

#### COURSE DELIVERY PLAN - THEORY

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	LP: GE18054
Department of CIVIL ENGINEERING	Rev. No: 00
B.E/B.Tech/M.E/M.Tech: CVE,CSE,ECE,EEE,INT and MAR Regulation:2018	Date:1.3.2022
PG Specialisation : NA	
Sub. Code / Sub. Name : GE18054 / PROFESSIONAL ETHICS	
Unit : I HUMAN VALUES	

Unit Syllabus: Morals, values and Ethics – Integrity – Work ethic – Service learning – Civic virtue – Respect for others – Living peacefully – Caring – Sharing – Honesty – Courage – Valuing time – Cooperation – Commitment – Empathy – Self confidence – Character – Spirituality – Introduction to Yoga and meditation for professional excellence and stress management

## Objective:

To know the importance of core values that shape the ethical behaviour of a professional.

Session No *	Topics to be covered	Ref	Teaching Aids
1	Morals, values and Ethics	T1,T2,R1,R6	_ PPT
2	Integrity - Work ethic - Service learning	T1,T2,R1,R6	PPT
3	Civic virtue – Respect for others – Living peacefully	T1,T2,R1,R6	PPT
4	Caring - Sharing - Honesty - Courage - Valuing time	T1,T2,R1,R6	PPT
5	Cooperation – Commitment – Empathy	T1,T2,R1,R6	PPT
6	Self confidence	T1,T2,R1,R6	PPT
7	Character	T1,T2,R1,R6	PPT
8	Spirituality	T1,T2,R1,R6	PPT
9	Introduction to Yoga and meditation for professional excellence	WS 1,2	PPT
10	Stress management	WS 1,2	PPT

Content beyond syllabus covered (if any):

NPTEL Video lecture on yoga, meditation and stress management

<sup>\*</sup> Session duration: 50 minutes



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Sub. Code / Sub. Name: GE18054 / PROFESSIONAL ETHICS

Unit: II ENGINEERING ETHICS

## Unit Syllabus:

Senses of 'Engineering Ethics' - Variety of moral issues - Types of inquiry - Moral dilemmas -Moral Autonomy - Kohlberg's theory - Gilligan's theory - Consensus and Controversy - Models of professional roles - Theories about right action - Self-interest -Customs and Religion - Uses of Ethical Theories.

## Objective:

To enable the students to apply ethical theories in controversial issues while playing the role of Engineering Professionals.

Session No *	Topics to be covered	Ref	Teaching Aids
11	Senses of 'Engineering Ethics'	T1, T2, R1	PPT
12	Variety of moral issues	T1, T2, R1	PPT
13	Types of inquiry – Moral dilemmas	T1, T2, R1	PPT
14	Moral Autonomy - Kohlberg's theory	T1, T2, R1	PPT
15	Gilligan's theory	T1, T2, R1	PPT
16	Consensus and Controversy – Models of professional roles	T1, T2, R1	PPT
17	Theories about right action	T1, T2, R1	PPT
18	Self-interest – Customs and Religion	T1, T2, R1	PPT
19	Uses of Ethical Theories	T1, T2, R1	PPT

Content beyond syllabus covered (if any):

Role of religion in establishing ethical values

<sup>\*</sup> Session duration: 50 mins



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Sub. Code / Sub. Name: GE18054 / PROFESSIONAL ETHICS

Unit: III ENGINEERING AS SOCIAL EXPERIMENTATION

Unit Syllabus: Engineering as Experimentation – Engineers as responsible Experimenters – Codes of Ethics – A Balanced Outlook on Law.

## Objective:

The students will be able to solve moral and ethical problems through exploration and assessment by established experiments and relate the code of ethics to social experimentation.

Session No *	Topics to be covered	Ref	Teaching Aids
20	Engineering as Experimentation	T1,T2,R2,R4	PPT
21	Engineering as Experimentation	T1,T2,R2,R4	PPT
22	Engineers as responsible Experimenters	T1,T2,R2,R4	PPT
23	Engineers as responsible Experimenters	T1,T2,R2,R4	PPT
24	Codes of Ethics	T1,T2,R2,R4	PPT
25	Codes of Ethics	T1,T2,R2,R4	PPT
26	Codes of Ethics	T1,T2,R2,R4	PPT
27	A Balanced Outlook on Law	T1,T2,R2,R4	PPT
28	A Balanced Outlook on Law	T1,T2,R2,R4	PPT

Content beyond syllabus covered (if any):

Challenger space craft disaster - A case study

\* Session duration: 50 mins



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Unit: IV

# Unit IV: SAFETY RESPONSIBILITIES AND RIGHTS

Unit Syllabus: Safety and Risk – Assessment of Safety and Risk – Risk Benefit Analysis and Reducing Risk -Respect for Authority – Collective Bargaining – Confidentiality – Conflicts of Interest –Occupational Crime – Professional Rights – Employee Rights – Intellectual Property Rights (IPR) – Discrimination.

## Objective:

To enable the students to enumerate the importance of safety, responsibilities and rights of an engineer at work place.

Session No *	Topics to be covered	Ref	Teaching Aids
29	Safety and Risk and its assessment	T1,T2,R3,R4	PPT
30	Risk Benefit Analysis and Reducing Risk	T1,T2,R3,R4	PPT
31	Respect for Authority	T1,T2,R3,R4	PPT
32	Collective Bargaining	T1,T2,R3,R4	PPT
33	Confidentiality	T1,T2,R3,R4	PPT
34	Conflicts of Interest	T1,T2,R3,R4	PPT
35	Occupational Crime	T1,T2,R3,R4	PPT
36	Professional Rights and Employee Rights	T1,T2,R3,R4	PPT
37	Intellectual Property Rights (IPR) and Discrimination.	T1,T2,R3,R4	PPT

Content beyond syllabus covered (if any):

Bhopal Gas Tragedy - A case study

\* Session duration: 50 mins



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Sub. Code / Sub. Name: GE18054 / PROFESSIONAL ETHICS

Unit: V GLOBAL ISSUES

Unit Syllabus: Multinational Corporations – Environmental Ethics – Computer Ethics – Weapons Development – Engineers as Managers – Consulting Engineers – Engineers as Expert Witnesses and Advisors – Moral Leadership –Code of Conduct – Corporate Social Responsibility.

## Objective:

The students will be able to explain the ethical attributes of engineers in various roles and in different domains of engineering in the global context.

Topics to be covered	Ref	Teaching Aids
Multinational Corporations	T1,R3,R4,R5	PPT
Environmental Ethics	T1,R3,R4,R5	PPT
Computer Ethics	T1,R3,R4,R5	PPT
Weapons Development	T1,R3,R4,R5	PPT
Engineers as Managers and Consulting Engineers	T1,R3,R4,R5	PPT
Engineers as Expert Witnesses and Advisors	T1,R3,R4,R5	PPT
Moral Leadership and Code of Conduct	T1,R3,R4,R5	PPT
Corporate Social Responsibility	T1,R3,R4,R5	PPT
	Multinational Corporations  Environmental Ethics  Computer Ethics  Weapons Development  Engineers as Managers and Consulting Engineers  Engineers as Expert Witnesses and Advisors  Moral Leadership and Code of Conduct	Multinational Corporations  Environmental Ethics  T1,R3,R4,R5  Computer Ethics  T1,R3,R4,R5  Weapons Development  T1,R3,R4,R5  Engineers as Managers and Consulting Engineers  T1,R3,R4,R5  Engineers as Expert Witnesses and Advisors  T1,R3,R4,R5  Moral Leadership and Code of Conduct  T1,R3,R4,R5

Content beyond syllabus covered (if any):

Corporate social responsibility of a Multinational Organization in India

\* Session duration: 50 mins



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### TEXT BOOKS:

- 1. Mike W. Martin and Roland Schinzinger, "Ethics in Engineering", Tata McGraw Hill, New Delhi, 2015.
- 2. Govindarajan M, Natarajan S, Senthil Kumar V. S, "Engineering Ethics", Prentice Hall of India, New Delhi, 2004.

#### REFERENCES:

- 1. Charles B. Fleddermann, "Engineering Ethics", Pearson Prentice Hall, New Jersey, 2012.
- 2. Charles E. Harris, Michael S. Pritchard and Michael J. Rabins, "Engineering Ethics Concepts and Cases", Cengage Learning, 2012.
- 3. John R Boatright, "Ethics and the Conduct of Business", Pearson Education, New Delhi, 2017.
- 4. Edmund G Seebauer and Robert L Barry, "Fundamentals of Ethics for Scientists and Engineers", Oxford University Press, Oxford, 2008.
- 5. Laura P. Hartman and Joe Desjardins, "Business Ethics: Decision Making for Personal Integrity and Social Responsibility" Mc Graw Hill education, India Pvt. Ltd., New Delhi, 2013.
- 6. World Community Service Centre, 'Value Education', Vethathiri publications, Erode, 2011.

#### Web sources:

- 1. www.onlineethics.org
- 2. www.nspe.org
- 3. www.globalethics.org
- 4. www.ethics.org



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Designation	Assistant Professor	HoD / CVE
Date	01.03.2022	01.03.2022
Remarks *:		
Remarks *:		
Remarks *:		

<sup>\*</sup> If the same lesson plan is followed in the subsequent semester/year it should be mentioned and signed by the Faculty and the HOD