

Course Title	INDIAN CONSTITUTION & ENGINEERING ETHICS						
Course Code	1BICT107/1BICT207						
Course Category	AEC (NCMC)						
Teaching - Learning Scheme & Credit	L	T	P	S	Total	Total Teaching Hours	Credit
	1	0	0	0	1	14+0+0+16=30	PP/NP
CIE Marks: 50	Assignment marks: 25		Group Activity marks: 25		Total Max. Marks: 100		

Course Learning Objectives: Students will learn to:	
CLO1	Understand the historical background, features, and values of the Indian Constitution.
CLO2	Explain the Fundamental Rights, Directive Principles of State Policy, Fundamental Duties, and the structure of Indian governance.
CLO3	Describe the electoral process, constitutional amendments, emergency provisions, and the Right to Information (RTI).
CLO4	Understand the principles of engineering ethics, professional responsibility, and Intellectual Property Rights (IPRs).
CLO5	Apply ethical values and constitutional principles to analyze professional and societal issues.

SYLLABUS	No. of Hours	BTLs
UNIT 1	3	L1
Introduction to Indian Constitution: Historical background and making of the Constitution; Roll of the constitute Assembly; Drafting and Adoption of the Indian Constitution; Salient features of the Indian Constitution; Citizenship:-Basic provisions for citizenship.		
SELF-STUDY COMPONENTS:		4 hours
Role of Dr. B. R. Ambedkar in framing the Indian Constitution , with emphasis on his contribution as Chairman of the Drafting Committee and his ideas on social justice, equality and constitutional democracy.		
UNIT 2	3	L1
Ideological Foundation OF Indian Constitution: Preamble of the Indian Constitution: - key concept of preamble; Fundamental Rights: - Core Rights [Articles 12 to 35]; Directive Principle of State Policy (DPSPs):- Guidelines for the State and establish Welfare Society; Fundamental Duties.		
SELF-STUDY COMPONENTS:		6 hours
Human Rights in India and Human Rights in the 21st Century: Issues and Perspectives, with reference to Fundamental Rights and Directive Principles of State Policy.		
UNIT 3	3	L1
Union and State Government: The Union:-Power and Functions of the President, Prime Minister, Cabinet and Parliament (Lok - Sabha & Rajya - Sabha); The State:- Power and Functions of the Governor, Chief Minister, State Council of Ministers and State Legislative (Vidhan - Sabha & Vidhan - Parishad); The Judiciary: - Structure Powers and Functions of the Supreme Court and High Court.		
SELF-STUDY COMPONENTS:		3 hours
Judicial Activism in India , with reference to landmark cases such as <i>Kesavananda Bharati v. State of Kerala</i> and <i>Vishaka v. State of Rajasthan</i> .		
UNIT 4	3	L1

Elections, Emergency Amendments Act :

Electoral process: - Power and Functions of the Election Commission and major electoral reforms;
 Emergency provisions: - National, State and Financial; Constitutional Amendments in India: - Types, Significance and Important Constitutional Amendments until today.

SELF-STUDY COMPONENTS:**3 hours**

The Right to Information (RTI) Act, 2005: Major provisions, objectives and significance in promoting transparency and accountability. Study of important Constitutional Amendments and their significance.

UNIT 5**2****L1****Engineering Ethics & Intellectual Property Rights [IPRs]:**

Engineering Ethics :- Meaning and Importance of engineering ethics and values; Scope and Aims of Professional Engineering Ethics; Responsibility of Engineers ;Risk, Safety, liability and conflicts of Interest;

Intellectual Property Rights [IPRs]:- Importance and Protection of Innovation in Engineering and Patents, Copyrights, and Trademarks an overview of IPRs.

SELF-STUDY COMPONENTS:**3 hours**

Case Study Analysis of Engineering Ethical Dilemmas, with reference to GPS/GNSS spoofing and the ISRO Chandrayaan-2 Vikram Lander (2019), focusing on engineering responsibility, risk, safety, liability, cybersecurity and ethical decision-making.

TEXT BOOKS:

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|---|--|
| 1 | D.D. Basu – <i>Introduction to the Constitution of India</i> (LexisNexis). |
| 2 | J.C. Johari – <i>Indian Government and Politics</i> (Sterling Publishers). |

REFERENCE BOOKS:

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|---|--|
| 1 | Subhash Kashyap – <i>Our Constitution: An Introduction to India's Constitution and Constitutional Law</i> (National Book Trust). |
| 2 | P.M. Bakshi – <i>The Constitution of India</i> (Universal Law Publishing). |
| 3 | Govindarajan M., Natarajan S., Senthil Kumar V.S. – <i>Professional Ethics and Human Values</i> (PHI Learning). |

E-LEARNING RESOURCES:

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| 1 | SWAYAM – Government of India – Online courses and learning resources in Humanities, Law, Engineering, and related areas. SWAYAM |
| 2 | NPTEL – National Programme on Technology Enhanced Learning – Online courses and video lectures in Engineering, Humanities, Ethics, Intellectual Property Rights, and related subjects. NPTEL |

Assessment Details - CIE

Continuous Internal Evaluation (CIE): The CIE comprises three components: **Theory (MCQs) (50 Marks)**, **Assignment (25 Marks)**, and **Group Activity (25 Marks)**, carrying 100 marks. Students must obtain a **minimum of 40 marks (40%)** in the aggregate of all three CIE components to pass the course.

The **Self-Study Component** shall **not be included in the Continuous Internal Evaluation (CIE)**.

CONTINUOUS INTERNAL EVALUATION (CIE)		Max. Marks	Minimum Marks to be scored in CIE, to qualify to take SEE (40% individually)
Theory	Weightage of CIE1 and CIE2 Tests or CIE3	50	-
	Assignment	25	-
	Group Activity	25	-
TOTAL		100	40

Course Outcomes: After the completion of the course, the student will be able to:

CO1	Describe the historical background, making, and salient features of the Indian Constitution and its basic provisions relating to citizenship.
CO2	Describe the key concepts of the Preamble, Fundamental Rights, Fundamental Duties, and Directive Principles of State Policy of the Indian Constitution.
CO3	Describe the structure, powers, and functions of the Union and State Governments and the Judiciary under the Indian Constitution.
CO4	Describe the electoral process, emergency provisions, and constitutional amendments under the Indian Constitution.
CO5	Describe the principles of engineering ethics, professional responsibilities, and the importance of Intellectual Property Rights (IPRs) in engineering practice.

Mapping of CO's, PO's with PSO's

Strength of correlation: Strongly related-3, Moderately related-2, Weakly related-1, Not related-0

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	2				2		1	1	1		3	2	1
CO2	3	2				3		2	1	1		2	3	2
CO3	3	2		1		3		2	1	1	1	2	3	2
CO4	3	2		1	1	3		2	1	2	1	2	3	3
CO5	3	2		1	2	3		3	2	2	2	3	3	3

Mapping of CO's with Knowledge and Attitude Profile (WK)

Strength of correlation: Strongly related-3, Moderately related-2, Weakly related-1, Not related-0

CO	WK1	WK2	WK3	WK4	WK5	WK6	WK7	WK8	WK9
CO1					1	3		1	1
CO2					1	3		2	1
CO3					1	3		2	2
CO4				1	1	3		2	2
CO5				2	3	3		3	2

Mapping of CO's with Sustainable Development Goals (SDG)																	
Strength of correlation: Strongly related-3, Moderately related-2, Weakly related-1, Not related-0																	
CO/SDG	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
CO1				3	1					2						3	1
CO2				3	2					3						3	1
CO3				3	1					2						3	1
CO4				3	1					2						3	2
CO5				2	1			3		2						2	1

Course Coordinator:

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