

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, NAGPUR

Survey No. 140,141/1 behind Br. Sheshrao Wankhade Shetkari Sahkari Soot Girni, Village - Waranga, Tahsil- Nagpur (Rural), District Nagpur, Maharashtra - 441108

HUL 304 Professional Ethics Teaching Plan

| Course Code: HUL 304 | Course Title: Professional Ethics | | | | |
|-------------------------------------|--|---|---|---|---|
| Category: Core/Open Elective | Credit Assigned | L | Т | P | С |
| | | 3 | 0 | 0 | 3 |
| Pre- Requisite (if Any): Nil | Type of Course: Basic Science | | | | |
| Branch: CSE-DSA/OE Semester: I/V | Course Coordinator: Mr. Vikrant Dhenge Email: vdhenge@iiitn.ac.in Contact: 8600949029 | | | | |

Course Outcomes:

After the successful completion of the course, the students will be able:

- 1. Define professional ethics associated with engineering profession.
- **2.** Identify various types of ethics.
- **3.** Recognize the complimentary nature of ethics and human-machine interactions.
- **4.** Illustrate the workplace responsibilities and ethical dilemmas associated with the engineering profession.
- **5.** Demonstrate broad framework of responsible technology development and social impact of engineering solutions.

Assessment Scheme

| Examination Scheme | | |
|---------------------------|-------------------|---|
| Theory | | |
| Sessional Exam 1 & 2 | End Semester Exam | Teacher Assessment |
| 15 Marks each | 60 Marks | 10 Marks 06 marks for 2 Assignments 04 Marks for Attendance |
| Total: 100 Marks | | |

Teaching Plan

| Lecture No. | Name of Topic | CO Covered | | | |
|----------------|--|---|--|--|--|
| Module 1 | | | | | |
| 1 | Introduction to PE | CO1: Define professional ethics | | | |
| 2 | Basic Concepts to understand professional ethics Society Types of Society | associated with engineering profession. | | | |
| 3 | Social organization and disorganization Tradition vs modernization | | | | |
| 4 | Power and social justice | | | | |
| 5 | Human Values, morals, moral judgement | 1 | | | |
| 6 | Ethics & Human actions | 1 | | | |
| Module 2 | | | | | |
| 7 | Types of ethics | _CO2: Identify various types of ethics | | | |
| 8 | General ethics Professional ethics | | | | |
| 9 | Legal ethics Environmental Ethics | | | | |
| 10 | Duty Ethics and Rights Ethics Corporate/ Business Ethics | | | | |
| 11 | Professional ethics and engineering profession Code of ethics in Engineering Profession | | | | |
| 12 | Ethical Competency Case Studies on Module 1 & Module 2 | | | | |
| 13 | Case Studies on Module 1 & Module 2 | | | | |
| Module 3 | | | | | |
| 14 | Professional Responsibility Social Responsibility | CO4: Illustrate the workplace responsibilities and ethical dilemmas associated with the engineering profession. | | | |
| 15 | Ethical Dilemmas | | | | |
| 16 | Whistle Blowing | F-51 5 | | | |
| 17 | Conflict of interest | | | | |
| 18 | Ethical Relativism | | | | |

| Modu | le 4 | | | |
|------|---|---|--|--|
| 19 | Technology Development & ethics | CO3: Recognize the complimentary nature of ethics | | |
| 20 | Appropriate Technology | and human-machine interactions. | | |
| 21 | Technology Transfer & Global Justice | | | |
| 22 | Surveillance | CO5: Demonstrate broad framework of responsible | | |
| 23 | Social Impact of Technology Development & Engineering Solutions | technology development and social impact of engineering | | |
| 24 | Case Studies | solutions. | | |
| 25 | Case Studies | | | |
| Modu | le 5 | | | |
| 26 | Interactions Between Human And Internet, | CO3: Recognize the complimentary nature of ethics | | |
| 27 | Computer, Data and Ethics | and human-machine interactions. | | |
| 28 | Computer, Data and Ethics | | | |
| 29 | Computer, Data and Ethics | CO5: Demonstrate broad framework of responsible | | |
| 30 | Computer, Data and Ethics | technology development and social impact of engineering | | |
| 31 | Effective Utilization Of Data For Sustainable Development | solutions. | | |
| 32 | Case Studies For Practical Experiences. | | | |
| 33 | Case Studies For Practical Experiences. | | | |

Text Books:

- 1. Martin, M. W., & Schinzinger, R. (1989). Ethics in engineering. McGraw-Hill.
- **2.** Camenisch, P.F. (1983). Grounding Professional Ethics in a Pluralistic Society, N.Y.: Haven Publications.
- **3.** Gaur, R. R., Sangal, R., &Bagaria, G. P. (2010). A Foundation Course in Human Values and Professionals Ethics. Excel Books India.
- **4.** World Bank. World development report 2021: Data for better lives. The World Bank; 2021 Jun 15.
- **5.** Srinivasan, S., Comini, N. and Minges, M., 2021. The Importance of National Data Infrastructure for Low and Middle-Income Countries. *Available at SSRN 3898094*.
- **6.** Pippa Norris. Digital Divide: Civic Engagement, Information Poverty and the Internet worldwide, Cambridge University Press, 2001.

Reference Books

- **1.** E.F. Schumacher, (1973). *Small is Beautiful: a study of economics as if people mattered*, Blond & Briggs, Britain.
- 2. Sussan George, (1976). How the Other Half Dies, Penguin Press
- 3. PL Dhar, RR Gaur, (1990). Science and Humanism, Commonwealth Publishers.
- **4.** Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, William W. Behrens III, (1972). *Limits to Growth- Club of Rome's report*, Universe Books.
- **5.** E G Seebauer& Robert L. Berry, (2000). *Fundamentals of Ethics for Scientists and Engineers*, Oxford University Press.
- 6. R R Gaur, R Sangal, G P Bagaria, (2009). A Foundation Course in Value Education.
- 7. Koehn, D. (1995). The Ground of Professional Ethics, Routledge.
- **8.** N. Tripathy, (2003). *Human Values*, New Age International Publishers.
- 9. J. Timmons Roberts and Amy Bellone Hite, Eds. The Globalization and Development Reader: Perspectives on Development and Global Change, Blackwell: London, 2007 Amartya Sen, Development as Freedom, Anchor Books: New York, 1999
- **10.** IT Governance: How Top Performers Manage IT Decision Rights for Superior Results Kindle Edition by Peter Weill (Author), JeanneW. Ross

Name and Signature of Subject Co-ordinator

Mr. Vikrant L. Dhenge