

Human Values and professional ethics

The institute does offer various courses on human values and professional ethics. The course includes salient values of life, Human rights, environment and ecology, social values & ethical values etc, offered for the period of six month semester.

Humanities and Social Sciences (210250 Audit Course 1)

Objective of Humanities and Social Science (HSS) is to produce well-rounded engineers, not only having good technological skills but also with the ability to interact with different organs of an organization. HSS is concerned with society and the relationships among individuals within a society. It in turn has many branches, each of which is considered a "social science". The main social sciences include economics, political science, human geography, demography and sociology. In a wider sense, social science also includes some fields in the humanities such as anthropology, archaeology, psychology, history, law and linguistics.

Course Objectives:

- ❖ Human and social development;
- ❖ Contemporary national and international affairs;
- ❖ Emergence of Indian society and Economics
- ❖ Sectorial development and Economic development and related issues (such as international economics, WTO, RBI, etc).

Course Outcomes:

On completion of the course, learner will be able to–

- ❖ Making engineering and technology students aware of the various issues concerning man and society.

- ❖ These issues will help to sensitize students to be broader towards the social, cultural, economic and human issues, involved in social changes
- ❖ Able to understand the nature of the individual and the relationship between the self and the community
- ❖ Understanding major ideas, values, beliefs, and experiences that have shaped human history and cultures

Course Contents

1. **Indian Society:** Structure of Indian Society, Indian Social Demography– Social and Cultural, Differentiations: caste, class, gender and tribe; Institutions of marriage, family and kinship- Secularization –Social Movements and Regionalism- Panchayatraj Institutions; Indian constitution; Affirmative Action Programme of the Government- various reservations and commissions.
2. **Social Development:** Scientific approach to the study of human beings. Evolution of human kind, social change and evolution. Industrial revolution. National policy on education, health and health care and human development.
3. **Sectoral Development: Agriculture:** Technology changes, Green revolutions, Employment Rural & Urban, Government Schemes. Industrial Development: Strategies, Public & Private Sectors, Categories, infrastructure, transport & communication, Consumer Awareness
4. **Environment & Ecology:** Ecosystems: Structure, Working, components. Pollution: Water & Air Pollution, Global Warming, Control Strategies, International Treaties. Energy Sources: Renewable & Non Renewable, Hydro power, Biomass, Ocean, Geothermal & Tidal. Global Environmental Issues: Population Growth, Soil Degradation, Loss of Biodiversity.

References:

1. Krugman, — International Economics, Pearson Education, ISBN-13:000-01334-23646
2. Prakash, —The Indian Economy, Pearson Education, ISBN-8131758931
3. Thursen Gerald, —Engineering Economics, Prentice Hall, ISBN-10:0138221227
4. C.S. Rao, —Environmental Pollution Control Engineering, New Age International Pvt. Ltd, ISBN-812241835X
5. Rangarajan, —Environmental Issues in India, Pearson Education, ISBN-10:8131708101
6. University of Delhi, —The Individual & Society, Pearson Education. ISBN-8131704173
7. Wikipedia.org / wiki /social studies.
8. M. N. Srinivas, —Social change in modern India, 1991, Orient Longman, ISBN-10:812500422X
9. David Mandelbaum, —Society in India, 1990, Popular, ISBN-10:8171540139
10. David Newman, —Exploring the architecture of everyday life, Pine Forge Press, 7th edition,

AC3 – II: Professional Ethics and Etiquettes (310249)

Professional ethics is the underlying concept behind the successful accomplishment of any act of a professional towards achieving the individual and societal goals. These goals should ultimately result in morally, legally, ethically and even culturally acceptable good things for all. Engineers being special group of professionals need to be more conscious of their acts since their duties, rights and responsibilities permeate into the society and the surroundings. To practice professional ethics, understanding of values and concepts are essential.

Course Objectives:

- ❖ To create awareness on professional ethics and Human Values.
- ❖ To provide basic familiarity about Engineers as responsible Experimenters, Research Ethics, Codes of Ethics, Industrial Standards.
- ❖ To inculcate knowledge and exposure on Safety and Risk.
- ❖ To expose students to right attitudinal and behavioral aspects

❖ Course Contents:

- 1 Human Values And Engineering Ethics:** Morals, values and Ethics, Integrity, Work ethic, Civic virtue , Valuing time, Cooperation, Commitment, Empathy, Self-confidence , stress management, Senses of Engineering Ethics, Kohlberg's theory, Gilligan's theory, Models of professional roles, Uses of Ethical Theories.
- 2 Research Ethics and Codes of Ethics:** Industrial standardization, ethical code and its importance, ethical accountability, law in engineering, engineering as social experimentation.
- 3 Safety, Responsibilities And Rights:** Safety and Risk, Assessment of Safety and Risk, Risk Benefit Analysis and Reducing Risk collegiality, Collective Bargaining , Confidentiality , Conflicts of Interest, Professional Rights, Employee Rights, Intellectual Property Rights (IPR), Discrimination, Utilitarianism
- 4 Professional Etiquette:** Etiquette at Meetings, Public Relations Office(PRO)'s Etiquettes, Technology Etiquette Phone Etiquette, Email Etiquette, Social Media Etiquette, Video Conferencing Etiquette, Interview Etiquette, Dressing Etiquettes : for Interview, offices and social functions, Ethical Values: Importance of Work Ethics.

1. Caroline Whitbeck, "Ethics in Engineering Practice and Research", Cambridge Press, ISBN:978-1-107-66847-8
2. Prabhuddha Ganguli: —Intellectual Property Rights|| Tata Mc-Graw –Hill, New Delhi, ISBN-10:0070077177
3. Professional Ethics and Etiquette (Mastering Career Skills), Checkmark, ISBN-10: 0816071179
4. A Alavudeen, "Professional Ethics And Human Values" Firewall, ISBN13 : 8131803066

Value Education (202054)

Course Objectives:

- ❖ To enable the students to understand meaning of values and select their goals by self-investigation based on personal values.
- ❖ To enable the students to understand value of truth, commitments, honesty, sacrifice, care, unity, team work and relationship.
- ❖ To educate and make the young generation students aware of their social responsibilities.
- ❖ To increase awareness among students about environment and create attitude towards sustainable lifestyle.

Course Outcomes:

On completion of the course, learner will be able to–

- ❖ Understood human values, their significance and role in life.
- ❖ Promote self-reflection and critical inquiry that foster critical thinking of one's value and the values of others.
- ❖ Practice respect for human rights and democratic principles.

- ❖ Familiarized with various living and non-living organisms and their interaction with environment.
- ❖ Understood the basics regarding the leadership and to become a conscious professional

Course Contents

UNIT 1: Introduction of Value Education (2 Hrs)

Value Education: Definition, Need, Content, Process and relevance to present day.
Concept of Human Values, self introspection

UNIT 2: Salient values for life (2 Hrs)

Truth, commitment, honesty and integrity, forgiveness and love, empathy and ability to sacrifice, care, unity, punctuality, Interpersonal and Intra personal relationship, Team work , Positive and creative thinking.

UNIT 3: Human Rights (2 Hrs)

Universal Declaration of Human Rights, Right to Information Act -2005, National Integration, Peace and non-violence, Dr. A P J Kalam's ten points for enlightened Citizenship. The role of media in value building.

UNIT 4: Environment and Ecology (2 Hrs)

Ecological balance, interdependence of all beings – living and non-living. Man and nature, Environment conservation and enrichment.

UNIT 5: Social values & Ethical values (2 Hrs)

Social values - Social consciousness and responsibility, Consumer rights and responsibilities.

Ethical values - Professional ethics, Code of ethics of engineers, Influence of ethics on family life, Leadership qualities and Personality development.

Books:

Text:

1. Dr. N. Venkataiah, "Value Education", APH Publishing Corporation, 2007

2. M. Govindarajan, S. Natarajan, V. S. Senthil Kumar, “Professional Ethics & Human Values”, PHI Learning Press, 2013.

References:

1. Chakravarthy S. K., “Values and ethics for Organizations: Theory and Practice”, Oxford University Press, New Delhi, 1999.
2. Man Singh Das, Vijay Kumar Gupta, “Social values among young adults: A changing scenario”, MD Publications Pvt. Ltd, 1995.
3. Ram Ahuja, “Social Problems in India”, Rawat Publications, 2012.
4. Leah Levin, “HUMAN RIGHTS Questions and Answers”, UNESCO Publishing, 2012.
5. P D Sharma, Ecology and Environment, Rastogi publications, 2005.
6. Kalam A P J, Arun Tiwari, “Wings of Fire”, University Press Publications, 2003.
7. http://www.ncert.nic.in/recent/env_edu.html
8. http://www.unipune.ac.in/pdf_files/Final%20Book_03042012.pdf
9. <https://engineering.purdue.edu/MSE/Academics/Undergrad/ethics.pdf>