

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR  
COLLEGE OF ENGINEERING PULIVENDULA( AUTONOMOUS) -PIN: 516390(A.P.)

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**UNIVERSAL HUMAN VALUES**

**OBJECTIVES**

- To create an awareness on Engineering Ethics and Human Values.
- To instill Moral and Social Values and Loyalty
- To appreciate the rights of Others

**Unit I: HUMAN VALUES**

Morals, Values and Ethics-Integrity-Work Ethic-Service learning – Civic Virtue – Respect for others – Living Peacefully – Caring – Sharing – Honesty - Courage- Co Operation – Commitment – Empathy –Self Confidence Character – Self interest - Spirituality, Moral dilemmas- Consensus and controversy.

**Unit II: PERSONALITY DEVELOPMENT**

Concept of personality, types of personalities, Knowing of self(SWOT), improving personality – techniques, interpersonal skills, intrapersonal skills, building right attitude, developing the spirit of universal human goodness.

**Unit III: ENGINEERING AS SOCIAL EXPERIMENTATION AND**

Engineering As Social Experimentation – Framing the problem – Determining the facts – Codes of Ethics – Clarifying Concepts – Application issues – Common Ground - General Principles – Utilitarian thinking respect for persons.

**RESPONSIBILITY FOR SAFETY AND RISK**

Safety and risk – Assessment of safety and risk – Risk benefit analysis and reducing risk- Safety and the Engineer- Designing for the safety.

**UNIT IV: UNDERSTANDING HARMONY IN THE FAMILY AND SOCIETY.**

Understanding Harmony in the family – the basic unit of human interaction, Understanding the meaning of Vishwas; Difference between intention and competence, Understanding the harmony

in the society (society being an extension of family): Samadhan, Samridhi, Abhay, Sah-astitva as comprehensive Human Goals, Visualizing a universal harmonious order in society- Undivided Society (Akhand Samaj), Universal Order (Sarvabhaum Vyawastha )- from family to world family.

## UNIT V: GLOBAL ISSUES

Globalization – Cross culture issues- Environmental Ethics – Computer Ethics – Computers as the instrument of Unethical behavior – Computers as the object of Unethical acts – Autonomous Computers- Computer codes of Ethics – Weapons Development - Ethics and Research – Analyzing Ethical Problems in research – Intellectual property Rights( IPR).

### Outcomes:

- ❖ Identify and analyze an ethical issue in the subject matter under investigation or in a relevant field.
- ❖ Identify the multiple ethical interests at stake in a real-world situation or practice.
- ❖ Articulate what makes a particular course of action ethically defensible.
- ❖ Assess their own ethical values and the social context of problems.
- ❖ Identify ethical concerns in research and intellectual contexts, including academic integrity, use and citation of sources, the objective presentation of data, and the treatment of human subjects.
- ❖ Demonstrate knowledge of ethical values in non-classroom activities, such as service learning, internships, and field work.
- ❖ Integrate, synthesize, and apply knowledge of ethical dilemmas and resolutions in academic settings, including focused and interdisciplinary research.

### Text Books

1. **“Engineering Ethics”** by Harris, Pritchard and Rabins, CENGAGE Learning, India Edition, 2009.
2. **Engineering Ethics includes Human Values”** by M.Govindarajan, S.Natarajan and V.S.SenthilKumar-PHI Learning Pvt. Ltd-2009.
3. **“Ethics in Engineering”** by Mike W. Martin and Roland Schinzinger – Tata McGraw-Hill– 2003.
4. **“Professional Ethics and Morals”** by Prof.A.R.Aryasri, Dharanikota Suyodhana-Maruthi Publications.
5. **“Professional Ethics and Human Values”** by A.Alavudeen, R.Kalil Rahman and M.Jayakumaran- Laxmi Publications.
6. **“Indian Culture, Values and Professional Ethics”** by PSR Murthy-BS Publication.



7. **“Professional Ethics and Human Values”** by Prof.D.R.Kiran.

