JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech. in COMPUTER SCIENCE AND ENGINEERING
COURSE STRUCTURE & SYLLABUS (R22 Regulations)

Applicable from AY 2022-23 Batch

I Year I Semester

S. No.	Course Code	Course	L	T	P	Credits
1.	MA101BS	Matrices and Calculus	3	1	0	4
2.	CH102BS	Engineering Chemistry	3	1	0	4
3.	CS103ES	Programming for Problem Solving	3	0	0	3
4.	EE104ES	Basic Electrical Engineering	2	0	0	2
5.	ME105ES	Computer Aided Engineering Graphics	1	0	4	3
6.	CS106ES	Elements of Computer Science & Engineering	0	0	2	1
7.	CH107BS	Engineering Chemistry Laboratory	0	0	2	1
8.	CS108ES	Programming for Problem Solving Laboratory	0	0	2	1
9.	EE109ES	Basic Electrical Engineering Laboratory	0	0	2	1
		Induction Program				
		Total	**12**	**2**	**12**	**20**

I Year II Semester

S. No.	Course Code	Course	L	T	P	Credits
1.	MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	PH202BS	Applied Physics	3	1	0	4
3.	ME203ES	Engineering Workshop	0	1	3	2.5
4.	EN204HS	English for Skill Enhancement	2	0	0	2
5.	EC205ES	Electronic Devices and Circuits	2	0	0	2
6.	CS206ES	Python Programming Laboratory	0	1	2	2
7.	PH207BS	Applied Physics Laboratory	0	0	3	1.5
8.	EN208HS	English Language and Communication Skills Laboratory	0	0	2	1
9.	CS209ES	IT Workshop	0	0	2	1
10.	*MC210	Environmental Science	3	0	0	0
		Total	**13**	**4**	**12**	**20**

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS301PC	Digital Electronics	3	0	0	3
2	CS302PC	Data Structures	3	0	0	3
3	CS303PC	Computer Oriented Statistical Methods	3	1	0	4
4	CS304PC	Computer Organization and Architecture	3	0	0	3
5	CS305PC	Object Oriented Programming through Java	3	0	0	3
6	CS306PC	Data Structures Lab	0	0	3	1.5
7	CS307PC	Object Oriented Programming through Java Lab	0	0	3	1.5
8	CS308PC	Data visualization- R Programming/ Power BI	0	0	2	1
9	*MC309	Gender Sensitization Lab	0	0	2	0
		Total	**15**	**1**	**10**	**20**

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS401PC	Discrete Mathematics	3	0	0	3
2	SM402MS	Business Economics & Financial Analysis	3	0	0	3
3	CS403PC	Operating Systems	3	0	0	3
4	CS404PC	Database Management Systems	3	0	0	3
5	CS405PC	Software Engineering	3	0	0	3
6	CS406PC	Operating Systems Lab	0	0	2	1
7	CS407PC	Database Management Systems Lab	0	0	2	1
8	CS408PC	Real-time Research Project/ Societal Related Project	0	0	4	2
9	CS409PC	Node JS/ React JS/ Django	0	0	2	1
10	*MC410	Constitution of India	3	0	0	0
		Total	**18**	**0**	**10**	**20**

2

DR. V.R.K WOMEN'S COLLEGE OF ENGINEERING AND TECHNOLOGY
Approved by AICTE & Premitted by Government of Telangana State
Affiliated to Jawaharlal Nehru Technological University Hyderabad
Aziznagar (V), Molnabad (M), R.R. Dist. 500 075 - T.S.
Contact No. 7893044962 / 08413235962
Website : www.drvrkwomenscollege.com

1.3.1. Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.

List of courses offered in the curriculum with topics of Gender, Human Values, Environment and Sustainability and Professional Ethics

Crosscutting Issue	Regulations	Course Code	Name of the Course	Year of Study	Academic Year
Gender Sensitization	R22	MC410	Gender Sensitization Lab	B.Tech ECE/AI&DS/CSE(AI&ML) II-II	2022-2023
	R22	MC309	Gender Sensitization Lab	B.Tech II-I - CSE/EEE	2021-22 & 2022-23
	RI 8	MC309	Gender Sensitization Lab	B.Tech II-I- CSE	2019-20
Environment and Sustainability	R18	MC209ES	Environmental Science	B.Tech I-II - CSE/EEE	2018-19
	R18	MC109ES	Environmental Science	B.Tech 1-1 - ECE	2018-19
	R 18	MC609	Environmental Science	B.Tech III-II CSE/ECE/EEE	2020-21 & 2021-22
	R22	MC110	Environmental Science	B.Tech ECE/AI&DS/CSE(AI&ML) I-I	2022-2023
	R22	MC210	Environmental Science	B.Tech CSE/EEE I-II	2022-2023

1

Human Values and Professional Ethics	R16	MC500HS	Professional Ethics	B.Tech III YEAR I SEMESTERCSE/ECE/EEE	2018-19
	R18	MC510	Intellectual Property Rights	B.Tech III YEAR I SEMESTER:CSE, ECE	2020-21,2021-22
	R18	MC309	Constitution of India	B. Tech II-II ECE,	2019-20,2020-21 & 2021-22
	R19	5606M	Research Methodology &IPR	M.Tech CSE, I SEM	2020-21,2021-22 & 2022-23
	R22	Audit -I & Audit - II course	1.English for Research Paper Writing 2. Disaster Management 3. Pedagogy Studies	M. Tech I YEAR I SEM, II SEM	2019-2020, 2020-2021, 2021-2022
					2022-2023

2

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS501PC	Design and Analysis of Algorithms	3	1	0	4
2	CS502PC	Computer Networks	3	0	0	3
3	CS503PC	DevOps	3	0	0	3
4		Professional Elective-I	3	0	0	3
5		Professional Elective -II	3	0	0	3
6	CS504PC	Computer Networks Lab	0	0	2	1
7	CS505PC	DevOps Lab	0	0	2	1
8	EN508HS	Advanced English Communication Skills Lab	0	0	2	1
9	CS506PC:	UI design- Flutter	0	0	2	1
10	*MC510	Intellectual Property Rights	3	0	0	0
		Total	**18**	**1**	**8**	**20**

III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS601PC	Machine Learning	3	0	0	3
2	CS602PC	Formal Languages and Automata Theory	3	0	0	3
3	CS603PC	Artificial Intelligence	3	0	0	3
4		Professional Elective – III	3	0	0	3
5		Open Elective-I	3	0	0	3
6	CS604PC	Machine Learning Lab	0	0	2	1
7	CS605PC	Artificial Intelligence Laboratory	0	0	2	1
8		Professional Elective-III Lab	0	0	2	1
9	CS606PC	Industrial Oriented Mini Project/ Internship/ Skill Development Course (Big data-Spark)	0	0	4	2
10	*MC609	Environmental Science	3	0	0	0
		Total	**18**	**0**	**8**	**20**

Environmental Science in III Yr II Sem Should be Registered by Lateral Entry Students Only.

4

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS701PC	Cryptography and Network Security	3	0	0	3
2	CS702PC	Compiler Design	3	0	0	3
3		Professional Elective -IV	3	0	0	3
4		Professional Elective -V	3	0	0	3
5		Open Elective - II	3	0	0	3
6	CS703PC	Cryptography and Network Security Lab	0	0	2	1
7	CS704PC	Compiler Design Lab	0	0	2	1
8	CS705PC	Project Stage - I	0	0	6	3
		Total Credits	**15**	**0**	**10**	**20**

IV YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS801PC	Organizational Behavior	3	0	0	3
2		Professional Elective – VI	3	0	0	3
3		Open Elective – III	3	0	0	3
4		Project Stage – II including Seminar	0	0	22	11
		Total Credits	**9**	**0**	**22**	**20**

*MC – Satisfactory/Unsatisfactory

#Skill Course - 1 credit with 2 Practical Hours

Professional Elective - I

CS511PE	Quantum Computing
CS512PE	Advanced Computer Architecture
CS513PE	Data Analytics
CS514PE	Image Processing
CS515PE	Principles of Programming Languages

Professional Elective - II

CS521PE	Computer Graphics
CS522PE	Embedded Systems
CS523PE	Information Retrieval Systems
CS524PE	Distributed Databases
CS525PE	Natural Language Processing

Professional Elective - III

CS631PE	Full Stack Development
CS632PE	Internet of Things
CS633PE	Scripting Languages
CS634PE	Mobile Application Development
CS635PE	Software Testing Methodologies

#Courses in PE - III and PE - III Lab must be in 1-1 correspondence.

5

Professional Elective -IV

CS741PE	Graph Theory
CS742PE	Cyber Security
CS743PE	Soft Computing
CS744PE	Cloud Computing
CS745PE	Ad hoc & Sensor Networks

Professional Elective -V

CS751PE	Advanced Algorithms
CS752PE	Agile Methodology
CS753PE	Robotic Process Automation
CS754PE	Blockchain Technology
CS755PE	Software Process & Project Management

Professional Elective – VI

CS861PE	Computational Complexity
CS862PE	Distributed Systems
CS863PE	Deep Learning
CS864PE	Human Computer Interaction
CS865PE	Cyber Forensics

Open Elective -1:
1. CS611OE: Data Structures
2. CS612OE: Database Management Systems

Open Elective -2:
1. CS721OE: Operating Systems
2. CS722OE: Software Engineering

Open Elective -3:
1. CS831OE: Algorithms Design and Analysis
CS832OE: Introduction to Computer Networks

6

MC210: ENVIRONMENTAL SCIENCE

B.Tech. I Year II Sem.

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Course Objectives:

- Understanding the importance of ecological balance for sustainable development.
- Understanding the impacts of developmental activities and mitigation measures.
- Understanding the environmental policies and regulations

Course Outcomes:

- Based on this course, the Engineering graduate will understand /evaluate / develop technologies on the basis of ecological principles and environmental regulations which in turn helps in sustainable development

UNIT - I

Ecosystems: Definition, Scope, and Importance of ecosystem. Classification, structure, and function of an ecosystem, Food chains, food webs, and ecological pyramids. Flow of energy, Biogeochemical cycles, Bioaccumulation, Biomagnification, ecosystem value, services and carrying capacity, Field visits.

UNIT - II

Natural Resources: Classification of Resources: Living and Non-Living resources, **water resources:** use and over utilization of surface and ground water, floods and droughts, Dams: benefits and problems. **Mineral resources:** use and exploitation, environmental effects of extracting and using mineral resources, **Land resources:** Forest resources, **Energy resources:** growing energy needs, renewable and non-renewable energy sources, use of alternate energy source, case studies.

UNIT - III

Biodiversity and Biotic Resources: Introduction, Definition, genetic, species and ecosystem diversity. Value of biodiversity; consumptive use, productive use, social, ethical, aesthetic and optional values. India as a mega diversity nation, Hot spots of biodiversity. Field visit. Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts; conservation of biodiversity: In-Situ and Ex-situ conservation. National Biodiversity act.

UNIT - IV

Environmental Pollution and Control Technologies: Environmental Pollution: Classification of pollution, **Air Pollution:** Primary and secondary pollutants, Automobile and Industrial pollution, Ambient air quality standards. **Water pollution:** Sources and types of pollution, drinking water quality standards. **Soil Pollution:** Sources and types, Impacts of modern agriculture, degradation of soil. **Noise Pollution:** Sources and Health hazards, standards, **Solid waste:** Municipal Solid Waste management, composition and characteristics of e-Waste and its management. **Pollution control technologies:** Wastewater Treatment methods: Primary, secondary and Tertiary.

Overview of air pollution control technologies, Concepts of bioremediation. **Global Environmental Issues and Global Efforts:** Climate change and impacts on human environment. Ozone depletion and Ozone depleting substances (ODS). Deforestation and desertification. International conventions / Protocols: Earth summit, Kyoto protocol, and Montréal Protocol. NAPCC-GoI Initiatives.

UNIT - V

Environmental Policy, Legislation & EIA: Environmental Protection act, Legal aspects Air Act-1981, Water Act, Forest Act, Wild life Act, Municipal solid waste management and handling rules, biomedical waste management and handling rules, hazardous waste management and handling rules. EIA: EIA structure, methods of baseline data acquisition. Overview on Impacts of air, water, biological and Socio- economical aspects. Strategies for risk assessment, Concepts of EnvironmentalManagementPlan (EMP). **Towards Sustainable Future:** Concept of Sustainable Development Goals, Population and its explosion, Crazy Consumerism, Environmental Education, Urban Sprawl, Human health, Environmental Ethics, Concept of Green Building, Ecological Foot Print, Life Cycle assessment (LCA),Low carbon life style.

TEXT BOOKS:

1. Textbook of Environmental Studies for Undergraduate Courses by Erach Bharucha forUniversity Grants Commission.
2. Environmental Studies by R. Rajagopalan, Oxford University Press.

REFERENCE BOOKS:

1. Environmental Science: towards a sustainable future by Richard T. Wright. 2008 PHL LearningPrivate Ltd. New Delhi.
2. Environmental Engineering and science by Gilbert M. Masters and Wendell P. Ela. 2008 PHILearning Pvt. Ltd.
3. Environmental Science by Daniel B. Botkin & Edward A. Keller, Wiley INDIA edition.
4. Environmental Studies by Anubha Kaushik, 4th Edition, New age international publishers.
5. Text book of Environmental Science and Technology - Dr. M. Anji Reddy 2007, BS Publications.
6. Introduction to Environmental Science by Y. Anjaneyulu, BS. Publications.

*MC309: GENDER SENSITIZATION LAB

B.Tech. II Year I Sem.   L T P C
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COURSE DESCRIPTION

This course offers an introduction to Gender Studies, an interdisciplinary field that asks critical questions about the meanings of sex and gender in society. The primary goal of this course is to familiarize students with key issues, questions and debates in Gender Studies, both historical and contemporary. It draws on multiple disciplines — such as literature, history, economics, psychology, sociology, philosophy, political science, anthropology and media studies — to examine cultural assumptions about sex, gender, and sexuality.

This course integrates analysis of current events through student presentations, aiming to increase awareness of contemporary and historical experiences of women, and of the multiple ways that sex and gender interact with race, class, caste, nationality and other social identities. This course also seeks to build an understanding and initiate and strengthen programmes combating gender-based violence and discrimination. The course also features several exercises and reflective activities designed to examine the concepts of gender, gender-based violence, sexuality, and rights. It will further explore the impact of gender-based violence on education, health and development.

Objectives of the Course

- To develop students' sensibility with regard to issues of gender in contemporary India.
- To provide a critical perspective on the socialization of men and women.
- To introduce students to information about some key biological aspects of genders.
- To expose the students to debates on the politics and economics of work.
- To help students reflect critically on gender violence.
- To expose students to more egalitarian interactions between men and women.

Learning Outcomes

- Students will have developed a better understanding of important issues related to gender in contemporary India.
- Students will be sensitized to basic dimensions of the biological, sociological, psychological and legal aspects of gender. This will be achieved through discussion of materials derived from research, facts, everyday life, literature and film.
- Students will attain a finer grasp of how gender discrimination works in our society and how to counter it.
- Students will acquire insight into the gendered division of labor and its relation to politics and economics.
- Men and women students and professionals will be better equipped to work and live together as equals.
- Students will develop a sense of appreciation of women in all walks of life.
- Through providing accounts of studies and movements as well as the new laws that provide protection and relief to women, the textbook will empower students to understand and respond to gender violence.

Unit-I: UNDERSTANDING GENDER

Introduction: Definition of Gender-Basic Gender Concepts and Terminology-Exploring Attitudestowards Gender-Construction of Gender-Socialization: Making Women, Making Men
- Preparing for Womanhood. Growing up Male. First lessons in Caste.

Unit – II: GENDER ROLES AND RELATIONS

Two or Many? -Struggles with Discrimination-Gender Roles and Relations-Types of Gender Roles-Gender Roles and Relationships Matrix-Missing Women-Sex Selection and Its Consequences-Declining Sex Ratio. Demographic Consequences-Gender Spectrum: Beyond the Binary

Unit – III: GENDER AND LABOUR
Division and Valuation of Labour-Housework: The Invisible Labor- "My Mother doesn't Work." "Share the Load."-Work: Its Politics and Economics -Fact and Fiction. Unrecognized and Unaccounted work.
-Gender Development Issues-Gender, Governance and Sustainable Development-Gender and Human Rights-Gender and Mainstreaming

Unit – IV: GENDER - BASED VIOLENCE
The Concept of Violence- Types of Gender-based Violence-Gender-based Violence from a Human Rights Perspective-Sexual Harassment: Say No!-Sexual Harassment, not Eve-teasing- Coping with Everyday Harassment- Further Reading: "*Chupulu*".
Domestic Violence: Speaking OutIs Home a Safe Place? -When Women Unite [Film]. Rebuilding Lives.Thinking about Sexual Violence Blaming the Victim-"I Fought for my Life…."

Unit – V: GENDER AND CULTURE
Gender and Film-Gender and Electronic Media-Gender and Advertisement-Gender and Popular Literature- Gender Development Issues-Gender Issues-Gender Sensitive Language-Gender andPopular Literature - Just Relationships: Being Together as Equals
Mary Kom and Onler. Love and Acid just do not Mix. Love Letters. Mothers and Fathers. Rosa Parks-The Brave Heart.

Note: **Since it is Interdisciplinary Course, Resource Persons can be drawn from the fields of English Literature or Sociology or Political Science or any other qualified faculty who has expertise in this field from engineering departments.**

> ➤ *Classes will consist of a combination of activities: dialogue-based lectures, discussions, collaborative learning activities, group work and in-class assignments. Apart from the above prescribed book, Teachers can make use of any authentic materials related to the topics given in the syllabus on "Gender".*

> ☐ **ESSENTIAL READING**: The Textbook, "*Towards a World of Equals: A Bilingual Textbook on Gender*" written by A.Suneetha, Uma Bhrugubanda, DuggiralaVasanta, Rama Melkote, Vasudha Nagaraj, Asma Rasheed, Gogu Shyamala, Deepa Sreenivas and Susie Tharu **published by Telugu Akademi, Telangana Government in 2015.**

ASSESSMENT AND GRADING:
- Discussion & Classroom Participation: 20%
- Project/Assignment: 30%
- End Term Exam: 50%

B.Tech. II Year II Sem.

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Course Objectives: Students will be able to:

- Understand the premises informing the twin themes of liberty and freedom from a civil rights perspective.
- To address the growth of Indian opinion regarding modern Indian intellectuals' constitutional role and entitlement to civil and economic rights as well as the emergence of nationhood in the early years of Indian nationalism.
- To address the role of socialism in India after the commencement of the Bolshevik Revolutionin 1917 and its impact on the initial drafting of the Indian Constitution.

Course Outcomes: Students will be able to:

- Discuss the growth of the demand for civil rights in India for the bulk of Indians before the arrival of Gandhi in Indian politics.
- Discuss the intellectual origins of the framework of argument that informed the conceptualization of social reforms leading to revolution in India.
- Discuss the circumstances surrounding the foundation of the Congress Socialist Party [CSP] under the leadership of Jawaharlal Nehru and the eventual failure of the proposal of direct elections through adult suffrage in the Indian Constitution
- Discuss the passage of the Hindu Code Bill of 1956.

Unit - 1 History of Making of the Indian Constitution- History of Drafting Committee.

Unit - 2 Philosophy of the Indian Constitution- Preamble Salient Features

Unit - 3 Contours of Constitutional Rights & Duties - Fundamental Rights

- Right to Equality
- Right to Freedom
- Right against Exploitation
- Right to Freedom of Religion
- Cultural and Educational Rights
- Right to Constitutional Remedies
- Directive Principles of State Policy
- Fundamental Duties.

Unit - 4 Organs of Governance: Parliament, Composition, Qualifications and Disqualifications, Powers and Functions, Executive, President, Governor, Council of Ministers, Judiciary, Appointment and Transfer of Judges, Qualifications, Powers and Functions

Unit - 5 Local Administration: District's Administration head: Role and Importance, Municipalities: Introduction, Mayor and role of Elected Representative, CEO of Municipal Corporation. Panchayat raj: Introduction, PRI: Zila Panchayat. Elected officials and their roles, CEO ZilaPanchayat: Position and role. Block level: Organizational Hierarchy (Different departments), Village level: Role of Elected and Appointed officials, Importance of grass root democracy

Unit - 6 Election Commission: Election Commission: Role and Functioning. Chief Election Commissioner and Election Commissioners. State Election Commission: Role and Functioning. Institute and Bodies for the welfare of SC/ST/OBC and women.

Suggested Reading:

1. The Constitution of India, 1950 (Bare Act), Government Publication.
2. Dr. S. N. Busi, Dr. B. R. Ambedkar framing of Indian Constitution, 1st Edition, 2015.
3. M. P. Jain, Indian Constitution Law, 7th Edn., Lexis Nexis, 2014.
4. D. D. Basu, Introduction to the Constitution of India, Lexis Nexis, 2015.

RESEARCH METHODOLOGY & IPR

M.Tech CSE/CS I Year I Sem.

L T P C
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Prerequisite: None

Course Objectives:
1. To understand the research problem
2. To know the literature studies, plagiarism and ethics
3. To get the knowledge about technical writing
4. To analyze the nature of intellectual property rights and new developments
5. To know the patent rights

Course Outcomes: At the end of this course, students will be able to
1. Understand research problem formulation.
2. Analyze research related information
3. Follow research ethics
4. Understand that today's world is controlled by Computer, Information Technology, but tomorrow world will be ruled by ideas, concept, and creativity.
5. Understanding that when IPR would take such important place in growth of individuals & nation, it is needless to emphasis the need of information about Intellectual Property Right to be promoted among students in general & engineering in particular.
6. Understand that IPR protection provides an incentive to inventors for further research work and investment in R & D, which leads to creation of new and better products, and in turn brings about, economic growth and social benefits.

UNIT - I:
Meaning of research problem, Sources of research problem, Criteria Characteristics of a good research problem, Errors in selecting a research problem, Scope and objectives of research problem.
Approaches of investigation of solutions for research problem, data collection, analysis, interpretation, Necessary instrumentations.

UNIT - II:
Effective literature studies approaches, analysis, Plagiarism, Research ethics

UNIT - III:
Effective technical writing, how to write report, Paper Developing a Research Proposal, Format of research proposal, a presentation and assessment by a review committee

UNIT - IV:
Nature of Intellectual Property: Patents, Designs, Trade and Copyright. Process of Patenting and Development: technological research, innovation, patenting, development. International Scenario: International cooperation on Intellectual Property. Procedure for grants of patents, Patenting under PCT.

UNIT - V:
Patent Rights: Scope of Patent Rights. Licensing and transfer of technology. Patent information and databases. Geographical Indications. New Developments in IPR: Administration of Patent System. New developments in IPR; IPR of Biological Systems, Computer Software etc. Traditional knowledge Case Studies, IPR and IITs.

TEXT BOOKS:

1. Stuart Melville and Wayne Goddard, "Research methodology: an introduction for science & engineering students"
2. C.R. Kothari, Research Methodology, methods & techniques, 2nd edition, New age International publishers

REFERENCES:

1. Ranjit Kumar, 2nd Edition, "Research Methodology: A Step by Step Guide for beginners"
2. Halbert, "Resisting Intellectual Property", Taylor & Francis Ltd ,2007.
3. Mayall, "Industrial Design", McGraw Hill, 1992.
4. Niebel, "Product Design", McGraw Hill, 1974.
5. Asimov, "Introduction to Design", Prentice Hall, 1962.
6. Robert P. Merges, Peter S. Menell, Mark A. Lemley, "Intellectual Property in New Technological Age", 2016.
7. T. Ramappa, "Intellectual Property Rights Under WTO", S. Chand, 2008

IPR (Open Elective)

M.Tech CNIS/CN/CYS II Year I Sem.   L T P C
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Course Objectives:
1. To explain the art of interpretation and documentation of research work
2. To explain various forms of intellectual property rights
3. To discuss leading International regulations regarding Intellectual Property Rights

Course Outcomes: Upon the Successful Completion of the Course, the Students would be able to:
1. Understand types of Intellectual Property
2. Analyze trademarks and its functionality
3. Illustrate law of copy rights and law of patents

UNIT- I
Introduction to Intellectual property: Introduction, types of intellectual property, international organizations, agencies and treaties, importance of intellectual property rights.

UNIT - II
Trade Marks: Purpose and function of trademarks, acquisition of trade mark rights, protectable matter, selecting, and evaluating trade mark, trade mark registration processes.

UNIT - III
Law of copy rights: Fundamental of copy right law, originality of material, rights of reproduction, rights to perform the work publicly, copy right ownership issues, copy right registration, notice of copy right, international copy right law.
Law of patents: Foundation of patent law, patent searching process, ownership rights and transfer

UNIT - IV
Trade Secrets: Trade secret law, determination of trade secrete status, liability for misappropriations of trade secrets, protection for submission, trade secrete litigation.
Unfair competition: Misappropriation right of publicity, false advertising.

UNIT - V
New development of intellectual property: new developments in trade mark law; copy right law, patent law, intellectual property audits.
International overview on intellectual property, international – trade mark law, copy right law, international patent law, and international development in trade secrets law.

TEXT BOOKS & REFERENCES:
1. Intellectual property right, Deborah. E. Bouchoux, Cengage learning.
2. Intellectual property right – Unleashing the knowledge economy, prabuddha ganguli, Tata McGraw Hill Publishing company ltd.

POST EVENT REPORT

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

A Brief Report on "Gender Sensitization" guest lecture.

1.Name of the Event: Gender Sensitization

2. Organized By : Dept. of CSE,DRVRKWCET

3. Event Date : 11-08-2022

4. Resource Person :Prof. Dr. Afroz Meher, SCET

5. Convener and Organizing head : Ms.Mubeena Anjum ,

Asst. Professor, **CSE Department.**

6. Brief description about the event:

The objective of the activity is to enhance appreciation on gender and development, and women economic empowerment, to heighten awareness on gender issues and concerns and to enable the local environment to promote women economic empowerment.

7. Report:

The event started at 10:30 AM (11/08/2022) with welcome address by Mr.DVGS Prasad, Asst. Professor, CSE Department followed by resource

person profile.

Feedback: All the Students who participated in the guest lecture learnt lot of Things about Gender Sensitization

8. The Work shop ended with Vote of **Thanks by Ms.Mubeena Anjum**, Asst.Prof, CSE department to the Resource Person.

The guest lecture has proven to be very useful and informative for the students

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Affiliated to Jawaharlal Nehru Technological University Hyderabad
Aziznagar (V), Moinabad (M), R.R. Dist. 500 075 - T.S.
Contact No. 7893044962 / 08413235962
Website : www.drvrkwomenscollege.com

The following students presented for the event

DR VRK WOMEN'S COLLEGE OF ENGINEERING AND TECHNOLOGY
2022-23 - III YEAR B.TECH. CSE STUDENTS LIST

S. NO	HALLTICKET NUMBER	NAME OF THE STUDENT
1	20H81A0501	ANKARLA VAISHNAVI
2	20H81A0502	AYESHA NOUREEN
3	20H81A0504	BUSHRA FATIMA FAROOQUI
4	20H81A0505	DAHALE SARASWATHI
5	20H81A0506	FAIZA FATIMA
6	20H81A0507	FARIHA FATIMA
7	20H81A0508	GATTU LAHARI
8	20H81A0509	MASARATH JAHAN
9	20H81A0510	MEDDHULA HARINI
10	20H81A0511	NABEELA MEHRUSH
11	20H81A0512	NAMBURI GREESHMITHA
12	20H81A0513	NARAM LAVANYA
13	20H81A0514	PEYYALA SRIVALLI
14	20H81A0515	RIFFAT
15	20H81A0516	SAARIYA MAHRUSH
16	20H81A0519	SHEIKH SANIYA
17	20H81A0521	UNAISAH ZAFAR KHAN
18	21H85A0501	KODAKANDLA AKSHAYA

CONVENER

PRINCIPAL

PRINCIPAL
Dr. VRK Womens College of Engg. & Tech.
Aziz Nagar, Moinabad, R.R. Dist.

DR. V.R.K WOMEN'S COLLEGE OF ENGINEERING AND TECHNOLOGY

Approved by AICTE & Premitted by Government of Telangana State
Affiliated to Jawaharlal Nehru Technological University Hyderabad
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POST EVENT REPORT

Department of ELCTRONICS AND COMMUNICATION ENGINEERING

A Brief Report on "HUMAN VALUES AND PROFESSIONAL ETHICS" guest lecture.

Name of the Event   : HUMAL VALUES AND PROFESSIONAL ETHICS
Organized By   : Dept. Of ECE, DRVRKWCET
Event Date   : 22/09/2022
Resource Person   : Dr. Dr.M.Subbaraj, Professor,

                                       Dept of Mechanical Engineering SCET

Convener and Organizing head: Ms. Shaheena kamrani,

                                       Assoc. Professor, ECE Department.

Brief description about the event:

Higher education is leadership education. The values and virtues practiced in universities heavily influence the future leaders. Many institutions of higher education simultaneously show excellence in academic subjects, are green campuses with manifold ethics curricula, are active members in community engagement, and also are adept in providing value orientation to all stakeholders. It is universally felt that the status of teaching profession requires to be raised to ensure its dignity and integrity. Accordingly, it is considered necessary that there should be a code of ethics which may be evolved by the teaching community itself for its guidance. There are five major areas of professional activities which encompass the work of a teacher. For each of these areas certain principles have been identified to serve as guidelines for teacher's conduct.

Report:

The event started at 10:00 AM (22/09/2022) with welcome address by Dr.C senthil singh, Professor, ECE Department followed by resource person profile. explained about the importance of this guest lecture and given brief overview.

Feedback: All the Students who participated in the seminar learnt lot of things about human values and professional ethics and able to know some positives of both genders in the society

The guest lecture ended with Vote of Thanks by Dr.C. Senthil singh, Professor, ECE Department to the resource Person. The guest lecture has proven to be very useful and informative for the students.

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The following students presented for the event

DR VRK WOMEN'S COLLEGE OF ENGINEERING AND TECHNOLOGY
2022-2023 - III YEAR B.TECH. ECE STUDENTS LIST

S. NO	HALLTICKET NUMBER	NAME OF THE STUDENT
1	20H81A0402	BUSHRA YASEEN
2	20H81A0404	KONTALA ALEKYA
3	20H81A0406	MARIYA HABEEB
4	20H81A0408	NIDA RAHMATH
5	20H81A0409	NUNE SHIVANI
6	20H81A0412	SRIRAM BHAVANA
7	20H81A0413	TABASSUM FATIMA
8	20H81A0414	TABASUM BEGUM

CONVENER

PRINCIPAL

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