<u>Sensitization of students and employees of the institution to constitutional obligations:</u> values, rights, duties and responsibilities of citizens:

Vishnu Institute of Technology is committed to providing comprehensive education to its students by creating awareness about constitutional rights, values, duties, and responsibilities. This is accomplished through various means, both within and outside the curriculum.

Sensitizing students and employees of the institution is achieved through the inclusion of relevant topics in the curriculum as well as through extracurricular activities. Subjects such as the Constitution of India, professional ethics, and human values play a crucial role in familiarizing students with the values, rights, duties, and responsibilities of citizens. The Constitution of India subject covers constitutional rights, duties, and responsibilities that citizens should uphold. Professional ethics and human values are mandatory subjects across all engineering and technology programs, ensuring students are well-versed in these areas.

To provide a broader perspective, students are required to take a course on Environmental Studies in their first year. This course enlightens them about various environmental acts, wildlife protection acts, forest acts, and global environmental concerns.

The institute also organizes seminars and workshops on important national days to enhance awareness among students and faculty. Additionally, the NSS unit of the institution conducts activities recommended by the Government of India, both within the college campus and in nearby villages.

Through these initiatives, Vishnu Institute of Technology fosters an environment where students gain knowledge, understanding, and a sense of responsibility towards their constitutional rights, values, duties, and responsibilities as responsible citizens.

An awareness program on Constitution Day: Constitution Day

On the occasion of Indian Constitution Day, NSS UNIT of our college organized an Awareness Programme on "Constitution of India" on 26.11.2022 at Padmabhushan Dr. B.V. Raju Mini Auditorium at 10.00 A.M

Addressing the gathering, Dr.D.Suryanarayana Director and Principal, said that the Constitution Day is being celebrated in India as a tribute to all the great legends who worked tirelessly to give India its Constitution. He said that the Indian Constitution has given us our rights with our responsibility and duties but we always seek for our rights and forget about duties so he urged every individual to first perform their duties and responsibilities which automatically provide their rights. He said that the Indian Constitution is for continuity of democracy and integrity of nation. He remembered Dr B.R. Ambedkar, the Architect of the Indian Constitution, for his stellar contribution and socio-political understanding.

Vice Principal Prof.K.Srinivas, the HODs of all Departments graced the program and 350 students from I B.Tech (all branches) attended the program.

Activities:

- 1. Reading of Preamble by Ms.Prabhashita, I CSBS
- 2. Awareness on Citizens Duties & Rights by Ms.Prabhashita, I CSBS & Mr.Venkat, I AIML
- 3. Lecture on "India: The Mother of Democracy" by Mr.R.S.R.Sumukh











Course Structure & Syllabus- EEE Department – Constitution of India – R20 regulation – Autonomous

Semester - II (First Year)

	Category/		Hours	Hours Per week		Credits
S.No	Course	Course Title	L	T	P	C
	Code					
1	BSC	Mathematics - II	3	0	0	3
2	BSC	Applied Physics	3	0	0	3
3	ESC	Computer Programming	3	0	0	3
4	ESC	Electrical Circuit Analysis - I	3	0	0	3
5	ESC	Elements of Civil and Mechanical Engineering	3	0	0	3
6	ESC	Computer Programming Lab	0	0	3	1.5
7	BSC	Applied Physics Lab	0	0	3	1.5
8	ESC	Workshop (Electrical & IT)	0	0	3	1.5
9	MC - I	Constitution of India	2	0	0	0
			Total	Cred	dits	19.5

Year/Semester	I B. Tech/II Sem	L	T	P	C
Regulation Year	2020-2021	2	0	0	0
Subject	Constitution of India				
Branch	EEE				

COURSE OBJECTIVES:

- > To train students in understanding the basic structure of Indian Constitution
- To prepare students to live better and happily with other fellow beings through the application of Fundamental Rights in their lives.

UNIT-I: Introduction to Indian Constitution

Meaning of the term Indian Constitution –Preamble- Constituent Assembly- Salient Features of Indian Constitution

UNIT-II: Fundamental Rights

Fundamental Rights -Fundamental Duties -The Directive Principles of State Policy

UNIT-III: Union Government

Union Government -Union Legislature (Parliament) -Lok Sabha and Rajya Sabha (with Powers and Functions) -Union Excecutive -President of India (with Powers and Functions) -Prime Minister of India (with Powers and Functions) -Union Judiciary (Supreme Court) -Jurisdiction of the Supreme Court

UNIT-IV State Government

State Government -State Legislature (Legislative Assembly / Vidhan Sabha, Legislative Council / Vidhan Parishad) -Powers and Functions of the State Legislature -State Executive-Governor of the State (with Powers and Functions) -The Chief Minister of the State (with Powers and Functions) -State Judiciary (High Courts)

UNIT-V: Local Self Governance

Powers and functions of Municipalities, Panchyats, ZP's and Co - Operative Societies

UNIT-VI: Sovereign Bodies

Election Commission of India (with Powers and Functions) -The Union Public Service Commission (with Powers and Functions)

BOOKS:

- 1. Introduction to constitution of India, Durga Das Basu, Lexis Nexis Publications
- 2. Constitution of India by PRFESSIONAL BOOK PUBLISHERS
- 3. The Constitution of India by Arun K Tiru vengadam, Blooms bury publishers.
- 4. The constitution of India by PM Bakshi, Universal law publishing co
- 5. The Constitution of India by S.R. Bhansali, Universal law publishing co

COURSE OUTCOMES:

Upon the completion of the course, the student will be able to:

- CO1: Examinesalient features of Indian Constitution and live accordingly in society.
- CO2: Interprethemeaning of Fundamental Rights and Directive Principles of State Policy and, develop an attitude which paves the way for better living conditions.
- CO3: Discover various aspects of Union Government legislation and live up to the expectations of the rules.
- CO4: Critically examineState Government legislation and improve your living standards by following the rules strictly
- CO5: Examine powers and functions of local bodies such as Muncipalities and Panchayats and, take advantage of available resources for better living
- CO6: Analyze the powers and functions of Election Commission and The Union Public Service Commission and decide upon it for safe and secured life.

Course Structure & Syllabus- EEE Department – Professional Ethics & Human Values - R16 regulation – Affliated to JNTU,Kakinada

III Year - II Semester

S. No	Subjects	L	T	P	Credits
1	Power Electronic Controllers & Drives	4			3
2	Power System Analysis	4			3
3	Micro Processors and Micro controllers	4			3
4	Data Structures	4			3
	Open Elective				
	1. Unix and Shell Programming				
	2. OOPS Through JAVA				
5	3. VLSI Design	4			3
3	4. Robotics				3
	5. Neural Networks &Fuzzy Logic				
	6. Energy Audit and Conservation&				
	Management				
6	Power Electronics Laboratory			3	2
7	Microprocessors & Microcontrollers			3	2
	Laboratory				
8	Data Structures Laboratory			3	2
9-MC	Professional Ethics & Human Values		3		
	Total Credits				21

PROFESSIONAL ETHICSAND HUMAN VALUES

Course Objectives:

- *To give basic insights and inputs to the student to inculcate Human values to grow as a responsible human beings with proper personality.
- *Professional Ethics instills the student to maintain ethical conduct and discharge their professional duties.

UNIT I: Human Values:

Morals, Values and Ethics – Integrity –Trustworthiness - Work Ethics – Service Learning – Civic Virtue – Respect for others – Living Peacefully – Caring – Sharing – Honesty – Courage – Value Time – Co-operation – Commitment – Empathy – Self-confidence – Spirituality- Character.

UNIT: II: Principles for Harmony:

Truthfulness – Customs and Traditions -Value Education – Human Dignity – Human Rights – Fundamental Duties - Aspirations and Harmony (I, We & Nature) – Gender Bias - Emotional Intelligence – Salovey – Mayer Model – Emotional Competencies – Conscientiousness.

UNIT III: Engineering Ethics and Social Experimentation:

History of Ethics - Need of Engineering Ethics - Senses of Engineering Ethics- Profession and Professionalism —Self Interest - Moral Autonomy – Utilitarianism – Virtue Theory - Uses of Ethical Theories - Deontology- Types of Inquiry –Kohlberg's Theory - Gilligan's Argument –Heinz's Dilemma - Comparison with Standard Experiments — Learning from the Past –Engineers as Managers – Consultants and Leaders – Balanced Outlook on Law - Role of Codes – Codes and Experimental Nature of Engineering.

UNIT IV: Engineers' Responsibilities towards Safety and Risk:

Concept of Safety - Safety and Risk - Types of Risks - Voluntary v/sInvoluntary Risk - Consequences - Risk Assessment - Accountability - Liability - Reversible Effects - Threshold Levels of Risk - Delayed v/sImmediate Risk - Safety and the Engineer - Designing for Safety - Risk-Benefit Analysis-Accidents.

UNIT V: Engineers' Duties and Rights:

Concept of Duty - Professional Duties - Collegiality - Techniques for Achieving Collegiality - Senses of Loyalty - Consensus and Controversy - Professional and Individual Rights - Confidential and Proprietary Information - Conflict of Interest-Ethical egoism - Collective Bargaining - Confidentiality - Gifts and Bribes - Problem solving-Occupational Crimes-Industrial Espionage- Price Fixing-Whistle Blowing.

UNIT VI: Global Issues:

Globalization and MNCs -Cross Culture Issues - Business Ethics - Media Ethics - Environmental Ethics - Endangering Lives - Bio Ethics - Computer Ethics - War Ethics - Research Ethics -Intellectual Property Rights.

Related Cases Shall be dealt where ever necessary.

Outcome:

- *It gives a comprehensive understanding of a variety issues that are encountered by every professional in discharging professional duties.
- *It provides the student the sensitivity and global outlook in the contemporary world to fulfill the professional obligations effectively.

References:

- 1. Professional Ethics by R. Subramaniam Oxford Publications, New Delhi.
- Ethics in Engineering by Mike W. Martin and Roland Schinzinger Tata McGraw-Hill – 2003.
- Professional Ethics and Morals by Prof.A.R.Aryasri, DharanikotaSuyodhana -Maruthi Publications.
- 4. Engineering Ethics by Harris, Pritchard and Rabins, Cengage Learning, New Delhi.
- Human Values & Professional Ethics by S. B. Gogate, Vikas Publishing House Pvt. Ltd., Noida.
- 6. Engineering Ethics & Human Values by M.Govindarajan, S.Natarajan and V.S.SenthilKumar-PHI Learning Pvt. Ltd 2009.
- Professional Ethics and Human Values by A. Alavudeen, R.Kalil Rahman and M. Jayakumaran – University Science Press.
- 8. Professional Ethics and Human Values by Prof.D.R.Kiran-Tata McGraw-Hill 2013
- Human Values And Professional Ethics by Jayshree Suresh and B. S. Raghavan, S.Chand Publications

${\bf Course\ Structure\ \&\ Syllabus\hbox{--}\ EEE\ Department\hbox{--}\ Constitution\ of\ India\ \hbox{--}\ R19\ regulation\ --} \\ {\bf Autonomous}$

I . B.Tech. II- Semester

S.No	Course Title	L	T	P	C	I	E	TM
1	Mathematics-II(PDE & Vector Calculus)	2	1	-	3	40	60	100
2	Mathematics-III (Transform Calculus & Complex Variables)	2	1	-	3	40	60	100
3	Applied Physics	3	-	-	3	40	60	100
4	Problem Solving & Programming Using Python	2	1	-	3	40	60	100
5	Engineering Graphics & Design	1	-	2	2.5	40	60	100
6	Applied physics Lab	-	-	3	1.5	40	60	100
7	Problem Solving & Programming Lab	-	-	3	1.5	40	60	100
8	Workshop (Electrical & Electronics Engineering Lab)	-	-	3	1.5	40	60	100
9	Constitution of India	3	-	-	-	-	-	-
	Total	13	3	11	19	320	480	800

Year/Semester	I B.Tech. / II Sem.	L	T	P	C	
Regulation Year	2019-20	2	-	-	-	
Name of the Subject	Constitution of India					
Branch	CSE,IT & EEE					

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- **CO6:** Analyze the powers and functions of Election Commission and The Union Public Service Commission and decide upon it for safe and secured life.