

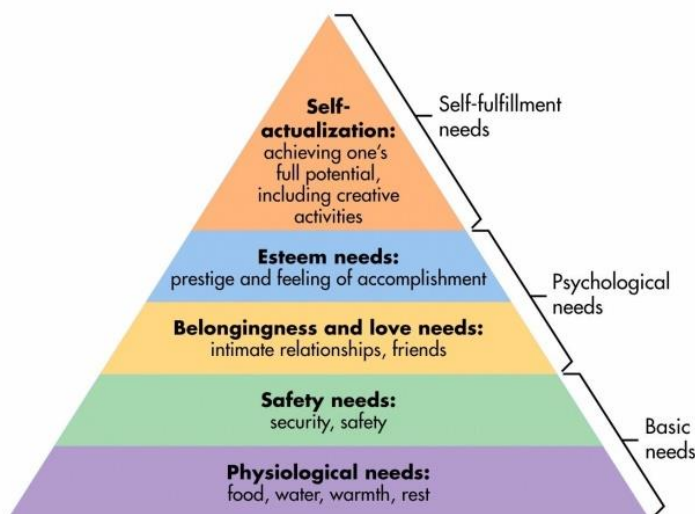
## LESSON 2: Moral Frameworks (Ethical Theories)

Ethics provides a set of standards for behavior that helps us decide how we ought to act in a range of situations and ethical theories seek to provide a comprehensive perspective on morality that clarifies, organizes and guides moral reflection. It provides a framework for making reasonable moral choices and resolving moral dilemmas – not a simple formula, but rather a unifying way to identify and integrate moral reasons. As one of their applications, ethical theories ground the requirements in engineering codes of ethics by reference to broader moral principles. In doing so, they illuminate connections between engineering ethics and everyday morality, that is, the justified moral values that play a role in all areas of life.

Ethical theories are important to study in order to establish a strong foundation for challenging situations or guide decisions — how do we know whether something is right or wrong? How can we use ethical theories and frameworks to help us determine appropriate legislation or whether or not a particular technology is designed to be ethical? The good news is that for many centuries, philosophers have discussed theoretical ways of understanding morality and ethics and have theorized various ways to guide moral living.

There are five types of ethical theories (and traditions) that have been especially influential: rights ethics, deontology (from Greek word “deon” means duty) i.e. duty ethics, consequentialism i.e. utilitarianism ethics, virtue ethics and self-realization ethics.

We can compare these with the model of Maslow’s Five Hierarchy of Needs such as: Physiological Needs, Safety/Shelter Needs, Belongingness & Social Needs, Esteem Needs, and Self-actualization.



Maslow's Hierarchy Needs Model



Ethical Theories Model

1. Physiological needs
2. Safety needs
3. Belongingness and love needs
4. Esteem needs  
Ethics
5. Self-actualization

1. Duty Ethics
2. Right Ethics
3. Virtue Ethics
4. Utilitarianism
5. Self-Realization

Now, we can discuss the details of the ethical theories:-

## RIGHTS ETHICS

We ought to respect natural rights and human rights and respect for person. The respect for persons' moral standard requires not only that we treat people equally but that we respect them as moral agents. Many theorists in the respect for persons' tradition have concluded that respecting the moral agency of others requires that we accord others the rights necessary to exercise their agency. A right may be understood as an entitlement to act or to have another individual act in a certain way. Minimally, rights serve as a protective barrier, shielding individuals from unjustified infringements of their moral agency by others. Beyond this, rights are sometimes asserted more positively as requiring the provision of food, clothing, and education. In this section, we will focus primarily on rights as requiring only noninterference with another person, not active support of that person's interests. Right ethics views that actions as wrong when they violate moral rights.

The term **right** [can be defined](#) as "a justified claim that individuals and groups can make upon other individuals or upon society." Rights-based ethics means that ethical behavior must uphold the rights of people, such as [civil rights within a democracy](#). Rights can be legal in nature, or they can pertain to morality or [human rights](#). Right are legal, social or ethical principles of freedom and entitlement. Right of employer, right of client, right of employee and workers, right of colleague, right of stake holder, right of vendors, contractor suppliers, right of society/public, right of Nation/Country, right of family and right of those for whom you have obligation and you are liable etc.

Thinking of rights in this way implies that, for every right we have, others have corresponding duties of noninterference. Here we can provide a list of some important rights, with their corresponding duties of noninterference-

Rights	Corresponding Duties
'X' has a right to life.	Others have a duty not to kill 'X'.
'X' has a right to bodily integrity.	Others have a duty not to cause bodily harm to 'X'.
'X' has a right to mental integrity.	Others have a duty not to cause debilitating mental harm to 'X'.
'X' has a right to free action.	Others have a duty not to coerce 'X'.
'X' has a right to free speech.	Others have a duty not to prevent 'X' from speaking freely.
'X' has a right not to be deceived.	Others have a duty not to deceive 'X'.
'X' has a right not to be cheated.	Others have a duty not to cheat 'X'.
'X' has a right not to be stolen from.	Others have a duty not to steal from 'X'.
'X' has a right not to be disrespected.	Others have a duty not to disrespect 'X'.
'X' has a right to kept promises.	Others have a duty not to break their promises to 'X'
'X' has a right to privacy.	Others have a duty not to invade 'X''s privacy.
'X' has a right to nondiscrimination.	Others have a duty not to deny 'X' opportunities based on race, gender, creed, or sexual preference.
'X' has a right to property.	Others have a duty not to bar 'X' opportunities for free and fair competition for property and its use.

Actions that fail to respect the rights of individuals represent [unethical behavior](#).

The Rights Approach focuses on **respect for human dignity**. This approach holds that our dignity is based on our ability to choose freely how we live our lives, and that we have a moral right to respect for our choices as free, equal, and rational people, and a moral duty to respect others in the same way.

When we think of rights as forming a protective barrier, they can be regarded as prohibiting certain infringements of our moral agency by others. Some jurists use the expression “penumbra of rights” to refer to this protective barrier that gives individuals immunity from interference from others.

Rights ethics applies in engineering in many ways. It provides a powerful foundation for the special ethical requirements in engineering and other professions. Most engineering codes of ethics enjoin holding paramount the safety, health and welfare of the public, a requirement that can be interpreted as having respect for the public’s rights to privacy, and rights to receive benefits through fair and honest exchanges in a free marketplace.

Mirror of Duty Ethics; People have rights that cannot be violated. Engineers are required to respect the rights of all stakeholders such as:- employer, employee, client, customers, contractor, supplier, vendor, supervisor and all concerns those are related with his works/activities.

## DUTY ETHICS

Duty Based (Deontology) – this perspective, founded by Immanuel Kant, is focused on binding rules and one’s obligation and duty towards to Almighty Allah, God, duty to family, parents, duty to mankind, society, country, and /or others for home. One’s motive is important; results or consequences of one’s actions are not the focus. Duty is a moral or legal obligation, a responsibility for example engineers duty to uphold paramount the safety, health and welfare/wellbeing of the public and the take action that is required to perform his professional duties and functions.

According duty ethics which first postulated by Immanuel Kant, an action is moral if it is conducted for the sake of duty. By acting out of duty, a person acts out of a concern for what is morally right, not out of self-serving motive. We ought to respect individual’s rational autonomy. A sense of justice and injustice, of doing our duty, is universal among human beings, however much they may fail to live up to ethical principles. In the Duty framework, we focus on the duties and obligations that we have in a given situation, that what are our obligations in that situation and what things we should never do. Ethical conduct is defined by doing one’s duties and doing the right thing, and the goal is performing the correct action. Right thing is determined by our obligations to one another and never failing to one’s duty aiming to perform right action.

This framework has the advantage of creating a system of rules that has consistent expectations of all people; if an action is ethically correct or a duty is required, it would apply to every person in a given situation. This even-handedness encourages treating everyone with equal dignity and respect.

This framework also focuses on following moral rules or duty regardless of outcome, so it allows for the possibility that one might have acted ethically, even if there is a bad result. Therefore, this framework works best in situations where there is a sense of obligation or in those in which we need to consider why duty or obligation mandates or forbids certain courses of action.

**Duty Ethics**

What is ethical is to perform duties regardless of whether they lead to “good” outcomes. Engineers have duty, responsibility and obligation to Society and uphold Standard & Professional Quality and Safe Design, Assessment of Risk and protection of the Public Health, Safety & Welfare while executing engineering works/activities, duty to profession and demonstrate Professional Competence, maintain Objectivity/Truthfulness, address Conflicts of Interest, duty towards employers, clients, stakeholders, colleagues, employees & subordinates and act as a Faithful Agent and Trustee, preserve Confidentiality, not to receive and provide Gifts and Other Valuable Considerations, not to deceive, not to disrespect, not to cheat, not to break promises/commitment and duty to one’s self, and strive for excellence etc. Our Code of Conduct and Code of Ethics has given emphasize on the theory of duty ethics and provided the clauses and provisions for duty to society, duty towards profession, duty to environment, health & safety, duty to employer, duty to clients / customer, duty and obligation for safe product design, safe engineering design & construction method, supervision and Quality Control of product and engineering process & activities, duty to colleagues, duty to employees and subordinates and finally duty to oneself.

**UTILITARIANISM ETHICS BASED ON CONSEQUENTIALISM APPROACH**

Consequentialism is the class of normative ethical theories holding that the consequences of one's conduct are the ultimate basis for any judgment about the rightness or wrongness of that conduct. Thus, from a consequentialist standpoint, a morally right act (or omission from acting) is one that will produce a good outcome, or consequence.

Utilitarianism is an ethical theory that determines right from wrong by focusing on outcomes. It is a form of consequentialism.

Utilitarianism holds that the most ethical choice is the one that will produce the greatest good for the greatest number. It is the only moral framework that can be used to justify military force or war. It is also the most common approach to moral reasoning used in business because of the way in which it accounts for costs and benefits.

Utilitarianism is an ethical theory that says that the right thing to do in any situation is whatever will “do the most good” (that is, whatever will produce the best outcomes) taking into consideration the interests of all concerned parties.

Consequentialist theories usually maintain that the rightness or wrongness of an action depends on the consequences of the act, and hence the circumstances in which it are performed.

Thus Utilitarianism is a consequentialist moral theory focused on maximizing the overall good; the good of others as well as the good of one’s self. The notable thinkers associated with utilitarianism are Jeremy Bentham and John Stuart Mill. These Utilitarians are hedonistic, meaning; their ideas of good are associated with pleasure or happiness. Thus, classical utilitarianism guides ethical decision makers to make decisions that bring the most pleasure for the greatest number of people.

Utilitarianism ethics framework says that we ought to maximize the overall good, taking into equal account all those affected by our actions. Its aim is to produce the most good and ethical conduct is the action that will achieve the best consequences. We determine right actions independent of what are good outcomes, and then choose what is good from among these. It allows the good of most to out weight the pain of few. We determine what good outcomes are, and then choose the action that maximizes the good. We are obliged to act to the extent that it advances our own interests. The

right action is the one that maximizes our own gain and happiness which is related more to the mind than the body is of longer duration and may encompass both pleasure and pain (for example, delivery of child birth).

In the utilitarianism framework, we focus on the future effects of the possible courses of action, considering the people who will be directly or indirectly affected. We ask about what outcomes are desirable in a given situation, and consider ethical conduct to be whatever will achieve the best consequences. The person using the utilitarianism framework desires to produce the most good.

#### Utilitarianism

What is ethical is that which produces the greatest good for the greatest number, most good for the most people, fair competition, and equal opportunity for all, giving equal consideration to all affected. Utilitarianism holds that those actions are good that serve to maximize human wellbeing. The emphasis in utilitarianism is not maximizing the wellbeing of the individual, but rather on maximizing the wellbeing of the society as whole. Example building dam, flood control providing facilities for stable supply of drinking water, electricity etc. For maximum benefits of the society some time some individual may be affected but utilitarianism tries to balance the needs of the society with the needs of the individual, with an emphasis on what will produce the most benefit of the most people. Utilitarianism is fundamental to many type of engineering analysis, including risk benefit. Analysis cost benefit analysis for maximize the overall good.

#### VIRTUE ETHICS

This framework says that good character is central to morality. In the Virtue framework, we try to identify the character traits (either positive or negative) that might motivate us in a given situation. We are concerned with what kind of person we should be and what our actions indicate about our character. We define ethical behavior as whatever a virtuous person would do in the situation, and we seek to develop similar virtues. The aim of virtue ethics is to develop one's character. It attempts to recognize character traits [চরিত্রিক বৈশিষ্ট্য] such as:- Virtues [ভালো কাজ, ভালো গুণ ও অভ্যাস], Virtuous- Conscientious, Righteous ethical, good, honest, dutiful, responsible, honorable, just, moral, nice, right, right-minded, true, upright, noble, principled, wholesome, blameless, celibate, chaste, clean, effective, effectual, efficient, excellent, exemplary, faithful, loyal, guiltless, incorruptible, inculpable, irreprehensible, moral, decent, moralistic, praiseworthy, pure, right-minded, spotless, straight, upright, worthy/ trustworthy.

Virtuous, Righteous, Conscientious and ethical people are always successful because the terms Virtuous, Righteous and Conscientious almost relate to the similar traits which provide the best ethical standard of behaviors and these can be seen from the synonyms of these terms which are given below:

**Virtuous-** Conscientious, righteous ethical, good, honest, truthful dutiful, respects moral right of others responsible, accountable, meet obligations, utilitarian, honorable, just, moral, nice, right, right-minded, true, noble, principled, wholesome, blameless, celibate, chaste, clean, effective, effectual, efficient, excellent, exemplary, faithful, loyal, guiltless, incorruptible, inculpable, irreprehensible, moral, decent, moralistic, praiseworthy, pure, right-minded, spotless, straight, upright, worthy/ trustworthy and uphold paramount the safety, health and welfare/wellbeing of the public/society and shall try to comply with the principles of sustainable development and no harm to environment in the performance of professional duties.

**Righteous-** Virtuous, conscientious, ethical, honest, truthful honorable, law-abiding, noble, pure, spiritual, upright, blameless, charitable, commendable, creditable, deserving, devoted, dutiful, respects moral right of others, responsible, accountable, meet obligations, utilitarian, equitable,

exemplary, fair, faithful, loyal, guiltless, impartial, innocent, irreproachable, just, laudable, meritorious, moral, peerless, philanthropic, praiseworthy, punctilious, right-minded, saintly, scrupulous, sinless, worthy / trustworthy and uphold paramount the safety, health and welfare/wellbeing of the public/society and shall try to comply with the principles of sustainable development and no harm to environment in the performance of professional duties.

**Conscientious-** Virtuous, righteous honest, truthful faithful, loyal, honorable, just, scrupulous, upright, careful, diligent, self-discipline, efficient, dutiful, respects moral right of others, responsible, accountable, meet obligations, utilitarian, dependable, neat and systematic, hard-working, and reliable, worthy/ trustworthy and uphold paramount the safety, health and welfare/wellbeing of the public/society and shall try to comply with the principles of sustainable development and no harm to environment in the performance of professional duties.

If any engineer possess these traits and follows & practice in the professional activities he will surely be successful in his professional career.

In most of the religion it is also said that the people who are religious, virtuous, righteous and Conscientious are always successful in their life. They will never be Disappointed.

Vices [দোষ ও রিপুসমূহ- Lust / greed লোভ-লালসা/কাম, Anger ক্রোধ, Arrogance অহমিকা, Delusion মোহ, Jealousy/Envy ঈর্ষা/হিংসা, Cowardice কাপুরুষতা।] Ethical conduct in virtue ethics is whatever a fully virtuous person would do in the circumstances. It is based on the development of good character traits and right actions are those that do not corrupt the character of others. Virtues are desirable habits and tendencies in action, commitment, motive, attitude, emotion, ways of reasoning and ways of relating to others. Vices are morally undesirable habits or tendencies. The words virtue and vice sound a bit old-fashioned. Words for specific virtues, however, remain familiar, both in engineering and in everyday life – for example, competence, honesty, courage, fairness, loyalty, and humility. Words for specific vices are also familiar: incompetence, dishonesty, cowardice, unfairness, disloyalty, arrogance, lust, anger, greed, delusion, envy, disobedience, jealousy etc. An engineer is essentially required to control all the vices and promote virtues. The Greek word *arete* translates as either “virtue” or “excellence”, an etymological fact that reinforces our theme of ethics and excellence going together in engineering. The most comprehensive virtue of engineers is responsible professionalism. The most basic and comprehensive professional virtue is professional responsibility, that is, being morally responsible as a professional. Professional responsibility is an umbrella virtue implies four (overlapping) categories of virtues: public well-being, professional competence, cooperative practices, and personal integrity. Public-spirited virtues are focused on the good of clients and the wider public. The minimum virtue is non-maleficence, that is, the tendency not to harm others intentionally and promoting the public health, safety and welfare. Proficiency virtues are the virtues of mastery of one’s profession, in particular mastery of the technical skills that characterize good engineering practice. Teamwork virtues are those that are especially important in enabling professionals to work successfully with other people. They include collegiality (the cooperative relationship of colleagues), cooperativeness, loyalty and respect for legitimate authority, leadership qualities, and responsible exercise of authority and the ability to motivate others to achieve goals/target. Finally, self-governance virtues are those necessary in exercising moral responsibility, for example – courage, self-discipline, self-respect and respect to others, perseverance, conscientiousness, fidelity to commitments, self-respect and integrity. Honesty falls into both groups of self-governance virtues, for it implies both truthfulness in speech and belief and trustworthiness in commitments.

**Honesty as a virtue:** Honesty is widely accepted as a prime example of a moral virtue. And yet, honesty has been surprisingly neglected in the recent drive to account for specific virtuous traits. Honesty has two aspects – truthfulness (meeting responsibilities concerning truth-telling) and trustworthiness (meeting responsibilities concerning trust). Examples of truthfulness and

trustworthy such as – honesty in acts includes not stealing, not padding expense sheets, not engaging in bribes and kickbacks (ঘুষ) ; honesty in speech means not deceiving (প্রতারণা), not lying, not withholding information that someone has the right to know ; Honesty in belief (intellectual honesty) means forming one's beliefs without self-deception or other forms of evading unpleasant truths and accentuating evidence favorable to one's self-esteem/respect and biases.

Honesty is a fundamental virtue for those who engage in the relationship between engineers and their employees and clients. These relationships are based on trust – trust that engineers will effectively perform the service for which they are hired.

Dishonesty undermines the functions of engineers such as – false report data, omit crucial data, designing, construction and production process on which our society depends.

Virtue of professional responsibility means engineers are concerned to do the right things. They are virtuous, righteous, conscientious and diligent in meeting obligation, and are truthful, fair, accountable, answerable or liable for meeting particular obligation.

Complying with the virtue theory for any ethical action we have responsibility against Corrupt Practices, Corruptions, Bribery, Extortion and Political influence, fraudulent, collusive or coercive practices, conflict of interest (undue gift, commission and favor etc.) and theft, misusing employer's facilities, secret employment etc. We are also responsible against dishonesty, falsehood, abusing trade secret & confidentiality, misrepresentation of data & information etc.

## SELF-REALIZATION ETHICS

This moral framework emphasizes the moral significance of self-fulfillment. The theory of self-realization is that a life of excellence is based on the actualization of human potentialities. We ought to actualize our potentialities. Often it is said that "we must become intimately, passionately, subjectively aware of everything about our existence." The idea is to choose that which you have the most talent and interest and develop that to a high degree. Other activities are meant to enhance the primary interest. Self-realization ethics gives greater prominence to self-interest and to personal commitments that individuals develop in pursuing self-fulfillment. The community-oriented version of self-realization ethics says that each individual ought to pursue self-realization, but it emphasizes the importance of caring relationship and communities in understanding self-realization. Self-realization ethics points to the highly personal commitments that motivate, guide and give meaning to the work of engineers and other professionals. These commitments enter into the core of an individual's character. As such, they reflect what engineers care about deeply in ways that evoke their interest and energy, shape their identities and generate pride or shame in their work. Personal commitments are commitments that are not incumbent on everyone – for example, specific humanitarian, environmental, religious, political, aesthetic, supererogatory and family commitments. They also include, however, commitments to obligatory professional standards, especially when these are linked to an individual's broader value perspective. Personal commitments are relevant in many ways to professional life, including one's choice of career and choice of jobs. Most important, they create meaning; thereby they motivate professionalism throughout long careers. Professions offer special opportunities for meaningful work, which explains much of their attraction to talented individuals.

Motives for self-actualization of professionals: Proficiency motives, compensation motives and moral motives to be considered for self-actualization of professionals.

**Proficiency motives:** proficiency motives and their associated values, center on excellence in meeting the technical standards of a profession, together with related aesthetic values of beauty.

**Compensation motives:** Compensation motives are for social rewards such as income, power, recognition and job or career stability. We tend to think of these motives and values as self-interested and in a large degree they are. Yet most people seek money for additional reasons, such as to benefit family members or even to be able to help others in need.

**Moral motives:** Moral motives include desires to meet one's responsibilities, respect the rights of others, and contribute to the well-being of others. Such motives of moral respect and caring involve affirming that other people have inherent moral worth. In addition, moral concern involves maintaining self-respect and integrity – valuing oneself as having equal moral worth and seeding to develop one's talents. Cultural appropriateness (preserving valuable institutions and practices within a particular society); openness (divulging to the public the value judgments expressed in products and also their known effects); stewardship (frugality in the use of natural resources and energy); harmony (effectiveness of products together with promoting social unity); justice (respect for persons); caring (for colleagues and workers); and trustworthiness (deserving consumer's trust).

## ETHICAL EGOISM

Ethical egoism is the view that each of us ought to pursue our own self-interest, and no-one has any obligation to promote anyone else's interests. It is thus a normative or prescriptive theory: it is concerned with how we ought to behave. Ethical egoism is a more individualistic version of self-realization ethics that says each of us ought always and only to promote our self-interest. The theory is *ethical* in that it is a theory about morality, and it is *egoistic* because it says the sole duty of each of us is to maximize our well-being. Self-interest is understood as our long-term and enlightened well-being (good, happiness), rather than a narrow, short-sighted pursuit of immediate pleasure that leaves us frustrated or damaged in the long run. Nevertheless, ethical egoism sounds like an endorsement of selfishness. It implies that engineers should think first and last about what is beneficial to themselves, an implication at odds with the injunction to keep paramount the public health, safety and welfare. As such, ethical egoism is an alarming view.

## MAKING ETHICAL JUDGMENTS ABOUT SPECIFIC CASES AND SOLVING PROBLEMS BY APPLYING FRAMEWORKS

Given a situation where a decision has to be made about the proper behavior or choice, one should try to assimilate the problem and then let his/her instinct and heart guide his/her reflection and then in a final stage express it in language. This is the same unconscious process that is taking place in all forms creative activities. A pre-conceive logical procedure is counter-productive to any creative process including moral judgment.

However, applying the frameworks to make ethical judgments about specific cases regarding moral problem analysis and solving, it will be useful to follow the process below:

1. **Recognizing an ethical issue:** identify, the relevant facts, including relevant laws and regulations (the factual considerations).



2. **Consider the parties involved:** Another important aspect to reflect upon are the various individuals and groups who may be affected by your decision and consider who might be harmed and who might be benefited.
3. **Gather all of the relevant information:** Before taking action, it is a good idea to make sure that you have gathered all of the pertinent information and that all potential sources are consulted.
4. **Formulate actions and consider alternatives:** Evaluate your decision-making options by asking the following questions – Which action will produce the most good and do the least harm? (The Utilitarian Approach) ; Which action respects the rights of all who have a stake in the decision? (The Rights Approach) ; Which action treats people equally or proportionately? (The Justice Approach) ; Which action serves the community as a whole, not just some members?(The Common Good Approach) ; Which action leads me to act as the sort of person I should be? (The Virtue Approach)
5. **Make a decision:** After examining all of the potential actions, which best addresses the situation? How do I feel about my choice?
6. **Act:** Many ethical situations are uncomfortable because we can never have all of the information. Even so, we must often take action.
7. **Reflect on the outcome:** What were the results of my decision? What were the intended and unintended consequences? Would I change anything now that I have seen the consequences?

## **TESTING ETHICAL THEORIES**

Which ethical theory is best?

Our intent is not to evaluate which of these theories is best. In fact, we believe that each of them has insights to offer, and we are more impressed by how they complement each other than by how they differ.

Ethical theories are developed to illuminate, unify and correct commonsense judgments; and refined commonsense judgments about specific situations are used to test ethical theories.

Thus we see the theory of moral frameworks provide a comprehensive perspective on morality that clarify, organize, and guide moral reflection and also it provides a framework for making reasonable moral choices and resolving moral dilemmas.

None of these theories has won a consensus, although each has proven attractive to many people. At least in some of their versions, they widely agree in their practical implications. We are confident that rights ethics, duty ethics, utilitarianism, virtue ethics, and self-realization ethics all capture essential elements of sound moral reflection, and that for the purpose of engineering ethics all of them converge toward similar conclusions. Thus we can draw freely on the language of rights ethics, duty ethics, utilitarianism, virtue ethics, and self-realization ethics wherever it aids practical reflections on moral dilemmas in engineering.

## **Doing the Right Things:**

Ethics is moral principles—it is a system that defines right and wrong and provides a guiding philosophy for every decision you make. The Josephson Institute of Ethics describes ethical behavior well: “Ethics is about how we meet the challenge of doing the right thing when that will cost more than we want to pay. There are two aspects to ethics: The first involves the ability to discern right from wrong, good from evil, and propriety from impropriety. The second involves the commitment to do what is right, good, and proper. Ethics entails action; it is not just a topic to mull or debate.” Ethics is doing the right thing, even if it is difficult or is not to your advantage.

Being ethical means you will do the right thing regardless of whether there are possible consequences—you treat other people well and behave morally for its own sake, not because you are afraid of the possible consequences. Simply put, people do the right thing because it is the right thing to do.

If you rationalize your decisions by saying, “Everyone does it,” you should reconsider. Unethical behavior is not only what you believe to be right and fair, it is a reflection of your personal brand and what people can expect from you personally and professionally. Even celebrities such as Wesley Snipes, Willie Nelson, and Darryl Strawberry have fallen from grace in the eyes of the public and learned the hard way that unethical. The consequences of unethical behavior can range from embarrassment to suspension, loss of job, or even jail time, depending on the act. “Do the right thing.” It is the essence of ethics: choosing to do the right thing when you have a choice of actions. Being ethical means you will do the right thing regardless of whether there are possible consequences—you treat other people well and behave morally for its own sake, not because you are afraid of the possible consequences. Simply put, people do the right thing because it is the right thing to do. “Whenever you are to do a thing, though it can never be known but to yourself, ask yourself how you would act were all the world looking at you, and act accordingly.” Ethical decisions are not always easy to make, depending on the situation. There are some gray areas depending on how you approach a certain situation. Every situation may have multiple options. For example, if one of your best friends told you in confidence that he stole the questions to the final exam would you say nothing, use them, or report him? Certainly, using the questions would not be ethical, but your ethical dilemma doesn’t end there. Reporting him would be the right thing to do. But if you didn’t report him, would it be unethical? You might not consider that unethical, but what if you just didn’t say anything—is that still ethical? This is the gray area where your personal ethics come into play. Looking the other way doesn’t help him or you. While you might be concerned about jeopardizing your friendship, it would be a small price to pay compared with jeopardizing your personal ethics.

### **How to Do the Right Thing Even if No One Is Watching**

The American author and philosopher Aldo Leopold once said “Ethical behaviour is doing the right thing when no one else is watching—even when doing the wrong thing is legal.”

This quote raises an important question: why should we do anything, let alone the right thing, if what we are being asked to do (or what we are observing others doing) is legal and unobservable? The simple answer to this question is: values. An ethical dilemma occurs when we find ourselves in a situation or circumstance that conflicts with our personal values. These values, which are cross-cultural and universal include: honesty, respect, responsibility, fairness, and compassion.

Doing the right thing generally means making decisions that are not based on your own personal needs, that don't expand your popularity, or enforce your personal beliefs. It means doing what is best for the greater or common good. Some examples are: Maintaining your character when no one is watching.

Integrity means doing the right thing when no one is looking. Otherwise, if others are watching you it's not really about being moral anymore. And if you want to be an observant human being who cares about others, then you need to have your own standards for integrity through which to operate.

## **AVOIDING IMPEDIMENTS TO ETHICAL BEHAVIOR**

Many of the ethical situations that engineers face have obvious correct solutions. In other words, the ethically correct course of action is known. Yet, when confronted with these problems, engineers don't always act ethically. Why? In a book like this, it is impossible to examine the motives of every individual. However, we can examine some commonly cited reasons for not doing the right thing. There are three common responses given for not choosing the right path:

- It's not my problem.
- If I don't do it, someone else will.
- I can't foresee everything that will happen.

Variations on these themes are often heard not just in engineering, but in everyday life as well. Let's examine some of these responses more closely and see if they are valid.

### **It's Not My Problem**

It's very tempting to respond to problems this way, since it relieves us of the responsibility for a situation. But is it true? The consequences of an unethical decision are borne by everyone. For example, in the wake of accidents caused by an unsafe design, the costs of lawsuits and redesigns are borne by those who buy products from that company. If a product causes injury, we all pay for it through increased health insurance premiums. When cheating on government contracts occurs, this money must be made up by taxpayers. So, unethical conduct winds up, either directly or indirectly, costing everyone. It truly is everyone's problem.

### **If I Don't, Someone Else Will**

This statement is very often true. Rarely are you the only engineer working on a particular technology. Frequently, there are many others working on the same or similar ideas. In the rush to be the first to the marketplace with a new idea or product, the thrill of the competition can get in the way of our ability to look objectively at what we are doing. Part of the fun of engineering is in beating the competition. But do you want to be the first to do something that turns out to be harmful or unethical? Most of us would agree that being the first to gain notoriety for something that is wrong is not desirable.

### **I Can't Foresee Everything That Will Happen**

This is true, too. It is impossible to foresee every consequence of a new design or every potential use or misuse of your work. However, engineering is an inherently creative process; making new devices or structures requires that engineers be creative in their work. Part of creativity in engineering is looking at both the potential uses and the potential misuses of our designs. How do we do this? First, we have to start by making foresight part of the design process. We do that by attempting to design around potential problems that we identify. We can also work with regulators before a new technology is in place to ensure that the problems with the technology are understood and regulations are put in place to help ensure that the design is used in an ethical manner. Second, ethics should not be an afterthought. Rather, ethical considerations should be an explicit part of the design process. Finally, we also need to acknowledge that there are probably some things that should not be done. What happens if the results of your work lead to unforeseen ethical problems? Don't beat yourself up about it. If you did your job correctly, you attempted to foresee those problems. But of course you can't foresee everything. You can work after the fact to try to change things to be more acceptable.

## **Class Assignment**

**Case example of Spiro T. Agnew, Vice-President, USA in 1973 relating application of ethical theories.**

On October 10, 1973, Spiro T. Agnew resigned as vice president of the United States amidst charges of bribery and tax evasion related to his previous service as county executive of Baltimore County. A civil engineer and lawyer, he had risen to influential positions in local government. As county executive from 1962 to 1966 he had the authority to award contracts for public works projects to engineering firms. In exercising that authority he functioned at the top of a lucrative kickback scheme.

Lester Matz and John Childs were two of the many engineers who participated in that scheme. Their consulting firm was given special consideration in receiving contracts for public works projects so long as they made secret payments to Agnew of five percent of fees from clients. Even though their firm was doing reasonably well, they entered into the arrangement in order to expand their business. They felt that in the past they had been denied contracts from the county because of their lack of political connections.

Clearly, the actions of the participants were unethical. But what reasons can be given to establish this conclusion? Why was it wrong for the engineers to make secret payments to Spiro Agnew in return for being given preference in the awarding of contracts for public projects?

***Write your opinion regarding above case example justifying the moral framework theories.***