, meditation, practices, and living in harmony, unity, or wise concord with what is real and significant.* Another reason to study religious ethics is simply that it is possible that one or more religious worldviews may be true. Common to most religions is the understanding of the cosmos as a meaningful forum in which we share a responsibility for each other, to care for the vulnerable, and to pursue justice. Most world religions hold that evil, sin, illusion, greed, and cruelty should not exist. If such a religious view of values might be *correct,* there is definitely reason to study the coherence, resources, promises, and challenges of religious ethics.

A possible religious foundation for ethics is important to explore, as it is not obvious that secular naturalism can provide a fully satisfactory foundation for ethics. The study of religious ethics is also recommended given the great importance of interfaithdialogue, which pervades our political system, not to mention everyday human interaction.

**Exemplary life sketch of Dr.Abdul Kalam:**

He or she is always an extraordinary individual whose incredible life serves as the brilliant inspiration to many. [Dr. APJ Kalam](https://successstory.com/people/avul-pakir-jainulabdeen-abdul-kalam) was surely one such grand human being whose achievements, humility, sincerity, hard work, positivity and never-give-up outlook had and would always impart a great moral fillip for all, at every stage of life.

One of the most important characteristics of an ideal role model is never to give up hope and hard work in the face of oddities. Life is ready to throw challenges at different stages but a true winner is the one who does not get vulnerable to the unfavorable situation and keeps on finding ways to beat the challenge and fight right up to success. Dr. Kalam had been one such gallant fighter since his childhood and its bravery to face challenges with a smile right as a kid that has duly elevated to the cult status of a role model for all.

The much revered ISRO project direct and former head of India hailed from a poor family in Rameshwaram. His father was a boat owner of modest means and found it hard to run the family alone. Dr. Kalam had this dream to make it big one day since his childhood and despite his underprivileged situation. Thus, when he saw that it was getting hard for his father to make both ends meet, he took to selling newspapers, along with continuing his education. It was his utmost dedication to his studies; in spite the different oddities in his surroundings that earned him the scholarship to study his desired aerospace engineering from Madras Institute of Technology.

**“**End is not the end, if fact END means "Effort Never Dies" - If you get No as an answer, remember NO means "Next Opportunity". So Let's be positive."

The poor boat-owner’s son, who used to sell newspapers to help out his dad  as a lad, went on to become a scientist at DRDO and later the honorary project director of ISRO, under whom India’s first ever SLV-III deployed the famous Rohini satellite back in 1980. In 2002, the great man was elected as the 11th President of India and he has also been a revered recipient of all the highest civilian awards of the country. He was felicitated with Bharat Ratna, Padma Bibhushan and Padma Bhushan added to several other prestigious honors from esteemed bodies all across the country and the world.

Throughout his life, this great man has taught to keep on with the endeavors to fulfill the dreams the big goals in life. He always encouraged never to get bogged down by failures but to continue looking for the opportunities that will ultimately lead to the ray of light.

“If you fail, never give up because FAIL means "First Attempt In Learning".

Dr. Kalam became a role model not only through his fight and success against adversity but also with his humble way of living. He had always been pro-active in getting down from the podium and interacting directly with the people below, mostly kids and students. Always a believer of simplicity, he stayed unfazed by the luxuries around. Even during his stay at the Rashtrapati Bhavan, he used a small simple room and often had food with his bunch of staff, right on the floor.

The great man’s ever-active lifestyle and youthful spirit was another major reason that made him a role model for all. Even after crossing 80, he did not stop playing his veena or composing poems or professing speeches before students. In fact, moments before his fatal cardiac attack of July 27th, the 84-year-old scientist was giving his lectures at IIM Shillong.

Death is unavoidable but it’s Dr. Kalam’s exemplary lessons and teachings that would keep him alive in billions of hearts forever.