



NEW AGE

A Textbook on
Professional
Ethics
and
Human Values

R.S. Naagarazan



NEW AGE INTERNATIONAL PUBLISHERS

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NEW AGE INTERNATIONAL (P) LIMITED, PUBLISHERS

New Delhi · Bangalore · Chennai · Cochin · Guwahati · Hyderabad

Jalandhar · Kolkata · Lucknow · Mumbai · Ranchi

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ISBN (10) : 81-224-2301-9

ISBN (13) : 978-81-224-2301-3

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NEW AGE INTERNATIONAL (P) LIMITED, PUBLISHERS

4835/24, Ansari Road, Daryaganj, New Delhi - 110002

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IF

If you can keep your head when all about you
Are losing theirs and blaming it on you;
If you can trust yourself when all men doubt you,
But make allowance for their doubting too;
If you can wait and not be tired by waiting,
Or, being lied about, don't deal in lies,
Or, being hated, don't give way to hating,
And yet don't look too good, nor talk too wise;

If you can dream - and not make dreams your master;
If you can think - and not make thoughts your aim;
If you can meet with triumph and disaster
And treat those two imposters just the same;
If you can bear to hear the truth you've spoken
Twisted by knaves to make a trap for fools,
Or watch the things you gave your life to broken,
And stoop and build 'em up with worn out tools;

If you can make one heap of all your winnings
And risk it on one turn of pitch-and-toss,
And lose, and start again at your beginnings
And never breath a word about your loss;
If you can force your heart and nerve and sinew
To serve your turn long after they are gone,
And so hold on when there is nothing in you
Except the Will which says to them: "Hold on";

If you can talk with crowds and keep your virtue,
Or walk with kings - nor lose the common touch;
If neither foes nor loving friends can hurt you;
If all men count with you, but none too much;
If you can fill the unforgiving minute
With sixty seconds' worth of distance run -
Yours is the Earth and everything that's in it,
And - which is more - you'll be a Man my son!

Rudyard Kipling

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Preface

‘Professional ethics and Human values’ is a very relevant subject of today’s environment of conflicts and stress in the profession, with obligations to be met by one person in many directions. A formal study will certainly improve one’s ability and judgment and refine one’s behaviour, decisions, and actions in performing the duty to the family, organization, and to the society. Academicians even feel that this subject should be introduced in high school level, in place of the moral instructions.

Anna University is to be congratulated for having introduced this paper as a core subject for all the engineering students of B.E./B.Tech. As a teacher who enjoyed teaching this subject for the past two years, I ventured to write this book. This book amply covers the revised syllabus of Anna University. Besides the codes of ethics of Indian professional societies, detailed risk analysis, crisp case studies, short-answer questions, long-answer questions with hints have been added to sustain the interest of the students. I believe the student community and the teaching fraternity will enjoy using this book. The students may even refer this book in their professional career and development.

I thank all the authors whose study, research, and reports have kindled my interest in writing this book. My thanks are due for the ready response shown by the Chairman, IETE, Chennai in providing me the particulars on their Codes.

I thank whole heartedly and record my deep sense of gratitude to Hon’ble Mr. E.V. Velu M.A., beloved Founder-Chairman, Arunai Engineering College, and Er.V. Kumaran, M.E., esteemed Vice-Chairman, AEC, Tiruvannamalai for their generosity, motivation, and providing all facilities in writing this book. Our thanks are due for the Principal, AEC. Prof. S. Suresh, P.R.O., Mr. R. Selvaraj, A.O., my colleagues, Mr. Mahendran K., and Ms. Sudha who have helped me in preparing the manuscript and illustrations. I thank my wife for having spared much time late in the evenings, through suggestions and proofreading.

The energetic and rapid response and yet error-free execution of this project by M/s New Age International (P) Ltd., Publishers, New Delhi deserve to be duly appreciated and thanked. I acknowledge their efforts towards the release of the book in time, to be with the engineers and groomed-to-be professionals.

The author would be grateful by receiving suggestions and comments to improve this textbook, from the students, teachers and also the practicing professionals.

July 2006

R.S. Naagarazan

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Contents

Preface	vii
Syllabus	ix
Chapter 1 – Human Values	1–21
1.0 Objectives	1
1.1 Morals	2
1.2 Values	2
1.3 Ethics	5
1.4 Integrity	5
1.5 Work ethics	5
1.6 Service learning	7
1.7 Virtues	8
1.8 Respect for others	9
1.9 Living peacefully	9
1.10 Caring	10
1.11 Sharing	10
1.12 Honesty	11
1.13 Courage	12
1.14 Valuing time	13
1.15 Cooperation	13
1.16 Commitment	14
1.17 Empathy	14
1.18 Self-confidence	15
1.19 Challenges in the work place	16
1.20 Spirituality	20

Chapter 2 – Engineering Ethics	22–44
2.0 Overview	22
2.1 Senses of engineering ethics	23
2.2 Variety of moral issues	23
2.3 Types of inquiries	24
2.4 Moral dilemma	25
2.5 Moral autonomy	26
2.6 Moral development (theories)	27
2.7 Consensus and controversy	29
2.8 Profession	29
2.9 Models of professional roles	31
2.10 Responsibility	32
2.11 Theories about right action (Ethical theories)	36
2.12 Self-control	41
2.13 Self-interest	41
2.14 Customs	41
2.15 Religion	42
2.16 Self-respect	43
2.17 Case study: Choice of the theory	43
Chapter 3 – Engineering as Social Experimentation	45–54
3.0 Engineering as experimentation	45
3.1 Engineers as responsible experimenters	48
3.2 Codes of ethics	49
3.3 Industrial standards	51
3.4 A balanced outlook on law	51
3.5 Case study: The challenger	52
Chapter 4 – Safety, Responsibilities and Rights	55–89
4.0 Safety definition	55
4.1 Safety and risk	56
4.2 Risk analysis	56
4.3 Assessment of safety and risk	65
4.4 Safe exit	66
4.5 Risk-benefit analysis	66
4.6 Safety lessons from ‘the challenger’	68
4.7 Case study: Power plants	69
4.8 Collegiality and loyalty	71

4.9 Collective bargaining	72
4.10 Confidentiality	74
4.11 Conflict of interests	77
4.12 Occupational crime	78
4.13 Human rights	80
4.14 Employee rights	81
4.15 Whistle blowing	83
4.16 Intellectual property rights	85
Chapter 5 – Global Issues	90–118
5.0 Globalization	90
5.1 Multinational corporations	90
5.2 Environmental ethics	94
5.3 Computer ethics	97
5.4 Weapons development	102
5.5 Engineers as managers	103
5.6 Consulting engineers	104
5.7 Engineers as expert witness	105
5.8 Engineers as advisors in planning and policy making	107
5.9 Moral leadership	108
5.10 Codes of ethics	109
5.11 Engineering council of India	118
5.12 Codes of ethics for TATA group	118
5.13 Ethics and codes of business conduct in MNC	118
Bibliography	119
Case Studies	120
Question Bank Part-A	140
Question Bank Part-B	154
Questions and Answers – Beyond the syllabus	166

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Chapter – 1

Human Values

1.0 OBJECTIVES (WHY ENGINEERING ETHICS?)

The objectives of this course on ‘Professional Ethics and Human Values’ are: (a) to understand the moral values that ought to guide the Engineering profession, (b) resolve the moral issues in the profession, and (c) justify the moral judgment concerning the profession. It is intended to develop a set of beliefs, attitudes, and habits that engineers should display concerning morality.

The prime objective is to increase one’s ability to deal effectively with moral complexity in engineering practice.

Alternatively, the objectives of the study on Professional Ethics may be listed as:

- (A) Improvement of the cognitive skills (skills of the intellect in thinking clearly)
 - 1. Moral awareness (proficiency in recognizing moral problems in engineering)
 - 2. Cogent moral reasoning (comprehending, assessing different views)
 - 3. Moral coherence (forming consistent viewpoints based on facts)
 - 4. Moral imagination (searching beyond obvious the alternative responses to issues and being receptive to creative solutions)
 - 5. Moral communication, to express and support one’s views to others.
- (B) To *act* in morally desirable ways, towards moral commitment and responsible conduct
 - 6. Moral reasonableness i.e., willing and able to be morally responsible.
 - 7. Respect for persons, which means showing concern for the well-being of others, besides oneself.
 - 8. Tolerance of diversity i.e., respect for ethnic and religious differences, and acceptance of reasonable differences in moral perspectives.
 - 9. Moral hope i.e., believe in using rational dialogue for resolving moral conflicts.
 - 10. Integrity, which means moral integrity, and integrating one’s professional life and personal convictions.

1.1 MORALS

Morals are the welfare principles enunciated by the wise people, based on their experience and wisdom. They were edited, changed or modified or evolved to suit the geography of the region, rulers (dynasty), and in accordance with development of knowledge in science and technology and with time.

Morality is concerned with principles and practices of morals such as: (a) What ought or ought not to be done in a given situation? (b) What is right or wrong about the handling of a situation? and (c) What is good or bad about the people, policies, and ideals involved?

Morality is different from Ethics in the following ways:

<i>Morality</i>	<i>Ethics</i>
1. More general and prescriptive based on customs and traditions.	1. Specific and descriptive. It is a critical reflection on morals.
2. More concerned with the results of wrong action, when done.	2. More concerned with the results of a right action, when not done.
3. Thrust is on judgment and punishment, in the name of God or by laws.	3. Thrust is on influence, education, training through codes, guidelines, and correction.
4. In case of conflict between the two, morality is given top priority, because the damage is more. It is more common and basic.	4. Less serious, hence second priority only. Less common. But relevant today, because of complex interactions in the modern society.
5. Example: Character flaw, corruption, extortion, and crime.	5. Example: Notions or beliefs about manners, tastes, customs, and towards laws.

As against morals and ethics, laws are norms, formally approved by state, power or national or international political bodies. Breaking the norms is called *crime*, and invite specific punishment.

1.2 VALUES

1.2.1 Definition

Humans have the unique ability to define their identity, choose their values and establish their beliefs. All three of these directly influence a person’s behavior. People have gone to great lengths to demonstrate the validity of their beliefs, including war and sacrificing their own life! Conversely, people are not motivated to support or validate the beliefs of another, when those beliefs are contrary to their own.

People will act congruent with their personal values or what they deem to be important.

A value is defined as a principle that promotes well-being or prevents harm.” Another definition is: Values are our guidelines for our success—our paradigm about what is acceptable.” Personal values are defined as: “Emotional beliefs in principles regarded as particularly favorable or important for the individual.” Our values associate emotions to our experiences and guide our choices, decisions and actions.

A person's observations on its environment are filtered through his values to determine whether or not he should expend energy to do something about his experiences. A person who values gold and sees a large bag of gold (a positive value) in his path as he walks, will be motivated to reach down and pick it up. A person who values his life and knows about venomous snakes will retreat from the sound of a rattlesnake (a negative value) from nearby, when he is walking in the desert. Said in another way, *"Values are the scales we use to weigh our choices for our actions, whether to move towards or away from something."*

Not all values have the same weight or priority. Some are more important than others and must be satisfied before others can be addressed. **Dr. Abraham Maslow** illustrated this with his hierarchy of human needs. Survival has a higher priority than security, which has a higher priority than social acceptance. Self-esteem can only be addressed to the degree that social acceptance is fulfilled. Similarly, self-actualization can only be pursued to the degree that self-esteem has been satisfied.

A person's beliefs, values and identity are usually acquired unconsciously based on his personal experience or observations of others' experiences as to what produces desirable or undesirable results in the environment. A baby's learning *to walk and talk* is a clear example of identifying with human adults, valuing the act of being able to have the mobility and communication ability of an adult and the belief, based on unconscious observation, that humans can do walk and do talk with each other.

Physiologists have identified the parts of the human brain that are involved in producing behavior in accordance with beliefs and values. All information collected by human senses is passed through a net-like group of cells, known as the Reticular Activating System (RAS), located near the top of the brain stem. The RAS compares the data received with accepted values, positive and negative (threats), and beliefs stored in memory and determines whether or not immediate action is required. The results of the RAS's comparison are communicated to the 'amygdala' near the mid-brain.

The 'amygdala' produces neuro-chemicals that cause emotions consistent with the nature of and proportional to the match between environment and values and beliefs. The neuro-chemicals initiate the chemical processes needed for the action to be taken. If the emotions produced are strong enough, the perceived information is blocked from reaching the logical, rational and conscious executive center of the brain, the pre-frontal lobes. In which case, the resulting behavior will be automatic, not necessarily logical or rational, and completely in accordance with the person's strongest held beliefs, values and/or identity.

By positive affirmations, one can modify or create new beliefs about a person's identity and/or what is important to him (values). Verbal repetition of statements intended to become new beliefs, and values will result in these being stored for use by the RAS for comparison with the environment being experienced. This is the mechanism how the beliefs or values are modified.

1.2.2 Types of Values²

The five core human values are: (1) Right conduct, (2) Peace, (3) Truth, (4) Love, and (5) Non-violence.

1. Values related to RIGHT CONDUCT are:

- (a) SELF-HELP SKILLS: Care of possessions, diet, hygiene, modesty, posture, self reliance, and tidy appearance
- (b) SOCIAL SKILLS: Good behavior, good manners, good relationships, helpfulness, No wastage, and good environment, and
- (c) ETHICAL SKILLS: Code of conduct, courage, dependability, duty, efficiency,

- ingenuity, initiative, perseverance, punctuality, resourcefulness, respect for all, and responsibility
2. Values related to PEACE are: Attention, calmness, concentration, contentment, dignity, discipline, equality, equanimity, faithfulness, focus, gratitude, happiness, harmony, humility, inner silence, optimism, patience, reflection, satisfaction, self-acceptance, self-confidence, self-control, self-discipline, self-esteem, self-respect, sense control, tolerance, and understanding
 3. Values related to TRUTH are: Accuracy, curiosity, discernment, fairness, fearlessness, honesty, integrity (unity of thought, word, and deed), intuition, justice, optimism, purity, quest for knowledge, reason, self-analysis, sincerity, spirit of enquiry, synthesis, trust, truthfulness, and determination.
 4. Values related to LOVE are: Acceptance, affection, care, compassion, consideration, dedication, devotion, empathy, forbearance, forgiveness, friendship, generosity, gentleness, humanness, interdependence, kindness, patience, patriotism, reverence, sacrifice, selflessness, service, sharing, sympathy, thoughtfulness, tolerance and trust
 5. Values related to NON-VIOLENCE are:
 - (a) PSYCHOLOGICAL: Benevolence, compassion, concern for others, consideration, forbearance, forgiveness, manners, happiness, loyalty, morality, and universal love
 - (b) SOCIAL: Appreciation of other cultures and religions, brotherhood, care of environment, citizenship, equality, harmlessness, national awareness, perseverance, respect for property, and social justice.

PERSEVERANCE is defined as persistence, determination, resolution, tenacity, dedication, commitment, constancy, steadfastness, stamina, endurance and indefatigability. To persevere is described as to continue, carry on, stick at it (in formal), keep going, persist, plug away, (informal), remain, stand firm, stand fast, hold on and hang on. Perseverance builds character.

ACCURACY means freedom from mistake or error; conformity to truth or to a standard or model and exactness. Accuracy is defined as correctness, exactness, authenticity, truth, veracity, closeness to truth (true value) and carefulness. The value of accuracy embraces a large area and has many implications. Engineers are encouraged to demonstrate accuracy in their behavior through the medium of praise and other incentives. Accuracy includes telling the truth, not exaggerating, and taking care over one's work.

DISCERNMENT means discrimination, perception, penetration, and insight. Discernment means the power to see what is not obvious to the average mind. It stresses accuracy, especially in reading character or motives. Discrimination stresses the power to distinguish or select what is true or genuinely excellent. Perception implies quick and often sympathetic discernment, as of shades of feelings. Penetration implies a searching mind that goes beyond what is obvious or superficial. Insight suggests depth of discernment.

Definitions of other terms are given in the appropriate pages of this book.

1.2.3 Evolution of Human Values

The human values evolve because of the following factors:

1. The impact of norms of the society on the fulfillment of the individual's needs or desires.

2. Developed or modified by one's own awareness, choice, and judgment in fulfilling the needs.
3. By the teachings and practice of Preceptors (Gurus) or Saviors or religious leaders.
4. Fostered or modified by social leaders, rulers of kingdom, and by law (government).

1.3 ETHICS

Ethics is the word that refers to morals, values, and beliefs of the individuals, family or the society. The word has several meanings. Basically it is an activity and process of inquiry. Secondly, it is different from non-moral problems, when dealing with issues and controversies. Thirdly, ethics refers to a particular set of beliefs, attitudes, and habits of individuals or family or groups concerned with morals. Fourth, it is used to mean 'morally correct'.

The study on ethics helps to know the people's beliefs, values, and morals, learn the good and bad of them, and practice them to maximize their well-being and happiness. It involves the inquiry on the existing situations, form judgments and resolve the issues. In addition, ethics tells us how to live, to respond to issues, through the duties, rights, responsibilities, and obligations. In religion, similar principles are included, but the reasoning on procedures is limited. The principles and practices of religions have varied from time to time (history), region (geography, climatic conditions), religion, society, language, caste and creed. But ethics has grown to a large extent beyond the barriers listed above. In ethics, the focus is to study and apply the principles and practices, universally.

1.4 INTEGRITY

Integrity is defined as the unity of thought, word and deed (honesty) and open mindedness. It includes the capacity to communicate the factual information so that others can make well-informed decisions. It yields the person's 'peace of mind', and hence adds strength and consistency in character, decisions, and actions. This paves way to one's success. It is one of the self-direction virtues. It enthuse people not only to execute a job well but to achieve excellence in performance. It helps them to own the responsibility and earn self-respect and recognition by doing the job.

Moral integrity is defined as a virtue, which reflects a consistency of one's attitudes, emotions, and conduct in relation to justified moral values. Further discussion on this is available in Chapter 2.

1.5 WORK ETHICS¹

Industry and Society are the two systems which interact with each other and are interdependent. Society requires industry/business system which provides manufacturing, distribution and consumption activities. It needs investment (capital input), labor (input), supply (raw materials), production (industries, business organizations), marketing and distribution (transport), and consumption (public, customer). A lot of transactions (and interactions) between these sub-systems involving people are needed for the welfare of the society. It is here, the work ethics plays an essential role.

Work ethics is defined as *a set of attitudes concerned with the value of work, which forms the motivational orientation*. The 'work ethics' is aimed at ensuring the economy (get job, create wealth, earn salary), productivity (wealth, profit), safety (in workplace), health and hygiene (working conditions), privacy (raise family), security (permanence against contractual, pension, and retirement benefits), cultural and social development (leisure, hobby, and happiness), welfare (social work), environment (anti-pollution activities), and offer opportunities for all, according to their abilities, but without discrimination.