JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India
DEPARTMENT OF CIVIL ENGINEERING

COURSE STRUCTURE

For UG – R20

B. TECH - CIVIL ENGINEERING

(Applicable for batches admitted from 2020-2021)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

KAKINADA - 533 003, Andhra Pradesh, India

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India
DEPARTMENT OF CIVIL ENGINEERING

COURSE STRUCTURE

I Year – I SEMESTER

S. No	Course Code	Subjects	L	T	P	Credits
1	BSC1101	Mathematics – I (Calculus & Differential Equations)	3	0	0	3
2	HSMC1101	Communicative English	3	0	0	3
3	BSC1102	Engineering Physics	3	0	0	3
4	ESC1101	Engineering Drawing	1	0	4	3
5	ESC1102	Engineering Geology (Integrated) (Theory & Lab)	2	0	2	3
6	HSMC1102	English Communication Skills Laboratory	0	0	3	1.5
7	BSC1103	Engineering Physics Lab	0	0	3	1.5
8	ESC1103	Basics of Civil Engg. Work Shop (Lab)	0	0	3	1.5
Total Credits			**19.5**			

I Year – II SEMESTER

S. No	Course Code	Subjects	L	T	P	Credits
1	BSC1201	Mathematics – II (Linear Algebra & Numerical Methods)	3	0	0	3
2	BSC1202	Engineering Chemistry	3	0	0	3
3	ESC1201	Engineering Mechanics	3	0	0	3
4	ESC1202	Programming for Problem Solving Using C	3	0	0	3
5	ESC1203	Building Materials and Concrete Technology	3	0	0	3
6	BSC1203	Engineering Chemistry Lab	0	0	3	1.5
7	ESC1204	Programming for problem Solving Using C Lab	0	0	3	1.5
8	ESC1205	Building Planning and Computer Aided Building Drawing	0	0	3	1.5
9	MC1201	Environmental Science	2	0	0	0
Total Credits			**19.5**			

***Breakup of credits for Engineering Graphics/Engineering Workshop shall be 1-0-4 (as per AICTE model curriculum)**
Universities/Institutions may swap a few courses between 1st and 2nd semesters to balance the workload of teaching and laboratory schedule.

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DEPARTMENT OF CIVIL ENGINEERING

II Year – I SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1	BSC301	Mathematics -III (Vector Calculus, Transforms and PDE)	3	0	0	3
2	PCC301	Strength of Materials - I	3	0	0	3
3	PCC302	Fluid Mechanics	3	0	0	3
4	PCC302	Surveying and Geometrics	3	0	0	3
5	PCC303	Highway Engineering	3	0	0	3
6	PCC304	Concrete Technology Lab	0	0	3	1.5
7	PCC305	Highway Engineering Lab	0	0	3	1.5
8	PCC306	Surveying Field Work – I (Lab)	0	0	3	1.5
9	SC301	**Skill oriented course***	1	0	2	2
10	MC301	Constitution of India	2	0	0	0
		Total Credits				**21.5**

II YEAR – II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	PC401	Complex Variables and Statistical Methods	3	0	0	3
2	PC402	Strength of Materials -II	3	0	0	3
3	ES401	Hydraulics and Hydraulic Machinery	3	0	0	3
4	PC403	Environmental Engineering	3	0	0	3
5	PC404	Managerial Economics & Financial Analysis	3	0	0	3
6	PC405	Environmental Engineering Lab	0	0	3	1.5
7	PC406	Strength of Material Lab	0	0	3	1.5
8	PC407	Fluid Mechanics & Hydraulics Machinery Lab	0	0	3	1.5
9	SC401	**Skill oriented course***	1	0	2	2
10	PR401	Industrial/Research Internship (Mandatory) 2 Months… to be evaluated in III year I semester				
		Total Credits				**21.5**
Honors/ Minor courses (The hours distribution can be 3-0-2 or 3-1-0 also)			3	1	0	4

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I Year - I Semester		L	T	P	C
		2	0	0	0
ENVIRONMENTAL SCIENCE (MC1101)					

Course Objectives:
The objectives of the course are to impart:

- Overall understanding of the natural resources.
- Basic understanding of the ecosystem and its diversity.
- Acquaintance on various environmental challenges induced due to unplanned anthropogenic activities.
- An understanding of the environmental impact of developmental activities.
- Awareness on the social issues, environmental legislation and global treaties.

UNIT I
Multidisciplinary nature of Environmental Studies: Definition, Scope and Importance – Sustainability: Stockholm and Rio Summit–Global Environmental Challenges: Global warming and climate change, acid rains, ozone layer depletion, population growth and explosion, effects. Role of information technology in environment and human health.
Ecosystems: Concept of an ecosystem. - Structure and function of an ecosystem; Producers, consumers and decomposers. - Energy flow in the ecosystem - Ecological succession. - Food chains, food webs and ecological pyramids; Introduction, types, characteristic features, structure and function of Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems.

UNIT II
Natural Resources: Natural resources and associated problems.
Forest resources: Use and over – exploitation, deforestation – Timber extraction – Mining, dams and other effects on forest and tribal people.
Water resources: Use and over utilization of surface and ground water – Floods, drought, conflicts over water, dams – benefits and problems.
Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.
Food resources: World food problems, changes caused by non-agriculture activities-effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity.
Energy resources: Growing energy needs, renewable and non-renewable energy sources use of alternate energy sources.
Land resources: Land as a resource, land degradation, Wasteland reclamation, man induced landslides, soil erosion and desertification; Role of an individual in conservation of natural resources; Equitable use of resources for sustainable lifestyles.

UNIT III
Biodiversity and its conservation: Definition: genetic, species and ecosystem diversity-classification - Value of biodiversity: consumptive use, productive use, social-Biodiversity at national and local levels. India as a mega-diversity nation - Hot-sports of biodiversity - Threats to biodiversity: habitat loss, man-wildlife conflicts. - Endangered and endemic species of India – Conservation of biodiversity: conservation of biodiversity.

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UNIT IV

Environmental Pollution: Definition, Cause, effects and control measures of Air pollution, Water pollution, Soil pollution, Noise pollution, Nuclear hazards. Role of an individual in prevention of pollution. - Pollution case studies, Sustainable Life Studies. Impact of Fire Crackers on Men and his well being.

Solid Waste Management: Sources, Classification, effects and control measures of urban and industrial solid wastes. Consumerism and waste products, Biomedical, Hazardous and e – waste management.

UNIT V

Social Issues and the Environment: Urban problems related to energy -Water conservation, rain water harvesting-Resettlement and rehabilitation of people; its problems and concerns. Environmental ethics: Issues and possible solutions. Environmental Protection Act -Air (Prevention and Control of Pollution) Act. –Water (Prevention and control of Pollution) Act - Wildlife Protection Act -Forest Conservation Act-Issues involved in enforcement of environmental legislation. -Public awareness.

Environmental Management: Impact Assessment and its significance various stages of EIA, preparation of EMP and EIS, Environmental audit. Ecotourism, Green Campus – Green business and Green politics.

The student should Visit an Industry / Ecosystem and submit a report individually on any issues related to Environmental Studies course and make a power point presentation.

Text Books:

1) Environmental Studies, K. V. S. G. Murali Krishna, VGS Publishers, Vijayawada
2) Environmental Studies, R. Rajagopalan, 2nd Edition, 2011, Oxford University Press.
3) Environmental Studies, P. N. Palanisamy, P. Manikandan, A. Geetha, and K. Manjula Rani; Pearson Education, Chennai

Reference Books:

1) Text Book of Environmental Studies, Deeshita Dave & P. UdayaBhaskar, 3rded, Cengage Learning.
2) A Textbook of Environmental Studies, ShaashiChawla, TMH, New Delhi
3) Environmental Studies, Benny Joseph, Tata McGraw Hill Co, New Delhi
4) Perspectives in Environment Studies, AnubhaKaushik, C P Kaushik, New Age International Publishers, 2014

e-learning resources:

- http://nptel.ac.in/courses.php
- http://jntuk-coeerd.in/

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I Year - II Semester		L	T	P	C
		2	0	0	0
CONSTITUTION OF INDIA (MC1201)					

Course Objectives:

- To Enable the student to understand the importance of constitution
- To understand the structure of executive, legislature and judiciary
- To understand philosophy of fundamental rights and duties
- To understand the autonomous nature of constitutional bodies like Supreme Court and high court controller and auditor general of India and election commission of India.
- To understand the central and state relation financial and administrative

Course Outcomes:

At the end of the course, the student will be able to have a clear knowledge on the following:

- Understand historical background of the constitution making and its importance for building a democratic India.
- Understand the functioning of three wings of the government ie., executive, legislative and judiciary.
- Understand the value of the fundamental rights and duties for becoming good citizen of India.
- Analyze the decentralization of power between central, state and local self-government.
- Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.
    1. Know the sources, features and principles of Indian Constitution.
    2. Learn about Union Government, State government and its administration.
    3. Get acquainted with Local administration and Pachayati Raj.
    4. Be aware of basic concepts and developments of Human Rights.
    5. Gain knowledge on roles and functioning of Election Commission

UNIT I

Introduction to Indian Constitution: Constitution meaning of the term, Indian Constitution - Sources and constitutional history, Features - Citizenship, Preamble, Fundamental Rights and Duties, Directive Principles of State Policy.

Learning outcomes:After completion of this unit student will

- Understand the concept of Indian constitution
- Apply the knowledge on directive principle of state policy
- Analyze the History, features of Indian constitution
- Evaluate Preamble Fundamental Rights and Duties

UNIT II

Union Government and its Administration Structure of the Indian Union: Federalism, Centre-State relationship, President: Role, power and position, PM and Council of ministers, Cabinet and Central Secretariat, LokSabha, RajyaSabha, The Supreme Court and High Court: Powers and Functions;

Learning outcomes: After completion of this unit student will

- Understand the structure of Indian government
- Differentiate between the state and central government
- Explain the role of President and Prime Minister
- Know the Structure of supreme court and High court

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UNIT III

State Government and its Administration Governor, Role and Position, CM and Council of ministers, State Secretariat: Organisation, Structure and Functions

Learning outcomes: After completion of this unit student will

- Understand the structure of state government
- Analyze the role Governor, state Secretariat and Chief Minister
- Differentiate between structure and functions of state secretariat

UNIT IV

A.Local Administration, District's Administration Head, Role and Importance, Municipalities, Mayor and role of Elected Representative, CEO of Municipal Corporation PachayatiRaj: Functions PRI: ZilaPanchayat, Elected officials and their roles, CEO ZilaPanchayat: Block level Organizational Hierarchy(Different departments), Village level, Role of Elected and Appointed officials, Importance of grass root democracy

Learning outcomes:-After completion of this unit student will

- Understand the local Administration
- Compare and contrast district administration role and importance
- Analyze the role of Myer and elected representatives of Municipalities
- Evaluate Zillapanchayat block level organisation

UNIT V

Election Commission: Election Commission, Role of Chief Election Commissioner and Election Commissionerate State Election Commission:, Functions of Commissions for the welfare of SC/ST/OBC and women

Learning outcomes: After completion of this unit student will

- Know the role of Election Commission apply knowledge
- Contrast and compare the role of Chief Election commissioner and Commissiononerate
- Analyze role of state election commission
- Evaluate various commissions of viz SC/ST/OBC and women

References:

1) Durga Das Basu, Introduction to the Constitution of India, Prentice Hall of India Pvt. Ltd.
2) SubashKashyap, Indian Constitution, National Book Trust
3) J.A. Siwach, Dynamics of Indian Government & Politics
4) D.C. Gupta, Indian Government and Politics
5) H.M.Sreevai, Constitutional Law of India, 4th edition in 3 volumes (Universal Law Publication)
6) J.C. Johari, Indian Government andPolitics Hans
7) J. Raj IndianGovernment and Politics
8) M.V. Pylee, Indian Constitution Durga Das Basu, Human Rights in Constitutional Law, Prentice – Hall of India Pvt. Ltd.. New Delhi
9) Noorani, A.G., (South Asia Human Rights Documentation Centre), Challenges to Civil Rights Guarantees in India, Oxford University Press 2012

esources:

1) nptel.ac.in/courses/109104074/8
2) nptel.ac.in/courses/109104045/
3) nptel.ac.in/courses/101104065/
4) www.hss.iitb.ac.in/en/lecture-details
5) www.iitb.ac.in/en/event/2nd-lecture-institute-lecture-series-indian-constitution

SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Science and Humanities** **Accredited by NAAC with "A" Grade** **CLASS TIME TABLE**	**SRKIT / S&H / 10.1**

Academic Year: 2021-22 **Class: CE** **Semester: II** **w.e.f: 18-04-2022**

Section I

Time	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00-2:55	2:55-3:50	5 Min	03:55-04:50
Period	1	2	3	BREAK	4	5	LUNCH	6	7	BREAK	8
MON	PPSC	EC	ES		BMCT	EM		M-II			SPORTS
TUE	BMCT	EM	M-II		EC	PPSC		-------EC LAB--			**EC**
WED	------BPCABD LAB-----				EM			M-II	EC		PPSC
THU	PPSC	M-II	SS		ES	BMCT		EC	M-II		BMCT
FRI	BMCT	----PPSC LAB-			**PPSC**	COU		M-II	EC		EM
SAT	PPSC	EM	YOGA / M-II		EC			PPSC	BMCT		SS

S.No.	Name of the Subject	Name of the Faculty
1	Mathematics-II (R201201)	Mr.K.Basava Raju
2	Engineering Chemistry (R201202)	Dr.T.V.Nagalakshmi / Dr. B.Sowjanya
3	Engineering Mechanics (R201203)	Ms.P.Bhagya Lakshmi
4	Building Materials and Concrete Technology (R201205)	Mr.K.Anoop Kumar
5	Programming for Problem Solving Using C (R201204)	Mr.Ch.Satyanarayana
6	Environmental Science (R201228)	Ms.G.L.Sarvani
7	Engineering Chemistry Laboratory (R201231)	Dr.T.V.Nagalakshmi / Dr.B.Sowjanya
8	Programming for problem Solving Using C Laboratory(R201232)	Mr.Ch.Satyanarayana
9	Building Planning and Computer Aided Building Drawing(R201252)	Ms.E.Usha Sri
10	Soft Skills	Ms.N.Gayathri
11	Yoga	Mr.Yellamanda Vusa

HoD 18/4/22

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Principal

SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Civil Engineering** **CLASS TIME TABLE**	**SRKIT / CE / 10.1**

Academic Year: 2021-22 **Class:II** **Semester:I** **W.E.F:01-10-2021**

Section I

Time	9:00 to 9:50	9:50 to 10:40	10:45 to 11:35	11: 35 to 12:25		1:10 to 2:00	2:00 to 2:45	2:50 to 3:35	3:35 to 4:20
Period	1	2	3	4		5	6	7	8
MON	SUR	M-III	SM-I	FM (T)	LUNCH	COI	--------HE LAB/CT LAB------		
TUE	HE	SUR	M-III	SUR		SM-I(T)	--------HE LAB/SUR LAB------		
WED	FM	HE	M-III	SUR		HE (T)	------Skill Oriented course----		
THU	M-III	SUR (T)	HE	SM-I		FM	--------CT LAB/SUR LAB------		
FRI	SM-I	FM	HE	M-III		COI	M-III (T)	SM-I	FM
SAT	HE	SM-I	M-III	FM		SM-I	FM	SUR	******

Name of the Subject		Name of the Faculty
Mathematics III	----------	Mr.K.Basava Raju
Strength of Materials-I	----------	Mrs.G.Sahithi
Fluid mechanics	----------	Mrs.E.Ushasree
Surveying and Geometrics	----------	Mr.A.Anoop Kumar
Highway Engineering	----------	Mr.K.Kiran
Surveying Field Work-I	----------	Mr.A.Anoop Kumar
Concrete Technology Lab	----------	Mrs.G.Anuradha&Mrs.A.Thanusree
Highway Engineering Lab	----------	Mr.K.Kiran
Constitution of India	----------	Mrs.N.Gayatri
Skill Oriented course	----------	Mr.M.Karthik kumar

HOD/Date 1/10/21

IQAC Coordinator/Date 1/10/21

PRINCIPAL/Date 1/10/21

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

COURSE STRUCTURE AND SYLLABUS

For

B. TECH ELECTRICAL AND ELECTRONICS ENGINEERING

(Applicable for batches admitted from 2020-2021)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

KAKINADA - 533 003, Andhra Pradesh, India

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KAKINADA – 533 003, Andhra Pradesh, India
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

I B. Tech I SEMESTER

Sl. No	Course Components	Subjects	L	T	P	Credits
1	HSMC	Communicative English	3	0	0	3
2	BSC	Mathematics-I (Calculus and Differential Equations)	3	0	0	3
3	BSC	Mathematics-II (Linear Algebra and Numerical Methods)	3	0	0	3
4	ESC	Programming for Problem Solving Using C	3	0	0	3
5	ESC	Engineering Drawing & Design	1	0	4	3
6	HSMC	English Communication Skills Laboratory	0	0	3	1.5
7	BSC	Electrical Engineering Workshop	0	1	3	1.5
8	ESC	Programming for Problem Solving Using C Lab	0	0	3	1.5
		Total Credits				**19.5**

I B. Tech II SEMESTER

Sl. No	Course Components	Subjects	L	T	P	Credits
1	BSC	Mathematics-III (Vector Calculus, Transforms and PDE)	3	0	0	3
2	BSC	Applied Physics	3	0	0	3
3	ESC	Data Structures Through C	3	0	0	3
4	ESC	Electrical Circuit Analysis -I	3	0	0	3
5	ESC	Basic Civil and Mechanical Engineering	3	0	0	3
6	BSC	Applied Physics Lab	0	0	3	1.5
7	ESC	Basic Civil and Mechanical Engineering Lab	0	0	3	1.5
8	ESC	Data Structures through C Lab	0	0	3	1.5
9	Mandatory Course	Constitution of India	2	0	0	0
		Total Credits				**19.5**

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

II B. Tech I Semester

Sl. No	Course Components	Subjects	L	T	P	Credits
1	BSC	Mathematics – IV	3	0	0	3
2	PCC	Electronic Devices and Circuits	3	0	0	3
3	PCC	Electrical Circuit Analysis –II	3	0	0	3
4	PCC	DC Machines and Transformers	3	0	0	3
5	PCC	Electro Magnetic Fields	3	0	0	3
6	PCC	Electrical Circuits Lab	0	0	3	1.5
7	PCC	DC Machines and Transformers Lab	0	0	3	1.5
8	PCC	Electronic Devices and Circuits lab	0	0	3	1.5
9	SC	Skill oriented course- Design of Electrical Circuits using Engineering Software Tools	0	0	4	2
10	MC	Professional Ethics & Human Values	2	0	0	0
		Total Credits				**21.5**

II B. Tech II Semester

Sl. No	Course Components	Subjects	L	T	P	Credits
1	ESC	Python Programming	3	0	0	3
2	PCC	Digital Electronics	3	0	0	3
3	PCC	Power System-I	3	0	0	3
4	PCC	Induction and Synchronous Machines	3	0	0	3
5	HSMC	Managerial Economics & Financial Analysis	3	0	0	3
6	ESC	Python Programming Lab	0	0	3	1.5
7	PCC	Induction and Synchronous Machines Lab	0	0	3	1.5
8	PCC	Digital Electronics Lab	0	0	3	1.5
9	SC	Skill oriented course- IoT Applications of Electrical Engineering	0	0	4	2
		Total Credits				**21.5**
		Minors/ Honors	4	0	0	4

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KAKINADA – 533 003, Andhra Pradesh, India

I Year - II Semester		L	T	P	C
		2	0	0	0
CONSTITUTION OF INDIA (MC1201)					

Course Objectives:

- To Enable the student to understand the importance of constitution
- To understand the structure of executive, legislature and judiciary
- To understand philosophy of fundamental rights and duties
- To understand the autonomous nature of constitutional bodies like Supreme Court and high court controller and auditor general of India and election commission of India.
- To understand the central and state relation financial and administrative

Course Outcomes:

At the end of the course, the student will be able to have a clear knowledge on the following:

- Understand historical background of the constitution making and its importance for building a democratic India.
- Understand the functioning of three wings of the government ie., executive, legislative and judiciary.
- Understand the value of the fundamental rights and duties for becoming good citizen of India.
- Analyze the decentralization of power between central, state and local self-government.
- Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.
    1. Know the sources, features and principles of Indian Constitution.
    2. Learn about Union Government, State government and its administration.
    3. Get acquainted with Local administration and Pachayati Raj.
    4. Be aware of basic concepts and developments of Human Rights.
    5. Gain knowledge on roles and functioning of Election Commission

UNIT I

Introduction to Indian Constitution: Constitution meaning of the term, Indian Constitution - Sources and constitutional history, Features - Citizenship, Preamble, Fundamental Rights and Duties, Directive Principles of State Policy.

Learning outcomes:After completion of this unit student will

- Understand the concept of Indian constitution
- Apply the knowledge on directive principle of state policy
- Analyze the History, features of Indian constitution
- Evaluate Preamble Fundamental Rights and Duties

UNIT II

Union Government and its Administration Structure of the Indian Union: Federalism, Centre-State relationship, President: Role, power and position, PM and Council of ministers, Cabinet and Central Secretariat, LokSabha, RajyaSabha, The Supreme Court and High Court: Powers and Functions;

Learning outcomes: After completion of this unit student will

- Understand the structure of Indian government
- Differentiate between the state and central government
- Explain the role of President and Prime Minister
- Know the Structure of supreme court and High court

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UNIT III

State Government and its Administration Governor, Role and Position, CM and Council of ministers, State Secretariat: Organisation, Structure and Functions

Learning outcomes: After completion of this unit student will

- Understand the structure of state government
- Analyze the role Governor, state Secretariat and Chief Minister
- Differentiate between structure and functions of state secretariat

UNIT IV

A.Local Administration, District's Administration Head, Role and Importance, Municipalities, Mayor and role of Elected Representative, CEO of Municipal Corporation PachayatiRaj: Functions PRI: ZilaPanchayat, Elected officials and their roles, CEO ZilaPanchayat: Block level Organizational Hierarchy(Different departments), Village level, Role of Elected and Appointed officials, Importance of grass root democracy

Learning outcomes:-After completion of this unit student will

- Understand the local Administration
- Compare and contrast district administration role and importance
- Analyze the role of Myer and elected representatives of Municipalities
- Evaluate Zillapanchayat block level organisation

UNIT V

Election Commission: Election Commission, Role of Chief Election Commissioner and Election Commissionerate State Election Commission:, Functions of Commissions for the welfare of SC/ST/OBC and women

Learning outcomes: After completion of this unit student will

- Know the role of Election Commission apply knowledge
- Contrast and compare the role of Chief Election commissioner and Commissiononerate
- Analyze role of state election commission
- Evaluate various commissions of viz SC/ST/OBC and women

References:

1) Durga Das Basu, Introduction to the Constitution of India, Prentice Hall of India Pvt. Ltd.
2) SubashKashyap, Indian Constitution, National Book Trust
3) J.A. Siwach, Dynamics of Indian Government & Politics
4) D.C. Gupta, Indian Government and Politics
5) H.M.Sreevai, Constitutional Law of India, 4th edition in 3 volumes (Universal Law Publication)
6) J.C. Johari, Indian Government andPolitics Hans
7) J. Raj IndianGovernment and Politics
8) M.V. Pylee, Indian Constitution Durga Das Basu, Human Rights in Constitutional Law, Prentice – Hall of India Pvt. Ltd.. New Delhi
9) Noorani, A.G., (South Asia Human Rights Documentation Centre), Challenges to Civil Rights Guarantees in India, Oxford University Press 2012

esources:

1) nptel.ac.in/courses/109104074/8
2) nptel.ac.in/courses/109104045/
3) nptel.ac.in/courses/101104065/
4) www.hss.iitb.ac.in/en/lecture-details
5) www.iitb.ac.in/en/event/2nd-lecture-institute-lecture-series-indian-constitution

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KAKINADA – 533 003, Andhra Pradesh, India
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

II Year I Semester		L	T	P	C
		2	0	0	0
PROFESSIONAL ETHICS & HUMAN VALUES					

Preamble:
This course is a mandatory course introduced to impart the Ethics and Human Values to the students in engineering education.

Course Objectives:

- To create an awareness on Engineering Ethics and Human Values.
- To instill Moral and Social Values and Loyalty
- To appreciate the rights of others
- To create awareness on assessment of safety and risk

UNIT -I

Human Values:

Morals, Values and Ethics-Integrity-Work Ethic-Service learning – Civic Virtue – Respect for others –Living Peacefully –Caring –Sharing –Honesty -Courage-Cooperation– Commitment – Empathy –Self Confidence Character –Spirituality.

Learning outcomes:

1. Learn about morals, values & work ethics.
2. Learn to respect others and develop civic virtue.
3. Develop commitment
4. Learn how to live peacefully

UNIT -II

Engineering Ethics:

Senses of 'Engineering Ethics-Variety of moral issued –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 –Valuing time –Cooperation –Commitment.

Learning outcomes:

1. Learn about the ethical responsibilities of the engineers.
2. Create awareness about the customs and religions.
3. Learn time management
4. Learn about the different professional roles.

UNIT -III

Engineering as Social Experimentation:

Engineering As Social Experimentation –Framing the problem –Determining the facts – Codes of Ethics –Clarifying Concepts –Application issues –Common Ground -General Principles –Utilitarian thinking respect for persons.

Learning outcomes:

1. Demonstrate knowledge to become a social experimenter.
2. Provide depth knowledge on framing of the problem and determining the facts.
3. Provide depth knowledge on codes of ethics.
4. Develop utilitarian thinking

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

UNIT -IV

Engineers Responsibility for Safety and Risk:

Safety and risk –Assessment of safety and risk –Risk benefit analysis and reducing risk-Safety and the Engineer-Designing for the safety-Intellectual Property rights (IPR).

Learning outcomes:

1. Create awareness about safety, risk & risk benefit analysis.
2. Engineer's design practices for providing safety.
3. Provide knowledge on intellectual property rights.

UINIT- V

Global Issues:

Globalization –Cross-culture issues-Environmental Ethics –Computer Ethics –Computers as the instrument of Unethical behavior –Computers as the object of Unethical acts – Autonomous Computers-Computer codes of Ethics –Weapons Development -Ethics and Research –Analyzing Ethical Problems in research.

Learning outcomes:

1. Develop knowledge about global issues.
2. Create awareness on computer and environmental ethics
3. Analyze ethical problems in research.
4. Give a picture on weapons development.

Course outcomes:

Students will be able to:

- Identify and analyze an ethical issue in the subject matter under investigation or in a relevant field
- Identify the multiple ethical interests at stake in a real-world situation or practice
- Articulate what makes a particular course of action ethically defensible
- Assess their own ethical values and the social context of problems
- Identify ethical concerns in research and intellectual contexts, including academic integrity, use and citation of sources, the objective presentation of data, and the treatment of human subjects
- Demonstrate knowledge of ethical values in non-classroom activities, such as service learning, internships, and field work
- Integrate, synthesize, and apply knowledge of ethical dilemmas and resolutions in academic settings, including focused and interdisciplinary research.

Text Books:

1) "Engineering Ethics includes Human Values" by M.Govindarajan, S.Natarajan and, V.S.Senthil Kumar-PHI Learning Pvt. Ltd-2009
2) "Engineering Ethics" by Harris, Pritchard and Rabins, CENGAGE Learning, India Edition, 2009.
3) "Ethics in Engineering" by Mike W. Martin and Roland Schinzinger –Tata McGraw-Hill–2003.
4) "Professional Ethics and Morals" by Prof.A.R.Aryasri, DharanikotaSuyodhana-Maruthi Publications.
5) "Professional Ethics and Human Values" by A.Alavudeen, R.KalilRahman and M. Jayakumaran, Laxmi Publications.
6) "Professional Ethics and Human Values" by Prof.D.R.Kiran-"Indian Culture, Values and Professional Ethics" by PSR Murthy-BS Publication

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SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Science and Humanities** **Accredited by NAAC with "A" Grade** **CLASS TIME TABLE**	**SRKIT / S&H / 10.1**

Academic Year: 2021-22 **Class: EEE** **Semester: II** **w.e.f: 18-04-2022**

Section I

Time	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00-2:55	2:55-3:50	5 Min	03:55-04:50
Period	1	2	3		4	5		6	7		8
MON	DS	ECA-I	BCME		AP	SS		DS	M-III		SPORTS
TUE	BCME	DS	COI		M-III	AP		COU	DS		ECA-I
WED	DS	M-III	DS		ECA-I	AP		M-III	BCME		BCME
THU	BCME	COI	**AP LAB**		**AP LAB**			M-III	YOGA / DS		AP
FRI	ECA-I	M-III	AP		AP	SS		**--BCME LAB--**			**BCME**
SAT	**----DS LAB-----**				ECA-I	BCME		ECA-I	M-III		AP

S.No.	Name of the Subject	Name of the Faculty
1	Mathematics-III (R201206)	Mr.B.V.Rama Krishnarao
2	Applied Physics (R201207)	Dr.J.Ashok
3	Electrical Circuit Analysis-I (R201209)	Mr.K.Satyanarayana
4	Constitution of India (R201229)	Ms.N.Gayathri
5	Data Structure Through C	Ms. Akhila
6	Basic Civil And Mechanical Engineering	Mr.R.Kiran Kumar / Mr. K.Karthik Kumar
7	Applied Physics Laboratory (R201233)	Dr.J.Ashok
8	Basic Civil And Mechanical Engineering Lab(R201232)	Mr.R.Kiran Kumar/Mr.K.Karthik Kumar
9	Data Structure Through C Lab(R201252)	Ms. Akhila
10	Soft Skills	Ms. V.Navatha
11	Yoga	Mr.Yellamanda Vusa

I/c HoD 16/4/22

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Principal

SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Electrical and Electronics Engineering** **CLASS TIME TABLE**	**SRKIT / EEE / 10.1**

Academic Year: 2021-22 **Class: II/IV B.TECH EEE** **Semester: I**

Time Table w.e.f 1/12/21

Time	9:00 to 9:50	9:50 to 10:40	10:45 to 11:35	11: 35 to 12:25		1:10 to 2:00	2:00 to 2:45	2:50 to 3:35	3:35 to 4:20
Period	1	2	3	4		5	6	7	8
MON	DCMT	EMF	ECA-II	EDC		EC LAB			
TUE	M-IV	DCMT	EMF	EDC		PEHV	DCMT	EDC	ECA-II
WED	EMF	ECA-II	PEHV	M-IV		EDC LAB			
THU	M-IV	EMF	ECA-II	M-IV		DCMT	EDC	PEHV	DCMT
FRI	DCMT	EMF	M-IV	LIB		DCM&T LAB			
SAT	DEC LAB					EDC	ECA-II	M-IV	-

LUNCH

Faculty:

Mathematics – IV : Ms. T. Prasanna

Electronic Devices and Circuits : Mr. V. Sekhara Babu

Electrical Circuit Analysis –II : Mr. K. Satyanarayana

DC Machines and Transformers : Mr. K. Narendra Babu

Electro Magnetic Fields : Ms. B. Indraja

Electrical Circuits Lab : Ms. T. Maha Lakshmi / Mr. S. Nageswara Rao

DC Machines and Transformers Lab : Mr. K. Satyanarayana / Mr. K. Narendra Babu

Electronic Devices and Circuits lab : Mr. V. Sekhara Babu / Mr. T. Venkateswara Rao

Design of Electrical Circuits using Engineering Software Tools : Mr. K. Satyanarayana / Ms. B. Indraja

Professional Ethics & Human Values : Mr. V. Srinivas

HOD/Date 1/12/21

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India
DEPARTMENT OF MECHANICAL ENGINEERING

COURSE STRUCTURE

For UG – R20

B. TECH - MECHANICAL ENGINEERING

(Applicable for batches admitted from 2020-2021)

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DEPARTMENT OF MECHANICAL ENGINEERING

COURSE STRUCTURE

I Year – I SEMESTER

Sl. No	Course Code	Subjects	L	T	P	Credits
1	BSC-1	Calculus & Differential Equations (M-I)	3	0	0	3
2	BSC-2	Engineering Physics	3	0	0	3
3	ESC-1	Programming for Problem Solving	3	0	0	3
4	HSC-1	Communicative English	3	0	0	3
5	ESC-2	Engineering Drawing	2	0	2	3
6	BSC-L1	Engineering Physics Lab	0	0	3	1.5
7	ESC-L1	Programming for Problem Solving Using C Laboratory	0	0	3	1.5
8	HSC-L1	English Communication Skills Laboratory	0	0	3	1.5
9	MC -1	Environmental Science	2	0	0	0
Total Credits						**19.5**

I Year – II SEMESTER

Sl.No	Course Code	Subjects	L	T	P	Credits
1	BSC-3	Linear Algebra & Numerical Methods (M-II)	3	0	0	3
2	BSC-4	Engineering Chemistry	3	0	0	3
3	ESC-3	Engineering Mechanics	3	0	0	3
4	ESC-4	Basic Electrical & Electronics Engineering	3	0	0	3
5	ESC-5	Thermodynamics	3	0	0	3
6	ESC-L2	Workshop Practice Lab	0	0	3	1.5
7	BSC-L2	Engineering Chemistry Laboratory	0	0	3	1.5
8	ESC-L3	Basic Electrical & Electronics Engineering Lab	0	0	3	1.5
9	MC-2	Constitution of India	2	0	0	0
Total Credits						**19.5**

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DEPARTMENT OF MECHANICAL ENGINEERING

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	BSC-5	Vector Calculus, Fourier Transforms and PDE(M-III)	3	0	0	3
2	PCC-1	Mechanics of Solids	3	0	0	3
3	PCC-2	Fluid Mechanics & Hydraulic Machines	3	0	0	3
4	PCC-3	Production Technology	3	0	0	3
5	PCC-4	Kinematics of Machinery	3	0	0	3
6	PCC-L1	Computer Aided Engineering Drawing Practice	0	0	3	1.5
7	PCC-L2	Fluid Mechanics & Hydraulic Machines Lab	0	0	3	1.5
8	PCC-L3	Production Technology Lab	0	0	3	1.5
9	SOC-1	Drafting and Modeling Lab	0	0	4	2
10	MC-3	Essence of Indian Traditional Knowledge	2	0	0	0
		Total Credits				**21.5**

II YEAR II SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1	ESC-6	Material Science & Metallurgy	3	0	0	3
2	BSC-6	Complex Variables and Statistical Methods	3	0	0	3
3	PCC-5	Dynamics of Machinery	3	0	0	3
4	PCC-6	Thermal Engineering-I	3	0	0	3
5	HSC-2	Industrial Engineering and Management	3	0	0	3
6	ESC-L4	Mechanics of Solids and Metallurgy Lab	0	0	3	1.5
7	PCC-L6	Machine Drawing Practice	0	0	3	1.5
8	PCC-L7	Theory of Machines Lab	0	0	3	1.5
9	SOC-2	Python Programming Lab	1	0	2	2
		Total Credits				**21.5**
Honors/Minor courses			**4**	**0**	**0**	**4**

* At the end of II Year II Semester, students must complete summer internship spanning between 1 to 2 months (Minimum of 6 weeks), @ Industries/ Higher Learning Institutions/ APSSDC.

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I Year - I Semester		L	T	P	C
		2	0	0	0
ENVIRONMENTAL SCIENCE (MC1101)					

Course Objectives:

The objectives of the course are to impart:

- Overall understanding of the natural resources.
- Basic understanding of the ecosystem and its diversity.
- Acquaintance on various environmental challenges induced due to unplanned anthropogenic activities.
- An understanding of the environmental impact of developmental activities.
- Awareness on the social issues, environmental legislation and global treaties.

UNIT I

Multidisciplinary nature of Environmental Studies: Definition, Scope and Importance – Sustainability: Stockholm and Rio Summit–Global Environmental Challenges: Global warming and climate change, acid rains, ozone layer depletion, population growth and explosion, effects. Role of information technology in environment and human health.

Ecosystems: Concept of an ecosystem. - Structure and function of an ecosystem; Producers, consumers and decomposers. - Energy flow in the ecosystem - Ecological succession. - Food chains, food webs and ecological pyramids; Introduction, types, characteristic features, structure and function of Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems.

UNIT II

Natural Resources: Natural resources and associated problems.

Forest resources: Use and over – exploitation, deforestation – Timber extraction – Mining, dams and other effects on forest and tribal people.

Water resources: Use and over utilization of surface and ground water – Floods, drought, conflicts over water, dams – benefits and problems.

Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.

Food resources: World food problems, changes caused by non-agriculture activities-effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity.

Energy resources: Growing energy needs, renewable and non-renewable energy sources use of alternate energy sources.

Land resources: Land as a resource, land degradation, Wasteland reclamation, man induced landslides, soil erosion and desertification; Role of an individual in conservation of natural resources; Equitable use of resources for sustainable lifestyles.

UNIT III

Biodiversity and its conservation: Definition: genetic, species and ecosystem diversity-classification - Value of biodiversity: consumptive use, productive use, social-Biodiversity at national and local levels. India as a mega-diversity nation - Hot-sports of biodiversity - Threats to biodiversity: habitat loss, man-wildlife conflicts. - Endangered and endemic species of India – Conservation of biodiversity: conservation of biodiversity.

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UNIT IV

Environmental Pollution: Definition, Cause, effects and control measures of Air pollution, Water pollution, Soil pollution, Noise pollution, Nuclear hazards. Role of an individual in prevention of pollution. - Pollution case studies, Sustainable Life Studies. Impact of Fire Crackers on Men and his well being.

Solid Waste Management: Sources, Classification, effects and control measures of urban and industrial solid wastes. Consumerism and waste products, Biomedical, Hazardous and e – waste management.

UNIT V

Social Issues and the Environment: Urban problems related to energy -Water conservation, rain water harvesting-Resettlement and rehabilitation of people; its problems and concerns. Environmental ethics: Issues and possible solutions. Environmental Protection Act -Air (Prevention and Control of Pollution) Act. –Water (Prevention and control of Pollution) Act - Wildlife Protection Act -Forest Conservation Act-Issues involved in enforcement of environmental legislation. -Public awareness.

Environmental Management: Impact Assessment and its significance various stages of EIA, preparation of EMP and EIS, Environmental audit. Ecotourism, Green Campus – Green business and Green politics.

The student should Visit an Industry / Ecosystem and submit a report individually on any issues related to Environmental Studies course and make a power point presentation.

Text Books:

1) Environmental Studies, K. V. S. G. Murali Krishna, VGS Publishers, Vijayawada
2) Environmental Studies, R. Rajagopalan, 2nd Edition, 2011, Oxford University Press.
3) Environmental Studies, P. N. Palanisamy, P. Manikandan, A. Geetha, and K. Manjula Rani; Pearson Education, Chennai

Reference Books:

1) Text Book of Environmental Studies, Deeshita Dave & P. UdayaBhaskar, 3rded, Cengage Learning.
2) A Textbook of Environmental Studies, ShaashiChawla, TMH, New Delhi
3) Environmental Studies, Benny Joseph, Tata McGraw Hill Co, New Delhi
4) Perspectives in Environment Studies, AnubhaKaushik, C P Kaushik, New Age International Publishers, 2014

e-learning resources:

- http://nptel.ac.in/courses.php
- http://jntuk-coeerd.in/

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I Year - II Semester		L	T	P	C
		2	0	0	0
CONSTITUTION OF INDIA (MC1201)					

Course Objectives:

- To Enable the student to understand the importance of constitution
- To understand the structure of executive, legislature and judiciary
- To understand philosophy of fundamental rights and duties
- To understand the autonomous nature of constitutional bodies like Supreme Court and high court controller and auditor general of India and election commission of India.
- To understand the central and state relation financial and administrative

Course Outcomes:

At the end of the course, the student will be able to have a clear knowledge on the following:

- Understand historical background of the constitution making and its importance for building a democratic India.
- Understand the functioning of three wings of the government ie., executive, legislative and judiciary.
- Understand the value of the fundamental rights and duties for becoming good citizen of India.
- Analyze the decentralization of power between central, state and local self-government.
- Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.
    1. Know the sources, features and principles of Indian Constitution.
    2. Learn about Union Government, State government and its administration.
    3. Get acquainted with Local administration and Pachayati Raj.
    4. Be aware of basic concepts and developments of Human Rights.
    5. Gain knowledge on roles and functioning of Election Commission

UNIT I

Introduction to Indian Constitution: Constitution meaning of the term, Indian Constitution - Sources and constitutional history, Features - Citizenship, Preamble, Fundamental Rights and Duties, Directive Principles of State Policy.

Learning outcomes:After completion of this unit student will

- Understand the concept of Indian constitution
- Apply the knowledge on directive principle of state policy
- Analyze the History, features of Indian constitution
- Evaluate Preamble Fundamental Rights and Duties

UNIT II

Union Government and its Administration Structure of the Indian Union: Federalism, Centre-State relationship, President: Role, power and position, PM and Council of ministers, Cabinet and Central Secretariat, LokSabha, RajyaSabha, The Supreme Court and High Court: Powers and Functions;

Learning outcomes: After completion of this unit student will

- Understand the structure of Indian government
- Differentiate between the state and central government
- Explain the role of President and Prime Minister
- Know the Structure of supreme court and High court

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UNIT III

State Government and its Administration Governor, Role and Position, CM and Council of ministers, State Secretariat: Organisation, Structure and Functions

Learning outcomes: After completion of this unit student will

- Understand the structure of state government
- Analyze the role Governor, state Secretariat and Chief Minister
- Differentiate between structure and functions of state secretariat

UNIT IV

A.Local Administration, District's Administration Head, Role and Importance, Municipalities, Mayor and role of Elected Representative, CEO of Municipal Corporation PachayatiRaj: Functions PRI: ZilaPanchayat, Elected officials and their roles, CEO ZilaPanchayat: Block level Organizational Hierarchy(Different departments), Village level, Role of Elected and Appointed officials, Importance of grass root democracy

Learning outcomes:-After completion of this unit student will

- Understand the local Administration
- Compare and contrast district administration role and importance
- Analyze the role of Myer and elected representatives of Municipalities
- Evaluate Zillapanchayat block level organisation

UNIT V

Election Commission: Election Commission, Role of Chief Election Commissioner and Election Commissionerate State Election Commission:, Functions of Commissions for the welfare of SC/ST/OBC and women

Learning outcomes: After completion of this unit student will

- Know the role of Election Commission apply knowledge
- Contrast and compare the role of Chief Election commissioner and Commissiononerate
- Analyze role of state election commission
- Evaluate various commissions of viz SC/ST/OBC and women

References:

1) Durga Das Basu, Introduction to the Constitution of India, Prentice Hall of India Pvt. Ltd.
2) SubashKashyap, Indian Constitution, National Book Trust
3) J.A. Siwach, Dynamics of Indian Government & Politics
4) D.C. Gupta, Indian Government and Politics
5) H.M.Sreevai, Constitutional Law of India, 4th edition in 3 volumes (Universal Law Publication)
6) J.C. Johari, Indian Government andPolitics Hans
7) J. Raj IndianGovernment and Politics
8) M.V. Pylee, Indian Constitution Durga Das Basu, Human Rights in Constitutional Law, Prentice – Hall of India Pvt. Ltd.. New Delhi
9) Noorani, A.G., (South Asia Human Rights Documentation Centre), Challenges to Civil Rights Guarantees in India, Oxford University Press 2012

esources:

1) nptel.ac.in/courses/109104074/8
2) nptel.ac.in/courses/109104045/
3) nptel.ac.in/courses/101104065/
4) www.hss.iitb.ac.in/en/lecture-details
5) www.iitb.ac.in/en/event/2nd-lecture-institute-lecture-series-indian-constitution

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II Year - I Semester		L	T	P	C
		2	0	0	0
ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE (MC2101)					

Course Objectives:

- The course aims at imparting basic principles of thought process, reasoning and inferencing. Sustainability is at the core of Indian Traditional Knowledge Systems connecting society and nature.
- Holistic life style of Yogic-science and wisdom capsules in Sanskrit literature are also important in modern society with rapid technological advancements and societal disruptions.
- The course focuses on introduction to Indian Knowledge System, Indian perspective of modern scientific world-view and basic principles of Yoga and holistic health care system

Course Outcomes:

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

- Understand the significance of Indian Traditional Knowledge
- Classify the Indian Traditional Knowledge
- Compare Modern Science with Indian Traditional Knowledge system.
- Analyze the role of Government in protecting the Traditional Knowledge
- Understand the impact of Philosophical tradition on Indian Knowledge System.

Unit I

Introduction to Traditional Knowledge: Define Traditional Knowledge- Nature and Characteristics- Scope and Importance- kinds of Traditional Knowledge- The historical impact of social change on Traditional Knowledge Systems- Value of Traditional knowledge in global economy.

Unit II

Basic structure of Indian Knowledge System: AstadashVidya- 4 Ved - 4 Upaved (Ayurved,Dhanurved,GandharvaVed&SthapthyaAdi),6vedanga(Shisha,Kalppa,Nirukha,Vykaran,Jyothisha&Chand),4upanga(Dharmashastra,Meemamsa,purana&Tharka Shastra).

Unit III

Modern Science and Indian Knowledge System-Indigenous Knowledge, Characteristics- Yoga and Holistic Health care-cases studies.

Unit IV

Protection of Traditional Knowledge: The need for protecting traditional knowledge - Significance of Traditional knowledge Protection-Role of government to harness Traditional Knowledge.

Unit V

Impact of Traditions: Philosophical Tradition (Sarvadarshan) Nyaya, Vyshepec, Sankhya, Yog, Meemamsa, Vedantha, Chavanka, Jain &Boudh - Indian Artistic Tradition - Chitrakala, Moorthikala, Vasthukala , Sthapthya, Sangeetha, NruthyaYevamSahithya

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Reference Books :

1. Traditional Knowledge System in India, by AmitJha, 2009.
2. Traditional Knowledge System and Technology in India by Basanta Kumar Mohanta and Vipin Kumar Singh, PratibhaPrakashan 2012.
3. Sivaramakrishnan (Ed.), Cultural Heritage of India-course material, BharatiyaVidya
4. Swami Jitatmanand, Holistic Science and Vedant, BharatiyaVidyaBhavan
5. Yoga Sutra of Patanjali, Ramakrishna Mission, Kolkata.
6. Pramod Chandra, India Arts, Howard Univ. Press, 1983.
7. Krishna Chaitanya, Arts of India, Abhinav Publications, 1987.

Web Resources:

1. https://www.wipo.int/wipo_magazine/en/2017/01/article_0004.html
2. http://iks.iitgn.ac.in/wp-content/uploads/2016/01/Indian-Knowledge-Systems-Kapil-Kapoor.pdf
3. https://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_21/wipo_grtkf_ic_21_ref_facilitators_text.pdf

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SRK INSTITUTE OF TECHNOLOGY
Enikepadu, Vijayawada-521108
Department of Science and Humanities
CLASS TIME TABLE

SRKIT / S & H /10.2

Academic Year: 2021-22 **Branch: MECHANICAL** **Semester: I**

TIME	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00 - 2:45	2:45-3:30	3:30-04:15
Hours / Day	1	2	3	BREAK	4	5	LUNCH	6	7	8
MON	----------CP LAB----------				AP	M-I		LIB	ENG	CP
TUE	M-I	ENG	CP		AP	ENG		----------AP LAB----------		
WED	----------ENG LAB----------				M-I			CP	SPORTS	AP
THU	----------ED----------				M-I	CP		ENG	UHV	ES
FRI	M-I	AP	ENG		CP			M-I	ES	AP
SAT	----------ED----------				ED	M-I		AP		

Theory:

Mathematics-I (R201101):Ms.V.V.M.Sri Vidya

Engg.Physics(R201103): Ms.M.Vidya Elizabeth

Communicative English(R201102): Dr.A.Padmaja / Ms.N.Gayathri

Programming for Problem Solving using C(R201110): Ms.V.Lalitha

Engg.Drawing (R201104): Mr.R.Kiran Kumar

Environmental Science(R201114): Mr.V.Saida Reddy

Labs:

English Communication Skills (R201106): Dr.A.Padmaja / Ms.N.Gayathri

Engg.Physics Lab (R201107): Ms.M.Vidya Elizabeth

Programming for Problem Solving using C (R201113): Ms.V.Lalitha

HOD

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Principal

SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Science and Humanities** **Accredited by NAAC with "A" Grade** **CLASS TIME TABLE**	**SRKIT / S&H / 10.1**

Academic Year: 2021-22 **Class: ME** **Semester: II** **w.e.f: 18-04-2022**

Section I

Time	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00-2:55	2:55-3:50	5 Min	03:55-04:50
Period	1	2	3	**BREAK**	4	5	**LUNCH**	6	7	**BREAK**	8
MON	TD	EC	COI		BEEE	EM		M-II			SPORTS
TUE	BEEE	EM	M-II		EC	TD		----EC LAB----			**EC**
WED	-----BEEE LAB----				EM			M-II	EC		BEEE
THU	TD	M-II	SS		BEEE	TD		EC	M-II		COI
FRI	BEEE	-WPL--			**WPL**	COU		M-II	EC		EM
SAT	TD	EM	YOGA / M-II		EC			TD	BEEE		SS

S.No.	Name of the Subject	Name of the Faculty
1	Mathematics-II (R201201)	Mr.Basava Raju
2	Engineering Chemistry (R201202)	Dr.T.V.Nagalakshmi / Dr.B.Sowjanya
3	Engineering Mechanics (R201210)	Ms.Bhagya Lakshmi
4	Basic Electrical and Electronics Engineering(R201211)	Mr.K.Narendra Babu
5	Constitution of India (R201229)	Ms.N.Gayathri
6	Thermodynamics (R201254)	Mr.M.Hari Krishna
7	Workshop Practice Laboratory (R201235)	Mr.R.Karun Kumar
8	Engineering Chemistry Laboratory (R201231)	Dr.T.V.Nagalakshmi / Dr.B.Sowjanya
9	Basic Electrical & Electronics EngineeringLaboratory (R201236)	Mr.K.Narendra Babu
10	Soft Skills	Ms.N.Gayathri
11	Yoga	Mr.Yellamanda Vusa

I/C
HoD 16/4/22

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SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**K INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **epartment of Mechanical Engineering** **CLASS TIME TABLE**	**SRKIT / ME / 10.1**

Academic Year: 2021-22 **Class: II** **Semester: I**

Class Incharge: Mr. U. Tanoj **W.E.F. 11/10/2021**

Section I

Time	9:00 to 9:50	9:50 to 10:40	10:45 to 11:35	11: 35 to 12:25	LUNCH	1:10 to 2:00	2:00 to 2:45	2:50 to 3:35	3:35 to 4:20
Period	1	2	3	4		5	6	7	8
MON	FMHM	FMHM / D&M LAB				MOS	VCFT	KOM	Counselling
TUE	PT	MOS	KOM	FMHM		VCFT	Library	Dassualt Systems	
WED	VCFT	FMHM	EITK	PT		MOS	CAEDP / PT LAB		
THU	MOS	FMHM	VCFT	PT		KOM	CAEDP / PT LAB		
FRI	KOM	FMHM / D&M LAB				MOS	FMHM	PT	Sports
SAT	VCFT	FMHM	MOS	EITK		VCFT	KOM	PT	*****

Vector Calculus & Fourier Transforms	Mr. K. Basava Raju
Kinematics of Machinery	Mr. V. Bala Chinalingam
Mechanics of Solids	Mr. R. Kiran Kumar
Fluid Mechanics & Hydraulic Machinery	Mr. P. Tarun Naga Venkatesh
Production Technology	Ms. Y. Durga Bhavani
Essence of Indian Traditional Knowledge	Dr. N. Sridevi
Computer Aided Engineering Drawing Practice	Dr. T. S. S. Balaji / Mr. R. Karun Kumar
Fluid Mechanics & Hydraulic Machinery Lab	Mr. P. Tarun Naga venkatesh/ Mr. V. Bala Chinalingam
Production Technology Lab	Mr. U. Tanoj /Ms. P. Bhagya Lakshmi
Drafting & Modeling Lab	Dr. R. Jaganathan / Mr. R. Kiran Kumar

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Enikepadu, Vijayawada 521108

Department of Mechanical Engineering

SRKIT / ME / 10.2

FACULTY INDIVIDUAL TIME TABLE

Mr. K Basava Raju

Time	9:00-9:50	9:50-10:40	10:45-11:35	11:35-12:25	LUNCH	1:10-2:00	2:00-2:45	2:50-3:35	3:35-4:20
Period	1	2	3	4		5	6	7	8
MON							VCFT		
TUE						VCFT			
WED	VCFT								
THU			VCFT						
FRI									
SAT	VCFT					VCFT			

Signature of the faculty: KB

Dr. N Sridevi

Time	9:00-9:50	9:50-10:40	10:45-11:35	11:35-12:25	LUNCH	1:10-2:00	2:00-2:45	2:50-3:35	3:35-4:20
Period	1	2	3	4		5	6	7	8
MON									
TUE									
WED			EIKT						
THU									
FRI									
SAT				EIKT					

Signature of the faculty:

Mr. Srinivas

Time	9:00-9:50	9:50-10:40	10:45-11:35	11:35-12:25	LUNCH	1:10-2:00	2:00-2:45	2:50-3:35	3:35-4:20
Period	1	2	3	4		5	6	7	8
MON							MEFA		
TUE		MEFA							
WED									
THU	MEFA								
FRI									
SAT									

Signature of the faculty: Srinivas

HOD-ME

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

COURSE STRUCTURE AND SYLLABUS

For

B. TECH ELECTRONICS AND COMMUNICATION ENGINEERING

(Applicable for batches admitted from 2019-2020)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA

KAKINADA - 533 003, Andhra Pradesh, India

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

III Year – I Semester

S. No.	Course	Category	L	T	P	Credits
1	Linear Integrated Circuits and Applications	PC	3	0	0	3
2	Microprocessor and Microcontrollers	PC	3	0	0	3
3	Digital Communications	PC	3	0	0	3
4	Electronic Measurements & Instrumentation	PC	3	0	0	3
5	Professional Elective (PE 1)	PE	3	0	0	3
6	Linear Integrated Circuits and Applications - Lab	LC	0	0	3	1.5
7	Digital Communications Lab	LC	0	0	3	1.5
8	Microprocessor and Microcontrollers - Lab	LC	0	0	3	1.5
9	Mini Project with Hardware Development	PR	0	0	3	1.5
10	Essence of Indian Traditional Knowledge	MC	3	0	0	0
			Sub-Total			21

III Year – IISemester

S. No.	Course	Category	L	T	P	Credits
1	Wired and Wireless Transmission Devices	PC	3	0	0	3
2	VLSI Design	PC	3	0	0	3
3	Digital Signal Processing	PC	3	0	0	3
4	Professional Elective (PE2)	PE	3	0	0	3
5	Open Elective (OE1)	OE	3	0	0	3
6	Internet of Things	PC	3	0	0	3
7	VLSI Lab	LC	0	0	3	1.5
8	Digital Signal Processing Lab	LC	0	0	3	1.5
9	Intellectual Property Rights (IPR) & Patents	MC	3	0	0	0
			Sub-Total			21

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II Year - I Semester		L	T	P	C
		2	0	0	0
ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE (MC2101)					

Course Objectives:

- The course aims at imparting basic principles of thought process, reasoning and inferencing. Sustainability is at the core of Indian Traditional Knowledge Systems connecting society and nature.
- Holistic life style of Yogic-science and wisdom capsules in Sanskrit literature are also important in modern society with rapid technological advancements and societal disruptions.
- The course focuses on introduction to Indian Knowledge System, Indian perspective of modern scientific world-view and basic principles of Yoga and holistic health care system

Course Outcomes:

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

- Understand the significance of Indian Traditional Knowledge
- Classify the Indian Traditional Knowledge
- Compare Modern Science with Indian Traditional Knowledge system.
- Analyze the role of Government in protecting the Traditional Knowledge
- Understand the impact of Philosophical tradition on Indian Knowledge System.

Unit I

Introduction to Traditional Knowledge: Define Traditional Knowledge- Nature and Characteristics- Scope and Importance- kinds of Traditional Knowledge- The historical impact of social change on Traditional Knowledge Systems- Value of Traditional knowledge in global economy.

Unit II

Basic structure of Indian Knowledge System: AstadashVidya- 4 Ved - 4 Upaved (Ayurved,Dhanurved,GandharvaVed&SthapthyaAdi),6vedanga(Shisha,Kalppa,Nirukha,Vykaran,Jyothisha&Chand),4upanga(Dharmashastra,Meemamsa,purana&Tharka Shastra).

Unit III

Modern Science and Indian Knowledge System-Indigenous Knowledge, Characteristics- Yoga and Holistic Health care-cases studies.

Unit IV

Protection of Traditional Knowledge: The need for protecting traditional knowledge - Significance of Traditional knowledge Protection-Role of government to harness Traditional Knowledge.

Unit V

Impact of Traditions: Philosophical Tradition (Sarvadarshan) Nyaya, Vyshepec, Sankhya, Yog, Meemamsa, Vedantha, Chavanka, Jain &Boudh - Indian Artistic Tradition - Chitrakala, Moorthikala, Vasthukala , Sthapthya, Sangeetha, NruthyaYevamSahithya

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Reference Books :

1. Traditional Knowledge System in India, by AmitJha, 2009.
2. Traditional Knowledge System and Technology in India by Basanta Kumar Mohanta and Vipin Kumar Singh, PratibhaPrakashan 2012.
3. Sivaramakrishnan (Ed.), Cultural Heritage of India-course material, BharatiyaVidya
4. Swami Jitatmanand, Holistic Science and Vedant, BharatiyaVidyaBhavan
5. Yoga Sutra of Patanjali, Ramakrishna Mission, Kolkata.
6. Pramod Chandra, India Arts, Howard Univ. Press, 1983.
7. Krishna Chaitanya, Arts of India, Abhinav Publications, 1987.

Web Resources:

1. https://www.wipo.int/wipo_magazine/en/2017/01/article_0004.html
2. http://iks.iitgn.ac.in/wp-content/uploads/2016/01/Indian-Knowledge-Systems-Kapil-Kapoor.pdf
3. https://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_21/wipo_grtkf_ic_21_ref_facilitators_text.pdf

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

III Year - II Semester		L	T	P	C
		3	0	0	0

Intellectual Property Rights (IPR) & Patents

UNIT I

Introduction to Intellectual Property Rights (IPR): Concept of Property - Introduction to IPR – International Instruments and IPR - WIPO - TRIPS – WTO -Laws Relating to IPR - IPR Tool Kit - Protection and Regulation - Copyrights and Neighboring Rights – Industrial Property – Patents - Agencies for IPR Registration – Traditional Knowledge –Emerging Areas of IPR - Layout Designs and Integrated Circuits – Use and Misuse of Intellectual PropertyRights.

UNIT II

Copyrights and Neighboring Rights: Introduction to Copyrights – Principles of Copyright Protection – Law Relating to Copyrights - Subject Matters of Copyright – Copyright Ownership – Transfer and Duration – Right to Prepare Derivative Works –Rights of Distribution – Rights of Performers – Copyright Registration – Limitations – Infringement of Copyright – Relief and Remedy – Case Law - Semiconductor Chip ProtectionAct.

UNIT III

Patents: Introduction to Patents - Laws Relating to Patents in India – Patent Requirements – Product Patent and Process Patent - Patent Search - Patent Registration and Granting of Patent - Exclusive Rights – Limitations - Ownership and Transfer — Revocation of Patent – Patent Appellate Board - Infringement of Patent – Compulsory Licensing — Patent Cooperation Treaty – New developments in Patents – Software Protection and Computer relatedInnovations

UNIT IV

Trademarks: Introduction to Trademarks – Laws Relating to Trademarks – Functions of Trademark – Distinction between Trademark and Property Mark – Marks Covered under Trademark Law - Trade Mark Registration – Trade Mark Maintenance – Transfer of rights - Deceptive Similarities

Likelihood of Confusion - Dilution of Ownership – Trademarks Claims and Infringement – Remedies – Passing Off Action.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

UNIT V

Trade Secrets & Cyber Law and Cyber Crime: Introduction to Trade Secrets – General Principles - Laws Relating to Trade Secrets–
Maintaining Trade Secret – Physical Security – Employee Access Limitation – Employee Confidentiality Agreements – Breach of Contract –Law of Unfair Competition – Trade Secret Litigation – Applying State Law.
Cyber Law – Information Technology Act 2000 - Protection of Online and Computer Transactions –
E-commerce - Data Security – Authentication and Confidentiality - Privacy - Digital Signatures – Certifying Authorities - Cyber Crimes - Prevention and Punishment – Liability of Network Providers.

References:

1) Intellectual Property Rights (Patents & Cyber Law), Dr. A. Srinivas. Oxford University Press, NewDelhi.
2) Deborah E.Bouchoux: Intellectual Property, Cengage Learning, NewDelhi.
3) PrabhuddhaGanguli: Intellectual Property Rights, Tata Mc-Graw –Hill, NewDelhi
4) Richard Stim: Intellectual Property, Cengage Learning, NewDelhi.
5) Kompal Bansal &Parishit Bansal Fundamentals of IPR for Engineers, B. S. Publications (Press).
6) Cyber Law - Texts & Cases, South-Western's Special TopicsCollections.
7) R.Radha Krishnan, S.Balasubramanian: Intellectual Property Rights, Excel Books. New Delhi.
8) M.Ashok Kumar and MohdIqbal Ali: Intellectual Property Rights, SerialsPub.

Course Outcomes:

- IPR Laws and patents pave the way for innovative ideas which are instrumental for inventions to seekPatents
- Student get an insight on Copyrights, Patents and Software patents which are instrumental for furtheradvancements
- advanced Technical and Scientific disciplines
- Imparting IPR protections and regulations for further advancement, so that the students can familiarize with the latestdevelopments

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SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Electronics and Communication Engineering** **CLASS TIME TABLE**	**SRKIT / ECE / 10.1**

Academic Year: 2021-22 **Class: III/IV B.TECH ECE I & II** **Semester: I**

Offline Time Table w.e.f 15/9/21

Section A

Time	9:00 to 9:50	9:50 to 10:40	10:45 to 11:35	11: 35 to 12:25		1:10 to 2:00	2:00 to 2:45	2:50 to 3:35	3:35 to 4:20
Period	1	2	3	4		5	6	7	8
MON	LICA	SCPP	DC	MPMC		MPMC/DC LAB			
TUE	EMI	DC	LICA	EITK		LICA/MINI PROJECT			
WED	DC/MPMC LAB					SCPP	DC	MPMC	SCPP
THU	LICA/MINI PROJECT					LICA	EITK	EMI	DC
FRI	MPMC	EMI	DC	EMI		MPMC	LICA	SCPP	LICA
SAT	EITK	MPMC	LICA	EMI		SCPP	EMI	MPMC	

LUNCH

Section B

Time	9:00 to 9:50	9:50 to 10:40	10:45 to 11:35	11: 35 to 12:25		1:10 to 2:00	2:00 to 2:45	2:50 to 3:35	3:35 to 4:20
Period	1	2	3	4		5	6	7	8
MON	EMI	MPMC	EITK	LICA		EMI	DC	SCPP	EITK
TUE	MPMC/DC LAB					MPMC	LICA	DC	SCPP
WED	SCPP	DC	EMI	LICA		LICA/MINI PROJECT			
THU	LICA	MPMC	EMI	MPMC		DC/MPMC LAB			
FRI	LICA/MINI PROJECT					SCPP	EMI	MPMC	DC
SAT	SCPP	EMI	SCPP	DC		EITK	LICA	DC	

LUNCH

Faculty:

Linear Integrated Circuits and Applications	: Mr. B. Ravi
Microprocessors and Microcontrollers	: Mr. B.S.S.Tejesh
Digital Communications	: Dr. S. Sri Gowri
Electronic Measurements & Instrumentation	: Ms. T. Manogna
Soft Computing and Python Programming	: Mr. Ch. Siva Rajesh
Essence of Indian Traditional Knowledge	: Ms.V.Navatha
Linear Integrated Circuits and Applications Lab	: Mr. B. Ravi/ Ms. V. Sri Lakshmi/ V. Navya Sri
Microprocessors and Microcontrollers Lab	: Mr. B.S.S.Tejesh/ Mr.P.Koteswara Rao/ Ms. Ch.Jnana Gayathri
Digital Communications Lab	: Mr.P.Ratna Bhaskar/Mr.G.Surya Prakash/ Ms. A.V.P.Sarvari / Ms.T.Manogna

S. Sri Gowri
HOD/Date 15/9/21

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SRK INSTITUTE OF TECHNOLOGY

Enikepadu, Vijayawada 521108

Department of Electronics and Communication Engineering

CLASS TIME TABLE

SRKIT / ECE / 10.1

Academic Year: 2021-22 **Class: III/IV B.Tech. ECE** **Semester: II** **w.e.f 15/02/2022**

Section A

Time	9:00 to 9:50	9:50 to 10:40	10:45 to 11:35	11: 35 to 12:25		1:10 to 2:00	2:00 to 2:50	3:00 to 3:55	3:55 to 4:50
Period	1	2	3	4		5	6	7	8
MON	WWTD	VLSID	DSP	DICD		ANN	IOT	IPR	ANN
TUE	VLSID	DICD	IPR	DSP		VLSI/DSP LAB			
WED	IOT	WWTD	IOT	WWTD		DICD	DSP	ANN	VLSID
THU	DSP/VLSI LAB					DSP	ANN	VLSID	DICD
FRI	DICD	DSP	VLSID	ANN		WWTD	IOT	WWTD	IOT
SAT	DSP	WWTD	VLSID	DICD		IOT	ANN	IPR	ANN

LUNCH

Section B

Time	9:00 to 9:50	9:50 to 10:40	10:45 to 11:35	11: 35 to 12:25		1:10 to 2:00	2:00 to 2:50	3:00 to 3:55	3:55 to 4:50
Period	1	2	3	4		5	6	7	8
MON	DICD	ANN	IOT	IPR		VLSID	DSP	WWTD	VLSID
TUE	IOT	DSP	VLSID	DICD		IOT	WWTD	ANN	WWTD
WED	VLSI/DSP LAB					ANN	VLSID	DICD	DSP
THU	WWTD	IOT	WWTD	IPR		DICD	IPR	DSP	ANN
FRI	VLSID	ANN	DICD	DSP		DSP/VLSI LAB			
SAT	ANN	DICD	IOT	DSP		WWTD	VLSID	IOT	IPR

LUNCH

Faculty:

Wired and Wireless Transmission Devices : Mr. P. Koteswara Rao
VLSI Design : Mr. D. Ravi Tej
Digital Signal Processing : Mr. V. Sekhara Babu
Digital IC Design (Professional Elective 2) : Ms. U. Aparna Devi
Artificial Neural Networks (Open Elective 1) : Ms. T.Vishnu Priya
Internet of Things : Mr. B.S.S.Tejesh
Intellectual Property Rights (IPR) & Patents : Mr. P. Naga Srinivasa Rao
VLSI Lab : Mr. D. Ravi Tej / Ms. U. Aparna Devi / Ms.Anuswetha
Digital Signal Processing Lab : Mr. V. Sekhara Babu / Ms. A.V.P.Sarvari / Ms. T.Vishnu Priya

S-Sri Gow
HOD/Date 15/2/22

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

COURSE STRUCTURE AND SYLLABUS

For UG – R20

B. TECH - ELECTRONICS AND COMMUNICATION ENGINEERING

(Applicable for batches admitted from 2020-2021)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

KAKINADA - 533 003, ANDHRA PRADESH, INDIA

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY:: KAKINADA
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

I Year –I SEMESTER

S.NO.	Category	Subjects	L	T	P	Credits
1	HS	Communicative English	3	0	0	3
2	BS	Mathematics –I(Calculus)	3	0	0	3
3	BS	Applied Chemistry	3	0	0	3
4	ES	Programming for Problem Solving Using C	3	0	0	3
5	BS	Engineering Drawing	2	0	2	3
6	LC	English Communication Skills Laboratory	0	0	3	1.5
7	LC	Applied Chemistry Lab	0	0	3	1.5
8	LC	Programming for Problem Solving Using C Lab	0	0	3	1.5
Total Credits						**19.5**

I Year – II SEMESTER

S.No.	Category	Subjects	L	T	P	Credits
1	BS	Mathematics –II (Linear Algebra and Numerical Methods)	3	0	0	3
2	BS	Applied Physics	3	0	0	3
3	ES	Object Oriented Programming through Java	2	0	2	3
4	ES	Network Analysis	3	0	0	3
5	ES	Basic Electrical Engineering	3	0	0	3
6	LC	Electronic workshop Lab	0	0	3	1.5
7	LC	Basic Electrical Engineering Lab	0	0	3	1.5
8	LC	Applied Physics Lab	0	0	3	1.5
9	MC	Environmental Science	3	0	0	0.0
Total Credits						**19.5**

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY:: KAKINADA
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

II Year –I Semester

S.No.	Category	Name of the Subject	L	T	P	Credits
1	PC	Electronic Devices and Circuits	3	1	0	3
2	PC	Switching Theory and Logic Design	3	1	0	3
3	PC	Signals and Systems	3	1	0	3
4	BS	Mathematics-III (Transforms and Vector Calculus)	3	1	0	3
5	BS	Random Variables and Stochastic Processes	3	1	0	3
6	LC	OOPS through Java Lab	0	0	2	1.5
7	LC	Electronic Devices and Circuits -Lab	0	0	2	1.5
8	LC	Switching Theory and Logic Design–Lab	0	0	2	1.5
9	SC	Python Programming	0	0	4	2
Total Credits						**21.5**

II Year – II Semester

S.No.	Category	Name of the subject	L	T	P	Credits
1	PC	Electronic Circuit Analysis	3	1	0	3
2	PC	Digital IC Design	3	1	0	3
3	PC	Analog Communications	3	0	0	3
4	ES	Linear control Systems	3	1	0	3
5	HS	Management and Organizational Behavior	3	0	0	3
6	LC	Electronic Circuit Analysis Lab	0	0	3	1.5
7	LC	Analog Communications Lab	0	0	3	1.5
8	LC	Digital IC Design Lab	0	0	3	1.5
9	SC	Soft Skills	0	0	4	2
10	MC	Constitution of India	3	0	0	0
Total Credits						**21.5**
Honors/Minor courses (The hours distribution can be 3-0-2 or 3-1-0 also)						**4**

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India

I Year - I Semester		L	T	P	C
		2	0	0	0
ENVIRONMENTAL SCIENCE (MC1101)					

Course Objectives:

The objectives of the course are to impart:

- Overall understanding of the natural resources.
- Basic understanding of the ecosystem and its diversity.
- Acquaintance on various environmental challenges induced due to unplanned anthropogenic activities.
- An understanding of the environmental impact of developmental activities.
- Awareness on the social issues, environmental legislation and global treaties.

UNIT I

Multidisciplinary nature of Environmental Studies: Definition, Scope and Importance – Sustainability: Stockholm and Rio Summit–Global Environmental Challenges: Global warming and climate change, acid rains, ozone layer depletion, population growth and explosion, effects. Role of information technology in environment and human health.

Ecosystems: Concept of an ecosystem. - Structure and function of an ecosystem; Producers, consumers and decomposers. - Energy flow in the ecosystem - Ecological succession. - Food chains, food webs and ecological pyramids; Introduction, types, characteristic features, structure and function of Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems.

UNIT II

Natural Resources: Natural resources and associated problems.

Forest resources: Use and over – exploitation, deforestation – Timber extraction – Mining, dams and other effects on forest and tribal people.

Water resources: Use and over utilization of surface and ground water – Floods, drought, conflicts over water, dams – benefits and problems.

Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.

Food resources: World food problems, changes caused by non-agriculture activities-effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity.

Energy resources: Growing energy needs, renewable and non-renewable energy sources use of alternate energy sources.

Land resources: Land as a resource, land degradation, Wasteland reclamation, man induced landslides, soil erosion and desertification; Role of an individual in conservation of natural resources; Equitable use of resources for sustainable lifestyles.

UNIT III

Biodiversity and its conservation: Definition: genetic, species and ecosystem diversity-classification - Value of biodiversity: consumptive use, productive use, social-Biodiversity at national and local levels. India as a mega-diversity nation - Hot-sports of biodiversity - Threats to biodiversity: habitat loss, man-wildlife conflicts. - Endangered and endemic species of India – Conservation of biodiversity: conservation of biodiversity.

UNIT IV

Environmental Pollution: Definition, Cause, effects and control measures of Air pollution, Water pollution, Soil pollution, Noise pollution, Nuclear hazards. Role of an individual in prevention of pollution. - Pollution case studies, Sustainable Life Studies. Impact of Fire Crackers on Men and his well being.

Solid Waste Management: Sources, Classification, effects and control measures of urban and industrial solid wastes. Consumerism and waste products, Biomedical, Hazardous and e – waste management.

UNIT V

Social Issues and the Environment: Urban problems related to energy -Water conservation, rain water harvesting-Resettlement and rehabilitation of people; its problems and concerns. Environmental ethics: Issues and possible solutions. Environmental Protection Act -Air (Prevention and Control of Pollution) Act. –Water (Prevention and control of Pollution) Act - Wildlife Protection Act -Forest Conservation Act-Issues involved in enforcement of environmental legislation. -Public awareness.

Environmental Management: Impact Assessment and its significance various stages of EIA, preparation of EMP and EIS, Environmental audit. Ecotourism, Green Campus – Green business and Green politics.

The student should Visit an Industry / Ecosystem and submit a report individually on any issues related to Environmental Studies course and make a power point presentation.

Text Books:

1) Environmental Studies, K. V. S. G. Murali Krishna, VGS Publishers, Vijayawada
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e-learning resources:

- http://nptel.ac.in/courses.php
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KAKINADA – 533 003, Andhra Pradesh, India

I Year - II Semester		L	T	P	C
		2	0	0	0
CONSTITUTION OF INDIA (MC1201)					

Course Objectives:

- To Enable the student to understand the importance of constitution
- To understand the structure of executive, legislature and judiciary
- To understand philosophy of fundamental rights and duties
- To understand the autonomous nature of constitutional bodies like Supreme Court and high court controller and auditor general of India and election commission of India.
- To understand the central and state relation financial and administrative

Course Outcomes:

At the end of the course, the student will be able to have a clear knowledge on the following:

- Understand historical background of the constitution making and its importance for building a democratic India.
- Understand the functioning of three wings of the government ie., executive, legislative and judiciary.
- Understand the value of the fundamental rights and duties for becoming good citizen of India.
- Analyze the decentralization of power between central, state and local self-government.
- Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.
  1. Know the sources, features and principles of Indian Constitution.
  2. Learn about Union Government, State government and its administration.
  3. Get acquainted with Local administration and Pachayati Raj.
  4. Be aware of basic concepts and developments of Human Rights.
  5. Gain knowledge on roles and functioning of Election Commission

UNIT I

Introduction to Indian Constitution: Constitution meaning of the term, Indian Constitution - Sources and constitutional history, Features - Citizenship, Preamble, Fundamental Rights and Duties, Directive Principles of State Policy.

Learning outcomes:After completion of this unit student will

- Understand the concept of Indian constitution
- Apply the knowledge on directive principle of state policy
- Analyze the History, features of Indian constitution
- Evaluate Preamble Fundamental Rights and Duties

UNIT II

Union Government and its Administration Structure of the Indian Union: Federalism, Centre-State relationship, President: Role, power and position, PM and Council of ministers, Cabinet and Central Secretariat, LokSabha, RajyaSabha, The Supreme Court and High Court: Powers and Functions;

Learning outcomes: After completion of this unit student will

- Understand the structure of Indian government
- Differentiate between the state and central government
- Explain the role of President and Prime Minister
- Know the Structure of supreme court and High court

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UNIT III

State Government and its Administration Governor, Role and Position, CM and Council of ministers, State Secretariat: Organisation, Structure and Functions

Learning outcomes: After completion of this unit student will

- Understand the structure of state government
- Analyze the role Governor, state Secretariat and Chief Minister
- Differentiate between structure and functions of state secretariat

UNIT IV

A.Local Administration, District's Administration Head, Role and Importance, Municipalities, Mayor and role of Elected Representative, CEO of Municipal Corporation PachayatiRaj: Functions PRI: ZilaPanchayat, Elected officials and their roles, CEO ZilaPanchayat: Block level Organizational Hierarchy(Different departments), Village level, Role of Elected and Appointed officials, Importance of grass root democracy

Learning outcomes:-After completion of this unit student will

- Understand the local Administration
- Compare and contrast district administration role and importance
- Analyze the role of Myer and elected representatives of Municipalities
- Evaluate Zillapanchayat block level organisation

UNIT V

Election Commission: Election Commission, Role of Chief Election Commissioner and Election Commissionerate State Election Commission:, Functions of Commissions for the welfare of SC/ST/OBC and women

Learning outcomes: After completion of this unit student will

- Know the role of Election Commission apply knowledge
- Contrast and compare the role of Chief Election commissioner and Commissiononerate
- Analyze role of state election commission
- Evaluate various commissions of viz SC/ST/OBC and women

References:

1) Durga Das Basu, Introduction to the Constitution of India, Prentice Hall of India Pvt. Ltd.
2) SubashKashyap, Indian Constitution, National Book Trust
3) J.A. Siwach, Dynamics of Indian Government & Politics
4) D.C. Gupta, Indian Government and Politics
5) H.M.Sreevai, Constitutional Law of India, 4th edition in 3 volumes (Universal Law Publication)
6) J.C. Johari, Indian Government andPolitics Hans
7) J. Raj IndianGovernment and Politics
8) M.V. Pylee, Indian Constitution Durga Das Basu, Human Rights in Constitutional Law, Prentice – Hall of India Pvt. Ltd.. New Delhi
9) Noorani, A.G., (South Asia Human Rights Documentation Centre), Challenges to Civil Rights Guarantees in India, Oxford University Press 2012

esources:

1) nptel.ac.in/courses/109104074/8
2) nptel.ac.in/courses/109104045/
3) nptel.ac.in/courses/101104065/
4) www.hss.iitb.ac.in/en/lecture-details
5) www.iitb.ac.in/en/event/2nd-lecture-institute-lecture-series-indian-constitution

SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Science and Humanities** **Accredited by NAAC with "A" Grade** **CLASS TIME TABLE**	**SRKIT / S&H / 10.1**

Academic Year: 2021-22 **Class: ECE** **Semester: II** **w.e.f: 18-04-2022**

		Section A									
Time	**9:00-9:50**	**9:50-10:40**	**10:40-11:30**	**5 Min**	**11:35-12:25**	**12:25-01:15**	**01:15-02:00**	**2:00-2:55**	**2:55-3:50**	**5 Min**	**03:55-04:50**
Period	**1**	**2**	**3**	**BREAK**	4	5	**LUNCH**	6	7	**BREAK**	8
MON	BEE	NA	AP		OOPS	M-II		**---EW LAB---**			**EW**
TUE	M-II	BEE	AP		NA	BEE		OOPS	AP		SS
WED	**-----BEE / AP LAB**				NA	OOPS		YOGA / AP	M-II		SPORTS
THU	M-II	ES	NA		M-II	BEE		AP	COU		SS
FRI	AP	OOPS	NA		M-II			**---BEE /AP LAB**			**BEE/AP**
SAT	BEE	ES	NA		BEE	AP		AP	OOPS		OOPS

S.No.	Name of the Subject	Name of the Faculty
1	Mathematics-II (R201201)	Mr.B.V.Rama Krishnarao
2	Applied Physics (R201207)	Dr.J.Ashok
3	Object Oriented Programming through Java(R201212)	Mr.Ch.Siva Rajesh
4	Network Analysis (R201213)	Ms. A.Vijaya Sri
5	Environmental Science (R201230)	Dr.N.Sridevi
6	Basic Electrical Engineering (R201214)	Ms.T.Mahalakshmi
7	Electronic workshop Laboratory (R201237)	Ms. Ramya
8	Applied Physics Laboratory (R201233)	Dr.J.Ashok /MsB.Jyothirrmai
9	Basic Electrical Engineering Laboratory (R201238)	Ms.T.Mahalakshmi/Mr.Keerthi Chandra
10	Soft Skills	Dr.G.Maithreyi
11	Yoga	Mr.Yellamanda Vusa

I/c

16/4/22
HoD

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SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Science and Humanities** **Accredited by NAAC with "A" Grade** **CLASS TIME TABLE**	**SRKIT / S&H / 10.1**

Academic Year: 2021-22 **Class: ECE** **Semester: II** **w.e.f: 18-04-2022**

		Section B									
Time	**9:00-9:50**	**9:50-10:40**	**10:40 - 11:30**	**5 Min**	**11:35 - 12:25**	**12:25 - 01:15**	**01:15 - 02:00**	**2:00-2:55**	**2:55-3:50**	**5 Min**	**03:55-04:50**
Period	**1**	**2**	**3**	**BREAK**	4	5	**LUNCH**	6	7	**BREAK**	8
MON	NA	BEE	ES		AP	SS		OOPS	M-II		SPORTS
TUE	ES	OOPS	NA		M-II	AP		COU	BEE		BEE
WED	SS	M-II	NA		BEE	AP		M-II	OOPS		OOPS
THU	OOPS	NA	**BEE / AP LAB-**		**BEE / APLAB**			M-II	YOGA / M-II		AP
FRI	NA	M-II	AP		AP	BEE		**---EW LAB----**			**EW**
SAT	**-----BEE / AP LAB----**				NA	OOPS		BEE	M-II		AP

S.No.	Name of the Subject	Name of the Faculty
1	Mathematics-II (R201201)	Ms.N.Gayathri Devi
2	Applied Physics (R201207)	Dr.J.Ashok
3	Object Oriented Programming through Java(R201212)	Mr.Ch.Siva Rajesh
4	Network Analysis (R201213)	MsA.Vijaya Sri
5	Environmental Science (R201230)	Dr.N.Sridevi
6	Basic Electrical Engineering (R201214)	Mr.S.Nageswara Rao
7	Electronic workshop Laboratory (R201237)	Ms. Ramya
8	Applied Physics Laboratory (R201233)	Dr.J.Ashok /Ms.Jyothirmai
9	Basic Electrical Engineering Laboratory (R201238)	Mr.K.Narendra Babu/ Mr.Keerthi Chandra
10	Soft Skills	Ms.V.Navatha
11	Yoga	Mr.Yellamanda Vusa

I/c
16/4/22
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SRK INSTITUTE OF TECHNOLOGY
Enikepadu, Vijayawada 521108
Department of Electronics and Communication Engineering
CLASS TIME TABLE

SRKIT / ECE / 10.1

Academic Year: 2021-22 Class: II/IV B.Tech. ECE Semester: II w.e.f 07/03/2022

Section A

Time	9:00 to 9:50	9:50 to 10:40	10:45 to 11:35	11: 35 to 12:25		1:10 to 2:00	2:00 to 2:50	3:00 to 3:55	3:55 to 4:50
Period	1	2	3	4		5	6	7	8
MON	ECA	LCS	AC	DICD		ECA/AC LAB			
TUE	LCS	SS	MOB	LCS		MOB	AC	ECA	COI
WED	DICD	LCS	ECA	AC		AC/DICD LAB			
THU	SS	AC	MOB	DICD		MOB	SS	ECA	LCS
FRI	DICD/ECA LAB					DICD	AC	ECA	MOB
SAT	LCS	ECA	DICD	MOB		DICD	AC	ECA	COI

LUNCH

Section B

Time	9:00 to 9:50	9:50 to 10:40	10:45 to 11:35	11: 35 to 12:25		1:10 to 2:00	2:00 to 2:50	3:00 to 3:55	3:55 to 4:50
Period	1	2	3	4		5	6	7	8
MON	DICD	MOB	ECA	AC		SS	MOB	LCS	DICD
TUE	ECA/DICD LAB					AC	SS	DICD	AC
WED	ECA	MOB	DICD	LCS		MOB	SS	LCS	COI
THU	MOB	DICD	ECA	AC		DICD/AC LAB			
FRI	AC	ECA	LCS	ECA		COI	MOB	DICD	LCS
SAT	AC/ECA LAB					ECA	LCS	AC	LCS

LUNCH

Faculty:

Electronic Circuit Analysis	: Mr. B. Ravi
Digital IC Design	: Ms. Ch. Jnana Gayathri
Analog Communications	: Dr. S. Sri Gowri / Ms.K.Nagalakshmi
Linear Control Systems	: Ms.A.V.P.Sarvari
Management and Organizational Behavior	: Ms.P.Kavya
Soft Skills	: Ms.V.Navatha / Ms.N.Gayathri
Constitution of India	: Ms.N.Gayathri
Electronic Circuit Analysis Lab	: Mr. B. Ravi / Mr.G.Venkata Rao/ Ms.V.Sri Lakshmi / Ms.U.Aparna Devi
Analog Communications Lab	: Mr. P.Ratna Bhaskar / Mr. G.Surya Prakash / Ms.K.Nagalakshmi
Digital IC Design Lab	: Ms. Ch. Jnana Gayathri / Mr.P.Koteswara Rao

S. Sri Gowri
HOD/Date

PRINCIPAL 7/03/22
S.R.K. INSTITUTE OF TECHNOLOGY
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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

COURSE STRUCTURE AND SYLLABUS

For UG –R20

B. TECH - COMPUTER SCIENCE & ENGINEERING

(Applicable for batches admitted from 2020-2021)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

KAKINADA - 533 003, Andhra Pradesh, India

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

COURSE STRUCTURE

I Year – I SEMESTER

S. No	Course Code	Courses	L	T	P	Credits
1	HS	Communicative English	3	0	0	3
2	BS	Mathematics - I (Calculus And Differential Equations)	3	0	0	3
3	BS	Applied Physics	3	0	0	3
4	ES	Programming for Problem Solving using C	3	0	0	3
5	ES	Computer Engineering Workshop	1	0	4	3
6	HS	English Communication Skills Laboratory	0	0	3	1.5
7	BS	Applied Physics Lab	0	0	3	1.5
8	ES	Programming for Problem Solving using C Lab	0	0	3	1.5
Total Credits			**19.5**			

I Year – II SEMESTER

S. No	Course Code	Courses	L	T	P	Credits
1	BS	Mathematics – II (Linear Algebra And Numerical Methods)	3	0	0	3
2	BS	Applied Chemistry	3	0	0	3
3	ES	Computer Organization	3	0	0	3
4	ES	Python Programming	3	0	0	3
5	ES	Data Structures	3	0	0	3
6	BS	Applied Chemistry Lab	0	0	3	1.5
7	ES	Python Programming Lab	0	0	3	1.5
8	ES	Data Structures Lab	0	0	3	1.5
9	MC	Environment Science	2	0	0	0
Total Credits			**19.5**			

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

II Year – I SEMESTER

S. No	Course Code	Courses	L	T	P	Credits
1	BS	Mathematics III	3	0	0	3
2	CS	Object Oriented Programming through C++	3	0	0	3
3	CS	Operating Systems	3	0	0	3
4	CS	Software Engineering	3	0	0	3
5	CS	Mathematical Foundations of Computer Science	3	0	0	3
6	CS	Object Oriented Programming through C++ Lab	0	0	3	1.5
7	CS	Operating Systems Lab	0	0	3	1.5
8	CS	Software Engineering Lab	0	0	3	1.5
9	SO	Skill oriented Course - I 1) Applications of Python - Num Py 2) Web Application Development Using FullStack - Frontend Development –Module -I	0	0	4	2
10	MC	Constitution of India	2	0	0	0
Total Credits			**21.5**			

II Year – II SEMESTER

II Year – II SEMESTER						
S. No	**Course Code**	**Courses**	**L**	**T**	**P**	**Credits**
1	BS	Probability and Statistics	3	0	0	3
2	CS	Database Management Systems	3	0	0	3
3	CS	Formal Languages and Automata Theory	3	0	0	3
4	ES	Java Programming	3	0	0	3
5	HS	Managerial Economics and Financial Accountancy	3	0	0	3
6	CS	Database Management Systems Lab	0	0	2	1
7	CS	R Programming Lab	0	1	2	2
8	ES	Java Programming Lab	0	0	3	1.5
9	SO	**Skill Oriented Course - II** 1) Applications of Python-Pandas **OR** 2) Web Application Development Using Full Stack -Frontend Development –Module-II	0	0	4	2
Total Credits			**21.5**			
10	Minor	Operating Systems[$]	3	0	2	4
11	Honors	Any course from the Pool, as per the opted track	4	0	0	4

$- Integrated Course

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KAKINADA – 533 003, Andhra Pradesh, India

I Year - I Semester		L	T	P	C
		2	0	0	0
ENVIRONMENTAL SCIENCE (MC1101)					

Course Objectives:

The objectives of the course are to impart:

- Overall understanding of the natural resources.
- Basic understanding of the ecosystem and its diversity.
- Acquaintance on various environmental challenges induced due to unplanned anthropogenic activities.
- An understanding of the environmental impact of developmental activities.
- Awareness on the social issues, environmental legislation and global treaties.

UNIT I

Multidisciplinary nature of Environmental Studies: Definition, Scope and Importance – Sustainability: Stockholm and Rio Summit–Global Environmental Challenges: Global warming and climate change, acid rains, ozone layer depletion, population growth and explosion, effects. Role of information technology in environment and human health.

Ecosystems: Concept of an ecosystem. - Structure and function of an ecosystem; Producers, consumers and decomposers. - Energy flow in the ecosystem - Ecological succession. - Food chains, food webs and ecological pyramids; Introduction, types, characteristic features, structure and function of Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems.

UNIT II

Natural Resources: Natural resources and associated problems.

Forest resources: Use and over – exploitation, deforestation – Timber extraction – Mining, dams and other effects on forest and tribal people.

Water resources: Use and over utilization of surface and ground water – Floods, drought, conflicts over water, dams – benefits and problems.

Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.

Food resources: World food problems, changes caused by non-agriculture activities-effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity.

Energy resources: Growing energy needs, renewable and non-renewable energy sources use of alternate energy sources.

Land resources: Land as a resource, land degradation, Wasteland reclamation, man induced landslides, soil erosion and desertification; Role of an individual in conservation of natural resources; Equitable use of resources for sustainable lifestyles.

UNIT III

Biodiversity and its conservation: Definition: genetic, species and ecosystem diversity-classification - Value of biodiversity: consumptive use, productive use, social-Biodiversity at national and local levels. India as a mega-diversity nation - Hot-sports of biodiversity - Threats to biodiversity: habitat loss, man-wildlife conflicts. - Endangered and endemic species of India – Conservation of biodiversity: conservation of biodiversity.

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KAKINADA – 533 003, Andhra Pradesh, India

UNIT IV

Environmental Pollution: Definition, Cause, effects and control measures of Air pollution, Water pollution, Soil pollution, Noise pollution, Nuclear hazards. Role of an individual in prevention of pollution. - Pollution case studies, Sustainable Life Studies. Impact of Fire Crackers on Men and his well being.

Solid Waste Management: Sources, Classification, effects and control measures of urban and industrial solid wastes. Consumerism and waste products, Biomedical, Hazardous and e – waste management.

UNIT V

Social Issues and the Environment: Urban problems related to energy -Water conservation, rain water harvesting-Resettlement and rehabilitation of people; its problems and concerns. Environmental ethics: Issues and possible solutions. Environmental Protection Act -Air (Prevention and Control of Pollution) Act. –Water (Prevention and control of Pollution) Act - Wildlife Protection Act -Forest Conservation Act-Issues involved in enforcement of environmental legislation. -Public awareness.

Environmental Management: Impact Assessment and its significance various stages of EIA, preparation of EMP and EIS, Environmental audit. Ecotourism, Green Campus – Green business and Green politics.

The student should Visit an Industry / Ecosystem and submit a report individually on any issues related to Environmental Studies course and make a power point presentation.

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Reference Books:

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3) Environmental Studies, Benny Joseph, Tata McGraw Hill Co, New Delhi
4) Perspectives in Environment Studies, AnubhaKaushik, C P Kaushik, New Age International Publishers, 2014

e-learning resources:

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- http://jntuk-coeerd.in/

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KAKINADA – 533 003, Andhra Pradesh, India

I Year - II Semester		L	T	P	C
		2	0	0	0
CONSTITUTION OF INDIA (MC1201)					

Course Objectives:

- To Enable the student to understand the importance of constitution
- To understand the structure of executive, legislature and judiciary
- To understand philosophy of fundamental rights and duties
- To understand the autonomous nature of constitutional bodies like Supreme Court and high court controller and auditor general of India and election commission of India.
- To understand the central and state relation financial and administrative

Course Outcomes:

At the end of the course, the student will be able to have a clear knowledge on the following:

- Understand historical background of the constitution making and its importance for building a democratic India.
- Understand the functioning of three wings of the government ie., executive, legislative and judiciary.
- Understand the value of the fundamental rights and duties for becoming good citizen of India.
- Analyze the decentralization of power between central, state and local self-government.
- Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.
  1. Know the sources, features and principles of Indian Constitution.
  2. Learn about Union Government, State government and its administration.
  3. Get acquainted with Local administration and Pachayati Raj.
  4. Be aware of basic concepts and developments of Human Rights.
  5. Gain knowledge on roles and functioning of Election Commission

UNIT I

Introduction to Indian Constitution: Constitution meaning of the term, Indian Constitution - Sources and constitutional history, Features - Citizenship, Preamble, Fundamental Rights and Duties, Directive Principles of State Policy.

Learning outcomes:After completion of this unit student will

- Understand the concept of Indian constitution
- Apply the knowledge on directive principle of state policy
- Analyze the History, features of Indian constitution
- Evaluate Preamble Fundamental Rights and Duties

UNIT II

Union Government and its Administration Structure of the Indian Union: Federalism, Centre-State relationship, President: Role, power and position, PM and Council of ministers, Cabinet and Central Secretariat, LokSabha, RajyaSabha, The Supreme Court and High Court: Powers and Functions;

Learning outcomes: After completion of this unit student will

- Understand the structure of Indian government
- Differentiate between the state and central government
- Explain the role of President and Prime Minister
- Know the Structure of supreme court and High court

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UNIT III

State Government and its Administration Governor, Role and Position, CM and Council of ministers, State Secretariat: Organisation, Structure and Functions

Learning outcomes: After completion of this unit student will

- Understand the structure of state government
- Analyze the role Governor, state Secretariat and Chief Minister
- Differentiate between structure and functions of state secretariat

UNIT IV

A.Local Administration, District's Administration Head, Role and Importance, Municipalities, Mayor and role of Elected Representative, CEO of Municipal Corporation PachayatiRaj: Functions PRI: ZilaPanchayat, Elected officials and their roles, CEO ZilaPanchayat: Block level Organizational Hierarchy(Different departments), Village level, Role of Elected and Appointed officials, Importance of grass root democracy

Learning outcomes:-After completion of this unit student will

- Understand the local Administration
- Compare and contrast district administration role and importance
- Analyze the role of Myer and elected representatives of Municipalities
- Evaluate Zillapanchayat block level organisation

UNIT V

Election Commission: Election Commission, Role of Chief Election Commissioner and Election Commissionerate State Election Commission:, Functions of Commissions for the welfare of SC/ST/OBC and women

Learning outcomes: After completion of this unit student will

- Know the role of Election Commission apply knowledge
- Contrast and compare the role of Chief Election commissioner and Commissiononerate
- Analyze role of state election commission
- Evaluate various commissions of viz SC/ST/OBC and women

References:

1) Durga Das Basu, Introduction to the Constitution of India, Prentice Hall of India Pvt. Ltd.
2) SubashKashyap, Indian Constitution, National Book Trust
3) J.A. Siwach, Dynamics of Indian Government & Politics
4) D.C. Gupta, Indian Government and Politics
5) H.M.Sreevai, Constitutional Law of India, 4th edition in 3 volumes (Universal Law Publication)
6) J.C. Johari, Indian Government andPolitics Hans
7) J. Raj IndianGovernment and Politics
8) M.V. Pylee, Indian Constitution Durga Das Basu, Human Rights in Constitutional Law, Prentice – Hall of India Pvt. Ltd.. New Delhi
9) Noorani, A.G., (South Asia Human Rights Documentation Centre), Challenges to Civil Rights Guarantees in India, Oxford University Press 2012

esources:

1) nptel.ac.in/courses/109104074/8
2) nptel.ac.in/courses/109104045/
3) nptel.ac.in/courses/101104065/
4) www.hss.iitb.ac.in/en/lecture-details
5) www.iitb.ac.in/en/event/2nd-lecture-institute-lecture-series-indian-constitution

SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Science and Humanities** **Accredited by NAAC with "A" Grade** **CLASS TIME TABLE**	**SRKIT / S&H / 10.1**

Academic Year: 2021-22 **Class: CSE** **Semester: II** **w.e.f: 18-04-2022**

Section A

Time	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00-2:55	2:55-3:50	5 Min	03:55-04:50
	1	2	3	BREAK	4	5	LUNCH	6	7	BREAK	8
MON	---PP LAB---				M-II	DS		ES	CO		AC
TUE	M-II	AC			PP	CO		DS	M-II		PP
WED	-----AC LAB-------				CO			AC	PP		YOGA / M-II
THU	M-II	PP	SS		M-II	CO		DS	AC		SPORTS
FRI	PP	SS	M-II		DS	AC		---DS LAB----			DS
SAT	AC	M-II	COU		DS			ES	CO		PP

S.No.	Name of the Subject	Name of the Faculty
1	Mathematics-II (R201201)	Ms.N.Gayathri Devi
2	Applied Chemistry (R201215)	Dr.B.Sowjanya
3	Computer Organization (R201216)	Ms.T.Bindu Madhavi
4	Data Structures (R201218)	Ms.Beersheba
5	Python Programming (R201225)	Mr.Rajamohan Reddy
6	Environmental Science (R201228)	Dr.N.Sridevi
7	Applied Chemistry Laboratory (R201239)	Dr.B.Sowjanya/Ms.G.L.Sarvani
8	Data Structures Laboratory (R201241)	Ms.Beersheba
9	Python Programming Laboratory (R201250)	Mr.Rajamohan Reddy
10	Soft Skills	Dr. G.Maithreyi
11	Yoga	Mr.Yellamanda Vusa

16/4/22
HoD

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SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Science and Humanities** **Accredited by NAAC with "A" Grade** **CLASS TIME TABLE**	**SRKIT / S&H / 10.1**

Academic Year: 2021-22 **Class: CSE** **Semester: II** **w.e.f: 18-04-2022**

		Section B									
Time	**9:00-9:50**	**9:50-10:40**	**10:40-11:30**	**5 Min**	**11:35-12:25**	**12:25-01:15**	**01:15-02:00**	**2:00-2:55**	**2:55-3:50**	**5 Min**	**03:55-04:50**
Period	1	2	3	BREAK	4	5	LUNCH	6	7	BREAK	8
MON	M-II	CO	DS		M-II	AC		----PP LAB----			PP
TUE	PP	COU	AC		SS	AC		PP	DS		CO
WED	CO	M-II	ES		DS			----DS LAB----			DS
THU	AC	DS	PP		M-II			SS	CO		YOGA / AC
FRI	------AC LAB----				M-II	CO		PP	AC		CO
SAT	PP	AC			ES	PP		M-II	DS		SPORTS

S.No.	Name of the Subject	Name of the Faculty
1	Mathematics-II (R201201)	Mr.Basava Raju
2	Applied Chemistry (R201215)	Ms.G.L.Sarvani
3	Computer Organization (R201216)	Ms.T.Bindu Madhavi
4	Data Structures (R201218)	Ms.Beersheba
5	Python Programming (R201225)	Mr.Rajamohan Reddy
6	Environmental Science (R201228)	Dr.N.Sridevi
7	Applied Chemistry Laboratory (R201239)	Ms.G.L.Sarvani/Dr.T.V.Nagalakshmi
8	Data Structures Laboratory (R201241)	Ms.Beersheba
9	Python Programming Laboratory (R201250)	Mr.Rajamohan Reddy
10	Soft Skills	Mr.Yellamanda Vusa
11	Yoga	Mr.Yellamanda Vusa

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SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Approved by AICTE, Affiliated to JNTUK, Kakinada** **(ISO 9001:2015 Certified Institution)** **Department of Computer Science and Engineering** **CLASS TIME TABLE**	**SRKIT / CSE / 10.1**

Academic Year: 2021-2022 **Class: II** **Semester: I** **Wef: 1-10-2021**

Section A

Time	9:00 To 9:50	9:50 To 10:40	10:45 To 11:35	11:35 To 12:20		1:10 To 2:00	2:00 To 2:45	2:50 To 3:35	3:35 To 4:20
Period	**1**	**2**	**3**	**4**		**5**	**6**	**7**	**8**
MON	MFCS	C++	M III	MFCS		Library/Counseling	SE	OS	**COI**
TUE	M III	SE	C++	OS		← SOC LAB →			
WED	← SE / OS LAB →					MFCS	OS	M III	SE
THU	SE	C++	OS	M III		SE	M III	OS	MFCS
FRI	←OOP'S THRU C ++ LAB →					MFCS	M III	C++	**COI**
SAT	OS	C++	MFCS	SE		← SE / OS LAB →			**

LUNCH

SUBJECTS		FACULTY
Mathematics III	:	B.V.Ramakrishna Rao
Object Oriented Programming through C++	:	Dr.D.Haritha
Operating Systems	:	K.Sri Lakshmi
Software Engineering	:	Ch.Ambedkar
Mathematical Foundations of Computer Science	:	T.Prasanna
Object Oriented Programming through C++ Lab	:	Dr.D.Haritha/ P.Jaya Sri/Ch.Satyanarayana
Operating Systems Lab	:	K.Sri Lakshmi/T.Ganesh Kumar
Software Engineering Lab	:	Ch.Ambedkar/Y.N.Malleswar
Skill Oriented Course - I	:	Hameeda Khatoon/ U.Harikrishna
Constitution of India	:	Dr.G.Maithreyi
Class Teacher	:	K.Sri Lakshmi

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HOD /Date 1/10/21

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Academic Year: 2021-2022 **Class: II** **Semester: I** **Wef: 1-10-2021**

Section B

Time	9:00 To 9:50	9:50 To 10:40	10:45 To 11:35	11:35 To 12:20	LUNCH	1:10 To 2:00	2:00 To 2:45	2:50 To 3:35	3:35 To 4:20
Period	1	2	3	4		5	6	7	8
MON	← SE / OS LAB →					OS	C++	MFCS	Library/Counseling
TUE	C++	OS	M III	SE		MFCS	SE	OS	MFCS
WED	M III	MFCS	C++	**COI**		M III	SE	C++	OS
THU	← OOP'S THRU C ++ LAB →					OS	MFCS	SE	M III
FRI	OS	SE	**COI**	M III		← SE / OS LAB →			SE
SAT	← SOC LAB →					MFCS	C++	M III	**

SUBJECTS		**FACULTY**
Mathematics III	:	S.Suman
Object Oriented Programming through C++	:	Hameeda Khatoon
Operating Systems	:	K.Sri Lakshmi
Software Engineering	:	Ch.Ambedkar
Mathematical Foundations of Computer Science	:	T.Prasanna
Object Oriented Programming through C++ Lab	:	Hameeda Khatoon/ Ch.Satyanarayana
Operating Systems Lab	:	K.Sri Lakshmi/ T.Ganesh Kumar
Software Engineering Lab	:	Ch.Ambedkar/ Y.N.Malleswar
Skill oriented Course - I	:	Hameeda Khatoon/ U.Harikrishna
Constitution of India	:	Dr.G.Maithreyi
Class Teacher	:	Ch.Ambedkar

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HOD /Date 1/10/21

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OF CSE - ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

COURSE STRUCTURE AND SYLLABUS

For UG – R20

B. Tech - COMPUTER SCIENCE AND ENGINEERING with Specialization

Common to

(i) CSE (ARTIFICIAL INTELLIGENCE and MACHINE LEARNING)-Branch Code:42

(ii) ARTIFICIAL INTELLIGENCE and MACHINE LEARNING - Branch Code: 61

(Applicable for batches admitted from 2020-2021)

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KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OF CSE - ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

COURSE STRUCTURE

I Year – I SEMESTER

S. No	Course Code	Subjects	L	T	P	Credits
1	HS1101	Communicative English	3	0	0	3
2	BS1101	Mathematics – I	3	0	0	3
3	BS1102	Applied Chemistry	3	0	0	3
4	ES1101	Programming for Problem Solving using C	3	0	0	3
5	ES1102	Computer Engineering Workshop	1	0	4	3
6	HS1102	English Communication Skills Laboratory	0	0	3	1.5
7	BS1103	Applied Chemistry Lab	0	0	3	1.5
8	ES1103	Programming for Problem Solving using C Lab	0	0	3	1.5
9	MC1101	Environmental Science	2	0	0	0
Total Credits			**15**	**0**	**13**	**19.5**

I Year – IISEMESTER

S. No	Course Code	Subjects	L	T	P	Credits
1	BS1201	Mathematics – II	3	0	0	3
2	BS1202	Applied Physics	3	0	0	3
3	ES1201	Digital Logic Design	3	0	0	3
4	ES1202	Python Programming	3	0	0	3
5	CS1201	Data Structures	3	0	0	3
6	BS1203	Applied Physics Lab	0	0	3	1.5
7	ES1203	Python Programming Lab	0	0	3	1.5
8	CS1202	Data Structures Lab	0	0	3	1.5
9	MC1201	Constitution of India	2	0	0	0
Total Credits			**17**	**0**	**9**	**19.5**

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DEPARTMENT OF CSE - ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

II Year – I SEMESTER

S. No	Course Code	Courses	L	T	P	Credits
1	BS	Mathematics III	3	0	0	3
2	CS	Mathematical Foundations of Computer Science	3	0	0	3
3	CS	Introduction to Artificial Intelligence and Machine Learning	3	0	0	3
4	CS	Object Oriented Programming with Java	3	0	0	3
5	CS	Database Management Systems	3	0	0	3
6	CS	Introduction to Artificial Intelligence and Machine Learning Lab	0	0	3	1.5
7	CS	Object Oriented Programming with Java Lab	0	0	3	1.5
8	CS	Database Management Systems Lab	0	0	3	1.5
9	SO	Mobile App Development	0	0	4	2
10	MC	Essence of Indian Traditional Knowledge	2	0	0	0
Total Credits			**17**	**0**	**13**	**21.5**

II Year – II SEMESTER

II Year – II SEMESTER						
S. No	**Course Code**	**Courses**	**L**	**T**	**P**	**Credits**
1	BS	Probability and Statistics	3	0	0	3
2	CS	Computer Organization	3	0	0	3
3	CS	Data Warehousing and Mining	3	0	0	3
4	ES	Formal Languages and Automata Theory	3	0	0	3
5	HS	Managerial Economics and Financial Accountancy	3	0	0	3
6	CS	R Programming Lab	0	0	3	1.5
7	CS	Data Mining using Python Lab	0	0	3	1.5
8	ES	Web Application Development Lab	0	0	3	1.5
9	SO	Natural Language Processing with Python	0	0	4	2
Total Credits						**21.5**
10	Minor	Introduction to Artificial Intelligence and Machine Learning[$]	**3**	**0**	**2**	**4**

$- Integrated Course

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I Year - I Semester		L	T	P	C
		2	0	0	0
ENVIRONMENTAL SCIENCE (MC1101)					

Course Objectives:

The objectives of the course are to impart:

- Overall understanding of the natural resources.
- Basic understanding of the ecosystem and its diversity.
- Acquaintance on various environmental challenges induced due to unplanned anthropogenic activities.
- An understanding of the environmental impact of developmental activities.
- Awareness on the social issues, environmental legislation and global treaties.

UNIT I

Multidisciplinary nature of Environmental Studies: Definition, Scope and Importance – Sustainability: Stockholm and Rio Summit–Global Environmental Challenges: Global warming and climate change, acid rains, ozone layer depletion, population growth and explosion, effects. Role of information technology in environment and human health.

Ecosystems: Concept of an ecosystem. - Structure and function of an ecosystem; Producers, consumers and decomposers. - Energy flow in the ecosystem - Ecological succession. - Food chains, food webs and ecological pyramids; Introduction, types, characteristic features, structure and function of Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems.

UNIT II

Natural Resources: Natural resources and associated problems.

Forest resources: Use and over – exploitation, deforestation – Timber extraction – Mining, dams and other effects on forest and tribal people.

Water resources: Use and over utilization of surface and ground water – Floods, drought, conflicts over water, dams – benefits and problems.

Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.

Food resources: World food problems, changes caused by non-agriculture activities-effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity.

Energy resources: Growing energy needs, renewable and non-renewable energy sources use of alternate energy sources.

Land resources: Land as a resource, land degradation, Wasteland reclamation, man induced landslides, soil erosion and desertification; Role of an individual in conservation of natural resources; Equitable use of resources for sustainable lifestyles.

UNIT III

Biodiversity and its conservation: Definition: genetic, species and ecosystem diversity-classification - Value of biodiversity: consumptive use, productive use, social-Biodiversity at national and local levels. India as a mega-diversity nation - Hot-sports of biodiversity - Threats to biodiversity: habitat loss, man-wildlife conflicts. - Endangered and endemic species of India – Conservation of biodiversity: conservation of biodiversity.

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UNIT IV

Environmental Pollution: Definition, Cause, effects and control measures of Air pollution, Water pollution, Soil pollution, Noise pollution, Nuclear hazards. Role of an individual in prevention of pollution. - Pollution case studies, Sustainable Life Studies. Impact of Fire Crackers on Men and his well being.

Solid Waste Management: Sources, Classification, effects and control measures of urban and industrial solid wastes. Consumerism and waste products, Biomedical, Hazardous and e – waste management.

UNIT V

Social Issues and the Environment: Urban problems related to energy -Water conservation, rain water harvesting-Resettlement and rehabilitation of people; its problems and concerns. Environmental ethics: Issues and possible solutions. Environmental Protection Act -Air (Prevention and Control of Pollution) Act. –Water (Prevention and control of Pollution) Act - Wildlife Protection Act -Forest Conservation Act-Issues involved in enforcement of environmental legislation. -Public awareness.

Environmental Management: Impact Assessment and its significance various stages of EIA, preparation of EMP and EIS, Environmental audit. Ecotourism, Green Campus – Green business and Green politics.

The student should Visit an Industry / Ecosystem and submit a report individually on any issues related to Environmental Studies course and make a power point presentation.

Text Books:

1) Environmental Studies, K. V. S. G. Murali Krishna, VGS Publishers, Vijayawada
2) Environmental Studies, R. Rajagopalan, 2nd Edition, 2011, Oxford University Press.
3) Environmental Studies, P. N. Palanisamy, P. Manikandan, A. Geetha, and K. Manjula Rani; Pearson Education, Chennai

Reference Books:

1) Text Book of Environmental Studies, Deeshita Dave & P. UdayaBhaskar, 3rded, Cengage Learning.
2) A Textbook of Environmental Studies, ShaashiChawla, TMH, New Delhi
3) Environmental Studies, Benny Joseph, Tata McGraw Hill Co, New Delhi
4) Perspectives in Environment Studies, AnubhaKaushik, C P Kaushik, New Age International Publishers, 2014

e-learning resources:

- http://nptel.ac.in/courses.php
- http://jntuk-coeerd.in/

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I Year - II Semester		L	T	P	C
		2	0	0	0
CONSTITUTION OF INDIA (MC1201)					

Course Objectives:

- To Enable the student to understand the importance of constitution
- To understand the structure of executive, legislature and judiciary
- To understand philosophy of fundamental rights and duties
- To understand the autonomous nature of constitutional bodies like Supreme Court and high court controller and auditor general of India and election commission of India.
- To understand the central and state relation financial and administrative

Course Outcomes:

At the end of the course, the student will be able to have a clear knowledge on the following:

- Understand historical background of the constitution making and its importance for building a democratic India.
- Understand the functioning of three wings of the government ie., executive, legislative and judiciary.
- Understand the value of the fundamental rights and duties for becoming good citizen of India.
- Analyze the decentralization of power between central, state and local self-government.
- Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.
    1. Know the sources, features and principles of Indian Constitution.
    2. Learn about Union Government, State government and its administration.
    3. Get acquainted with Local administration and Pachayati Raj.
    4. Be aware of basic concepts and developments of Human Rights.
    5. Gain knowledge on roles and functioning of Election Commission

UNIT I

Introduction to Indian Constitution: Constitution meaning of the term, Indian Constitution - Sources and constitutional history, Features - Citizenship, Preamble, Fundamental Rights and Duties, Directive Principles of State Policy.

Learning outcomes:After completion of this unit student will

- Understand the concept of Indian constitution
- Apply the knowledge on directive principle of state policy
- Analyze the History, features of Indian constitution
- Evaluate Preamble Fundamental Rights and Duties

UNIT II

Union Government and its Administration Structure of the Indian Union: Federalism, Centre-State relationship, President: Role, power and position, PM and Council of ministers, Cabinet and Central Secretariat, LokSabha, RajyaSabha, The Supreme Court and High Court: Powers and Functions;

Learning outcomes: After completion of this unit student will

- Understand the structure of Indian government
- Differentiate between the state and central government
- Explain the role of President and Prime Minister
- Know the Structure of supreme court and High court

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UNIT III

State Government and its Administration Governor, Role and Position, CM and Council of ministers, State Secretariat: Organisation, Structure and Functions

Learning outcomes: After completion of this unit student will

- Understand the structure of state government
- Analyze the role Governor, state Secretariat and Chief Minister
- Differentiate between structure and functions of state secretariat

UNIT IV

A.Local Administration, District's Administration Head, Role and Importance, Municipalities, Mayor and role of Elected Representative, CEO of Municipal Corporation PachayatiRaj: Functions PRI: ZilaPanchayat, Elected officials and their roles, CEO ZilaPanchayat: Block level Organizational Hierarchy(Different departments), Village level, Role of Elected and Appointed officials, Importance of grass root democracy

Learning outcomes:-After completion of this unit student will

- Understand the local Administration
- Compare and contrast district administration role and importance
- Analyze the role of Myer and elected representatives of Municipalities
- Evaluate Zillapanchayat block level organisation

UNIT V

Election Commission: Election Commission, Role of Chief Election Commissioner and Election Commissionerate State Election Commission:, Functions of Commissions for the welfare of SC/ST/OBC and women

Learning outcomes: After completion of this unit student will

- Know the role of Election Commission apply knowledge
- Contrast and compare the role of Chief Election commissioner and Commissiononerate
- Analyze role of state election commission
- Evaluate various commissions of viz SC/ST/OBC and women

References:

1) Durga Das Basu, Introduction to the Constitution of India, Prentice Hall of India Pvt. Ltd.
2) SubashKashyap, Indian Constitution, National Book Trust
3) J.A. Siwach, Dynamics of Indian Government & Politics
4) D.C. Gupta, Indian Government and Politics
5) H.M.Sreevai, Constitutional Law of India, 4th edition in 3 volumes (Universal Law Publication)
6) J.C. Johari, Indian Government andPolitics Hans
7) J. Raj IndianGovernment and Politics
8) M.V. Pylee, Indian Constitution Durga Das Basu, Human Rights in Constitutional Law, Prentice – Hall of India Pvt. Ltd.. New Delhi
9) Noorani, A.G., (South Asia Human Rights Documentation Centre), Challenges to Civil Rights Guarantees in India, Oxford University Press 2012

esources:

1) nptel.ac.in/courses/109104074/8
2) nptel.ac.in/courses/109104045/
3) nptel.ac.in/courses/101104065/
4) www.hss.iitb.ac.in/en/lecture-details
5) www.iitb.ac.in/en/event/2nd-lecture-institute-lecture-series-indian-constitution

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II Year - I Semester		L	T	P	C
		2	0	0	0
ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE (MC2101)					

Course Objectives:

- The course aims at imparting basic principles of thought process, reasoning and inferencing. Sustainability is at the core of Indian Traditional Knowledge Systems connecting society and nature.
- Holistic life style of Yogic-science and wisdom capsules in Sanskrit literature are also important in modern society with rapid technological advancements and societal disruptions.
- The course focuses on introduction to Indian Knowledge System, Indian perspective of modern scientific world-view and basic principles of Yoga and holistic health care system

Course Outcomes:

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

- Understand the significance of Indian Traditional Knowledge
- Classify the Indian Traditional Knowledge
- Compare Modern Science with Indian Traditional Knowledge system.
- Analyze the role of Government in protecting the Traditional Knowledge
- Understand the impact of Philosophical tradition on Indian Knowledge System.

Unit I

Introduction to Traditional Knowledge: Define Traditional Knowledge- Nature and Characteristics- Scope and Importance- kinds of Traditional Knowledge- The historical impact of social change on Traditional Knowledge Systems- Value of Traditional knowledge in global economy.

Unit II

Basic structure of Indian Knowledge System: AstadashVidya- 4 Ved - 4 Upaved (Ayurved,Dhanurved,GandharvaVed&SthapthyaAdi),6vedanga(Shisha,Kalppa,Nirukha,Vykaran,Jyothisha&Chand),4upanga(Dharmashastra,Meemamsa,purana&Tharka Shastra).

Unit III

Modern Science and Indian Knowledge System-Indigenous Knowledge, Characteristics- Yoga and Holistic Health care-cases studies.

Unit IV

Protection of Traditional Knowledge: The need for protecting traditional knowledge - Significance of Traditional knowledge Protection-Role of government to harness Traditional Knowledge.

Unit V

Impact of Traditions: Philosophical Tradition (Sarvadarshan) Nyaya, Vyshepec, Sankhya, Yog, Meemamsa, Vedantha, Chavanka, Jain &Boudh - Indian Artistic Tradition - Chitrakala, Moorthikala, Vasthukala , Sthapthya, Sangeetha, NruthyaYevamSahithya

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Reference Books :

1. Traditional Knowledge System in India, by AmitJha, 2009.
2. Traditional Knowledge System and Technology in India by Basanta Kumar Mohanta and Vipin Kumar Singh, PratibhaPrakashan 2012.
3. Sivaramakrishnan (Ed.), Cultural Heritage of India-course material, BharatiyaVidya
4. Swami Jitatmanand, Holistic Science and Vedant, BharatiyaVidyaBhavan
5. Yoga Sutra of Patanjali, Ramakrishna Mission, Kolkata.
6. Pramod Chandra, India Arts, Howard Univ. Press, 1983.
7. Krishna Chaitanya, Arts of India, Abhinav Publications, 1987.

Web Resources:

1. https://www.wipo.int/wipo_magazine/en/2017/01/article_0004.html
2. http://iks.iitgn.ac.in/wp-content/uploads/2016/01/Indian-Knowledge-Systems-Kapil-Kapoor.pdf
3. https://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_21/wipo_grtkf_ic_21_ref_facilitators_text.pdf

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SRK INSTITUTE OF TECHNOLOGY
Enikepadu, Vijayawada-521108
Department of Science and Humanities
CLASS TIME TABLE

SRKIT / S & H /10.2

Academic Year: 2021-22 **Branch: CSM** **Semester: I**

TIME	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00 - 2:45	2:45-3:30	3:30-04:15
Hours / Day	1	2	3		4	5		6	7	8
MON	AC	ENG	LIB		M-I	CP		----------AC LAB----------		
TUE	M-I	ES	SPORTS		CP			ENG	M-I	AC
WED	CP	AC		BREAK	COUNSELLING	CP	LUNCH	ENG	M-I	YOGA
THU	AC	CP	ENG		M-I			----------CEW LAB----------		
FRI	----------ENG LAB----------				AC	CP		ES	AC	M-I
SAT	---------CP LAB---------				M-I			AC	ENG	

Theory:

Communicative English(R201102) : Ms.V.Navatha

Mathematics - I (R201101) : Ms.S.Suman

App.Chemistry (R201115) : Dr.T.V.Naga Lakshmi

Programming for Problem Solving using C (R201110): Ms.G.Keerthi

Environmental Science(R201114): Dr.N.Sridevi

Labs:

English Communication Skills (R201106): Ms.V.Navatha

App.Chemistry(R201116): Dr.T.V.Naga Lakshmi / Ms.G.L.Sarvani

Computer Engineering Wokshop(R201118):Mr.T.Ganesh Kumar

Programming for Problem Solving using C (R201113): Ms. G.Keerthi

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SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Science and Humanities** **Accredited by NAAC with "A" Grade** **CLASS TIME TABLE**	**SRKIT / S&H / 10.1**

Academic Year: 2021-22 **Class: CSM** **Semester: II** **w.e.f: 18-04-2022**

Section I

Time	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00-2:55	2:55-3:50	5 Min	03:55-04:50
Period	1	2	3	BREAK	4	5	LUNCH	6	7	BREAK	8
MON	DLD		DS		M-II	PP		PP	AP		COI
TUE	-----AP LAB------				DS	DLD		M-II	PP		SPORTS
WED	PP	DLD	SS		DS	AP		COI	M-II		M-II
THU	-----DS LAB-----				AP	M-II		YOGA / M-II	AP		DLD
FRI	M-II		DS		DLD	PP		SS	AP		AP
SAT	DS	PP	AP		DS	COU		----PP LAB---			PP

S.No.	Name of the Subject	Name of the Faculty
1	Mathematics-II (R201201)	Ms.Suman
2	Applied Physics (R201207)	Ms.Vidya Elizabeth
3	Digital Logic Design (R201221)	Ms.Ramya
4	Python Programming (R201225)	Dr..D.Usha Rani
5	Constitution of India (R201229)	Ms.V.Navatha
6	Data Structures (R201218)	Ms.Keerthi
7	Data Structures Laboratory (R201241)	Ms.Keerthi
8	Applied Physics Laboratory (R201233)	Ms.Vidya Elizabeth / Ms.Jyothirmai
9	Python Programming Laboratory (R201250)	Ms.D.Usha Rani
10	Soft Skills	Ms N.Gayathri
11	Yoga	Mr.Yellamanda Vusa

IC
HoD 16/4/22

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FACULTY INDIVIDUAL TIME TABLE

SRKIT / S & H /10.2

Faculty Name:Ms.B. Madhavi **Academic Year: 2021-22** **Semester: I**

TIME	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00 - 2:45	2:45-3:30	3:30-04:15
Hours / Day	1	2	3	BREAK	4	5	LUNCH	6	7	8
MON								----------CSM----------		
TUE	----------ECE-B----------									
WED								----------CSD----------		
THU										
FRI										
SAT	----------ECE-A----------									

Faculty Sign

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FACULTY INDIVIDUAL TIME TABLE

SRKIT / S & H /10.2

Faculty Name:Dr. N.Sridevi **Academic Year: 2021-22** **Semester: I**

TIME	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00 - 2:45	2:45-3:30	3:30-04:15
Hours / Day	1	2	3	BREAK	4	5	LUNCH	6	7	8
MON								CSD		
TUE		CSM						CSD		
WED										
THU										
FRI								CSM		
SAT										

N. Sridevi

Faculty Sign

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SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Approved by AICTE, Affiliated to JNTUK, Kakinada** **(ISO 9001:2015 Certified Institution)** **Department of Computer Science and Engineering(CSM)** **CLASS TIME TABLE**	**SRKIT / CSE / 10.1**

Academic Year: 2021-2022 **Class: II** **Semester: I** **Wef: 1-10-2021**

Section A

Time	9:00 To 9:50	9:50 To 10:40	10:45 To 11:35	11:35 To 12:20		1:10 To 2:00	2:00 To 2:45	2:50 To 3:35	3:35 To 4:20
Period	1	2	3	4		5	6	7	8
MON	M-III	DBMS	JAVA	AI&ML		← JAVA /DBMS LAB →			
TUE	JAVA	MFCS	AI&ML	DBMS	**LUNCH**	M-III	MFCS	JAVA	**EITK**
WED	AI&ML	DBMS	M-III	MFCS		← JAVA /DBMS LAB →			
THU	MFCS	M-III	JAVA	AI&ML		**EITK**	← MAD LAB →		
FRI	DBMS	M-III	AI&ML	MFCS		JAVA	M-III	AI&ML	Library/ Counseling
SAT	← AI & ML LAB →					DBMS	MFCS	JAVA	**

SUBJECTS		**FACULTY**
Mathematics III	:	S.Suman
Mathematical Foundations of Computer Science	:	G.Koteswaramma
Introduction to AI and M L	:	Dr.B.Srikanth
Object Oriented Programming through Java	:	M.V.Sumanth
Database Management Systems	:	A.Kalyan Kumar
Introduction to AI and M L Lab	:	Dr.B.Srikanth/ Ch.Satyanarayana
Object Oriented Programming through Java Lab	:	M.V.Sumanth/T.Ganesh Kumar
Database Management Systems Lab	:	A.Kalyan Kumar/ Y.N. Malleswar
Mobile App Development	:	Dr.A.Radhika/ U.Harikrishna
Essence of Indian Traditional Knowledge	:	Dr.N.Sridevi
Class Teacher	:	Dr.B.Srikanth

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HOD/Date 1/10/21

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OF CSE - DATA SCIENCE

COURSE STRUCTURE

For UG – R20

B. Tech - COMPUTER SCIENCE AND ENGINEERING with Specialization

DATA SCIENCE

(Applicable for batches admitted from 2020-2021)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
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KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OF CSE - DATA SCIENCE

COURSE STRUCTURE

I Year – I SEMESTER

S. No	Course Code	Subjects	L	T	P	Credits
1	HS1101	Communicative English	3	0	0	3
2	BS1101	Mathematics – I	3	0	0	3
3	BS1102	Applied Chemistry	3	0	0	3
4	ES1101	Programming for Problem Solving using C	3	0	0	3
5	ES1102	Computer Engineering Workshop	1	0	4	3
6	HS1102	English Communication Skills Laboratory	0	0	3	1.5
7	BS1103	Applied Chemistry Lab	0	0	3	1.5
8	ES1103	Programming for Problem Solving using C Lab	0	0	3	1.5
9	MC1101	Environmental Science*	2	0	0	0
Total Credits			**15**	**0**	**13**	**19.5**

I Year – II SEMESTER

S. No	Course Code	Subjects	L	T	P	Credits
1	BS1201	Mathematics – II	3	0	0	3
2	BS1202	Applied Physics	3	0	0	3
3	ES1201	Digital Logic Design	3	0	0	3
4	ES1202	Python Programming	3	0	0	3
5	CS1201	Data Structures	3	0	0	3
6	BS1203	Applied Physics Lab	0	0	3	1.5
7	ES1203	Python Programming Lab	0	0	3	1.5
8	CS1202	Data Structures Lab	0	0	3	1.5
9	MC1201	Constitution of India *	2	0	0	0
Total Credits			**17**	**0**	**9**	**19.5**

*Internal Evaluation

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DEPARTMENT OF CSE - DATA SCIENCE

II Year – I SEMESTER

S. No	Course Code	Courses	L	T	P	Credits
1	BS	Mathematics III	3	0	0	3
2	CS	Mathematical Foundations of Computer Science	3	0	0	3
3	CS	Fundamentals of Data Science	3	0	0	3
4	CS	Object Oriented Programming with Java	3	0	0	3
5	CS	Database Management Systems	3	0	0	3
6	CS	Fundamentals of Data Science Lab	0	0	3	1.5
7	CS	Object Oriented Programming with Java Lab	0	0	3	1.5
8	CS	Database Management Systems Lab	0	0	3	1.5
9	SO	Mobile App Development	0	0	4	2
10	MC	Essence of Indian Traditional Knowledge	2	0	0	0
Total Credits			**17**	**0**	**13**	**21.5**

II Year – II SEMESTER

S. No	Course Code	Courses	L	T	P	Credits
1	BS	Probability and Statistics	3	0	0	3
2	CS	Computer Organization	3	0	0	3
3	CS	Data Warehousing and Mining	3	0	0	3
4	ES	Formal Languages and Automata Theory	3	0	0	3
5	HS	Managerial Economics and Financial Accountancy	3	0	0	3
6	CS	R Programming Lab	0	0	3	1.5
7	CS	Data Mining using Python Lab	0	0	3	1.5
8	ES	Web Application Development Lab	0	0	3	1.5
9	SO	MongoDB	0	0	4	2
Total Credits						**21.5**
10	Minor	Fundamentals of Data Science $	**3**	**0**	**2**	**4**

$- Integrated Course

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I Year - I Semester		L	T	P	C
		2	0	0	0
ENVIRONMENTAL SCIENCE (MC1101)					

Course Objectives:

The objectives of the course are to impart:

- Overall understanding of the natural resources.
- Basic understanding of the ecosystem and its diversity.
- Acquaintance on various environmental challenges induced due to unplanned anthropogenic activities.
- An understanding of the environmental impact of developmental activities.
- Awareness on the social issues, environmental legislation and global treaties.

UNIT I

Multidisciplinary nature of Environmental Studies: Definition, Scope and Importance – Sustainability: Stockholm and Rio Summit–Global Environmental Challenges: Global warming and climate change, acid rains, ozone layer depletion, population growth and explosion, effects. Role of information technology in environment and human health.

Ecosystems: Concept of an ecosystem. - Structure and function of an ecosystem; Producers, consumers and decomposers. - Energy flow in the ecosystem - Ecological succession. - Food chains, food webs and ecological pyramids; Introduction, types, characteristic features, structure and function of Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems.

UNIT II

Natural Resources: Natural resources and associated problems.

Forest resources: Use and over – exploitation, deforestation – Timber extraction – Mining, dams and other effects on forest and tribal people.

Water resources: Use and over utilization of surface and ground water – Floods, drought, conflicts over water, dams – benefits and problems.

Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.

Food resources: World food problems, changes caused by non-agriculture activities-effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity.

Energy resources: Growing energy needs, renewable and non-renewable energy sources use of alternate energy sources.

Land resources: Land as a resource, land degradation, Wasteland reclamation, man induced landslides, soil erosion and desertification; Role of an individual in conservation of natural resources; Equitable use of resources for sustainable lifestyles.

UNIT III

Biodiversity and its conservation: Definition: genetic, species and ecosystem diversity-classification - Value of biodiversity: consumptive use, productive use, social-Biodiversity at national and local levels. India as a mega-diversity nation - Hot-sports of biodiversity - Threats to biodiversity: habitat loss, man-wildlife conflicts. - Endangered and endemic species of India – Conservation of biodiversity: conservation of biodiversity.

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UNIT IV

Environmental Pollution: Definition, Cause, effects and control measures of Air pollution, Water pollution, Soil pollution, Noise pollution, Nuclear hazards. Role of an individual in prevention of pollution. - Pollution case studies, Sustainable Life Studies. Impact of Fire Crackers on Men and his well being.

Solid Waste Management: Sources, Classification, effects and control measures of urban and industrial solid wastes. Consumerism and waste products, Biomedical, Hazardous and e – waste management.

UNIT V

Social Issues and the Environment: Urban problems related to energy -Water conservation, rain water harvesting-Resettlement and rehabilitation of people; its problems and concerns. Environmental ethics: Issues and possible solutions. Environmental Protection Act -Air (Prevention and Control of Pollution) Act. –Water (Prevention and control of Pollution) Act - Wildlife Protection Act -Forest Conservation Act-Issues involved in enforcement of environmental legislation. -Public awareness.

Environmental Management: Impact Assessment and its significance various stages of EIA, preparation of EMP and EIS, Environmental audit. Ecotourism, Green Campus – Green business and Green politics.

The student should Visit an Industry / Ecosystem and submit a report individually on any issues related to Environmental Studies course and make a power point presentation.

Text Books:

1) Environmental Studies, K. V. S. G. Murali Krishna, VGS Publishers, Vijayawada
2) Environmental Studies, R. Rajagopalan, 2nd Edition, 2011, Oxford University Press.
3) Environmental Studies, P. N. Palanisamy, P. Manikandan, A. Geetha, and K. Manjula Rani; Pearson Education, Chennai

Reference Books:

1) Text Book of Environmental Studies, Deeshita Dave & P. UdayaBhaskar, 3rded, Cengage Learning.
2) A Textbook of Environmental Studies, ShaashiChawla, TMH, New Delhi
3) Environmental Studies, Benny Joseph, Tata McGraw Hill Co, New Delhi
4) Perspectives in Environment Studies, AnubhaKaushik, C P Kaushik, New Age International Publishers, 2014

e-learning resources:

- http://nptel.ac.in/courses.php
- http://jntuk-coeerd.in/

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I Year - II Semester		L	T	P	C
		2	0	0	0
CONSTITUTION OF INDIA (MC1201)					

Course Objectives:

- To Enable the student to understand the importance of constitution
- To understand the structure of executive, legislature and judiciary
- To understand philosophy of fundamental rights and duties
- To understand the autonomous nature of constitutional bodies like Supreme Court and high court controller and auditor general of India and election commission of India.
- To understand the central and state relation financial and administrative

Course Outcomes:

At the end of the course, the student will be able to have a clear knowledge on the following:

- Understand historical background of the constitution making and its importance for building a democratic India.
- Understand the functioning of three wings of the government ie., executive, legislative and judiciary.
- Understand the value of the fundamental rights and duties for becoming good citizen of India.
- Analyze the decentralization of power between central, state and local self-government.
- Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.
    1. Know the sources, features and principles of Indian Constitution.
    2. Learn about Union Government, State government and its administration.
    3. Get acquainted with Local administration and Pachayati Raj.
    4. Be aware of basic concepts and developments of Human Rights.
    5. Gain knowledge on roles and functioning of Election Commission

UNIT I

Introduction to Indian Constitution: Constitution meaning of the term, Indian Constitution - Sources and constitutional history, Features - Citizenship, Preamble, Fundamental Rights and Duties, Directive Principles of State Policy.

Learning outcomes:After completion of this unit student will

- Understand the concept of Indian constitution
- Apply the knowledge on directive principle of state policy
- Analyze the History, features of Indian constitution
- Evaluate Preamble Fundamental Rights and Duties

UNIT II

Union Government and its Administration Structure of the Indian Union: Federalism, Centre-State relationship, President: Role, power and position, PM and Council of ministers, Cabinet and Central Secretariat, LokSabha, RajyaSabha, The Supreme Court and High Court: Powers and Functions;

Learning outcomes: After completion of this unit student will

- Understand the structure of Indian government
- Differentiate between the state and central government
- Explain the role of President and Prime Minister
- Know the Structure of supreme court and High court

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UNIT III

State Government and its Administration Governor, Role and Position, CM and Council of ministers, State Secretariat: Organisation, Structure and Functions

Learning outcomes: After completion of this unit student will

- Understand the structure of state government
- Analyze the role Governor, state Secretariat and Chief Minister
- Differentiate between structure and functions of state secretariat

UNIT IV

A.Local Administration, District's Administration Head, Role and Importance, Municipalities, Mayor and role of Elected Representative, CEO of Municipal Corporation PachayatiRaj: Functions PRI: ZilaPanchayat, Elected officials and their roles, CEO ZilaPanchayat: Block level Organizational Hierarchy(Different departments), Village level, Role of Elected and Appointed officials, Importance of grass root democracy

Learning outcomes:-After completion of this unit student will

- Understand the local Administration
- Compare and contrast district administration role and importance
- Analyze the role of Myer and elected representatives of Municipalities
- Evaluate Zillapanchayat block level organisation

UNIT V

Election Commission: Election Commission, Role of Chief Election Commissioner and Election Commissionerate State Election Commission:, Functions of Commissions for the welfare of SC/ST/OBC and women

Learning outcomes: After completion of this unit student will

- Know the role of Election Commission apply knowledge
- Contrast and compare the role of Chief Election commissioner and Commissiononerate
- Analyze role of state election commission
- Evaluate various commissions of viz SC/ST/OBC and women

References:

1) Durga Das Basu, Introduction to the Constitution of India, Prentice Hall of India Pvt. Ltd.
2) SubashKashyap, Indian Constitution, National Book Trust
3) J.A. Siwach, Dynamics of Indian Government & Politics
4) D.C. Gupta, Indian Government and Politics
5) H.M.Sreevai, Constitutional Law of India, 4th edition in 3 volumes (Universal Law Publication)
6) J.C. Johari, Indian Government andPolitics Hans
7) J. Raj IndianGovernment and Politics
8) M.V. Pylee, Indian Constitution Durga Das Basu, Human Rights in Constitutional Law, Prentice – Hall of India Pvt. Ltd.. New Delhi
9) Noorani, A.G., (South Asia Human Rights Documentation Centre), Challenges to Civil Rights Guarantees in India, Oxford University Press 2012

esources:

1) nptel.ac.in/courses/109104074/8
2) nptel.ac.in/courses/109104045/
3) nptel.ac.in/courses/101104065/
4) www.hss.iitb.ac.in/en/lecture-details
5) www.iitb.ac.in/en/event/2nd-lecture-institute-lecture-series-indian-constitution

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II Year - I Semester		L	T	P	C
		2	0	0	0
ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE (MC2101)					

Course Objectives:

- The course aims at imparting basic principles of thought process, reasoning and inferencing. Sustainability is at the core of Indian Traditional Knowledge Systems connecting society and nature.
- Holistic life style of Yogic-science and wisdom capsules in Sanskrit literature are also important in modern society with rapid technological advancements and societal disruptions.
- The course focuses on introduction to Indian Knowledge System, Indian perspective of modern scientific world-view and basic principles of Yoga and holistic health care system

Course Outcomes:

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

- Understand the significance of Indian Traditional Knowledge
- Classify the Indian Traditional Knowledge
- Compare Modern Science with Indian Traditional Knowledge system.
- Analyze the role of Government in protecting the Traditional Knowledge
- Understand the impact of Philosophical tradition on Indian Knowledge System.

Unit I

Introduction to Traditional Knowledge: Define Traditional Knowledge- Nature and Characteristics- Scope and Importance- kinds of Traditional Knowledge- The historical impact of social change on Traditional Knowledge Systems- Value of Traditional knowledge in global economy.

Unit II

Basic structure of Indian Knowledge System: AstadashVidya- 4 Ved - 4 Upaved (Ayurved,Dhanurved,GandharvaVed&SthapthyaAdi),6vedanga(Shisha,Kalppa,Nirukha,Vykaran,Jyothisha&Chand),4upanga(Dharmashastra,Meemamsa,purana&Tharka Shastra).

Unit III

Modern Science and Indian Knowledge System-Indigenous Knowledge, Characteristics- Yoga and Holistic Health care-cases studies.

Unit IV

Protection of Traditional Knowledge: The need for protecting traditional knowledge - Significance of Traditional knowledge Protection-Role of government to harness Traditional Knowledge.

Unit V

Impact of Traditions: Philosophical Tradition (Sarvadarshan) Nyaya, Vyshepec, Sankhya, Yog, Meemamsa, Vedantha, Chavanka, Jain &Boudh - Indian Artistic Tradition - Chitrakala, Moorthikala, Vasthukala , Sthapthya, Sangeetha, NruthyaYevamSahithya

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Reference Books :

1. Traditional Knowledge System in India, by AmitJha, 2009.
2. Traditional Knowledge System and Technology in India by Basanta Kumar Mohanta and Vipin Kumar Singh, PratibhaPrakashan 2012.
3. Sivaramakrishnan (Ed.), Cultural Heritage of India-course material, BharatiyaVidya
4. Swami Jitatmanand, Holistic Science and Vedant, BharatiyaVidyaBhavan
5. Yoga Sutra of Patanjali, Ramakrishna Mission, Kolkata.
6. Pramod Chandra, India Arts, Howard Univ. Press, 1983.
7. Krishna Chaitanya, Arts of India, Abhinav Publications, 1987.

Web Resources:

1. https://www.wipo.int/wipo_magazine/en/2017/01/article_0004.html
2. http://iks.iitgn.ac.in/wp-content/uploads/2016/01/Indian-Knowledge-Systems-Kapil-Kapoor.pdf
3. https://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_21/wipo_grtkf_ic_21_ref_facilitators_text.pdf

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Department of Science and Humanities
CLASS TIME TABLE

SRKIT / S & H /10.2

Academic Year: 2021-22 **Branch: CSD** **Semester: I**

TIME	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00 - 2:45	2:45-3:30	3:30-04:15
Hours / Day	1	2	3		4	5		6	7	8
MON	----------CP LAB----------				M-I	AC		ES	M-I	YOGA
TUE	M-I	CP	LIB		ENG	AC		ES	AC	M-I
WED	M-I	AC	CP		ENG	M-I		----------AC LAB----------		
THU	----------ENG LAB----------				CP			AC		ENG
FRI	CP	AC	CP		M-I			---------- CEW LAB----------		
SAT	ENG	M-I	COUNSELLING		ENG	CP		AC	SPORTS	

BREAK

LUNCH

Theory:

Communicative English(R201102) : Ms.V.Navatha

Mathematics - I (R201101) : Ms.S.Kalpana

App.Chemistry (R201115) : Ms.G.L.Sarvani

Programming for Problem Solving using C (R201110): Ms.Keerthi

Environmental Science(R201114): Dr. N.Sridevi

Labs:

English Communication Skills (R201106): Ms.N.Gayathri

App.Chemistry(R201116): Ms.G.L.Sarvani/ Dr.T.V.Naga Lakshmi

Computer Engineering Wokshop(R201118):Mr.T.Ganesh Kumar

Programming for Problem Solving using C (R201113): Ms.Keerthi

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SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Science and Humanities** **Accredited by NAAC with "A" Grade** **CLASS TIME TABLE**	**SRKIT / S&H / 10.1**

Academic Year: 2021-22 **Class: CSD** **Semester: II** **w.e.f: 18-04-2022**

		Section I									
Time	**9:00-9:50**	**9:50-10:40**	**10:40-11:30**	**5 Min**	**11:35-12:25**	**12:25-01:15**	**01:15-02:00**	**2:00-2:55**	**2:55-3:50**	**5 Min**	**03:55-04:50**
Period	1	2	3	**BREAK**	4	5	**LUNCH**	6	7		8
MON	**----AP LAB------**				DS	M-II		M-II	AP		PP
TUE	**-----DS LAB-----**				PP			AP	DLD		M-II
WED	M-II	SS	DS		DLD			COI	PP		SPORTS
THU	DLD	M-II	AP		AP	DS		**----PP LAB----**			**PP**
FRI	AP	DS	DLD		DS	M-II		COI	PP		SS
SAT	DLD	DS	M-II		PP	AP		AP	M-II		COU

S.No.	**Name of the Subject**	**Name of the Faculty**
1	Mathematics-II (R201201)	Ms.Kalpana
2	Applied Physics (R201207)	Ms.Jyothirmai
3	Digital Logic Design (R201221)	Ms. Ramya
4	Python Programming (R201225)	Dr. .D.Usha Rani
5	Constitution of India (R201229)	Dr.G.Maithreyi
6	Data Structures (R201218)	Ms.Keerthi
7	Data Structures Laboratory (R201241)	Ms.Keerthi
8	Applied Physics Laboratory (R201233)	Ms.Jyothirmai/Ms.Vidya Elizabeth
9	Python Programming Laboratory (R201250)	Ms.D.Usha Rani
10	Soft Skills	Ms.V.Navatha
11	Yoga	Mr.Yellamanda Vusa

I/c

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Department of Science and Humanities
FACULTY INDIVIDUAL TIME TABLE

SRKIT / S & H /10.2

Faculty Name:Ms.B. Madhavi **Academic Year: 2021-22** **Semester: I**

TIME	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00 - 2:45	2:45-3:30	3:30-04:15
Hours / Day	1	2	3	BREAK	4	5	LUNCH	6	7	8
MON								----------CSM----------		
TUE	----------ECE-B----------									
WED								----------CSD----------		
THU										
FRI										
SAT	----------ECE-A----------									

Faculty Sign

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FACULTY INDIVIDUAL TIME TABLE

SRKIT / S & H /10.2

Faculty Name:Dr. N.Sridevi **Academic Year: 2021-22** **Semester: I**

TIME	9:00-9:50	9:50-10:40	10:40-11:30	5 Min	11:35-12:25	12:25-01:15	01:15-02:00	2:00 - 2:45	2:45-3:30	3:30-04:15
Hours / Day	1	2	3	BREAK	4	5	LUNCH	6	7	8
MON								CSD		
TUE		CSM						CSD		
WED										
THU										
FRI								CSM		
SAT										

N. Sridevi
Faculty Sign

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SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** Enikepadu, Vijayawada 521108 Approved by AICTE, Affiliated to JNTUK, Kakinada (ISO 9001:2015 Certified Institution) **Department of Computer Science and Engineering(CSD)** **CLASS TIME TABLE**	**SRKIT / CSE / 10.1**

Academic Year: 2021-2022 **Class: II** **Semester: I** **Wef: 1-10-2021**

Section A

Time	9:00 To 9:50	9:50 To 10:40	10:45 To 11:35	11:35 To 12:20		1:10 To 2:00	2:00 To 2:45	2:50 To 3:35	3:35 To 4:20
Period	1	2	3	4		5	6	7	8
MON	← FDS LAB →					M-III	JAVA	FDS	MFCS
TUE	DBMS	JAVA	M-III	MFCS		← JAVA /DBMS LAB →			
WED	MFCS	JAVA	FDS	DBMS		EITK	MFCS	JAVA	M-III
THU	M-III	DBMS	MFCS	FDS		← JAVA /DBMS LAB →			
FRI	← MAD LAB →			M-III		DBMS	JAVA	FDS	EITK
SAT	JAVA	FDS	MFCS	DBMS		FDS	M-III	Library/ Counseling	**

LUNCH

SUBJECTS		FACULTY
Mathematics III	:	S.Kalpana
Mathematical Foundations of Computer Science	:	G.Koteswaramma
Fundamentals of Data Science	:	K.Malliakarjuna Mallu
Object Oriented Programming through Java	:	E.Naga Raju
Database Management Systems	:	A.Kalyan Kumar
Fundamentals of Data Science Lab	:	K.Malliakarjuna Mallu/ Ch.Satyanarayana
Object Oriented Programming through Java Lab	:	E.Naga Raju/T.Ganesh Kumar
Database Management Systems Lab	:	A.Kalyan Kumar/ Y.N.Malleswar
Mobile App Development	:	Dr.N.Neelima Priyanka/U.Harikrishna
Essence of Indian Traditional Knowledge	:	Dr.N.Sridevi
Class Teacher	:	A.Kalyan Kumar

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HOD/Date 1/10/21

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE STRUCTURE AND SYLLABUS

For UG – R20

B. TECH - INFORMATION TECHNOLOGY

(Applicable for batches admitted from 2020-2021)

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KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE STRUCTURE

I Year – I SEMESTER

S. No	Course Code	Courses	L	T	P	Credits
1	HS	Communicative English	3	0	0	3
2	BS	Mathematics - I (Calculus And Differential Equations)	3	0	0	3
3	BS	Applied Physics	3	0	0	3
4	ES	Programming for Problem Solving using C	3	0	0	3
5	ES	Computer Engineering Workshop	1	0	4	3
6	HS	English Communication Skills Laboratory	0	0	3	1.5
7	BS	Applied Physics Lab	0	0	3	1.5
8	ES	Programming for Problem Solving using C Lab	0	0	3	1.5
		Total Credits				**19.5**

I Year – II SEMESTER

S. No	Course Code	Courses	L	T	P	Credits
1	BS	Mathematics – II (Linear Algebra And Numerical Methods)	3	0	0	3
2	BS	Applied Chemistry	3	0	0	3
3	ES	Computer Organization	3	0	0	3
4	ES	Python Programming	3	0	0	3
5	ES	Data Structures	3	0	0	3
6	BS	Applied Chemistry Lab	0	0	3	1.5
7	ES	Python Programming Lab	0	0	3	1.5
8	ES	Data Structures Lab	0	0	3	1.5
9	MC	Environment Science	2	0	0	0
		Total Credits				**19.5**

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DEPARTMENT OF INFORMATION TECHNOLOGY

II Year – I SEMESTER

S.No	Course Code	Courses	L	T	P	Credits
1	BS	Mathematics - III	3	0	0	3
2	IT	Object Oriented Programming through C++	3	0	0	3
3	IT	Operating Systems	3	0	0	3
4	IT	Database Management Systems	3	0	0	3
5	IT	Discrete Mathematics and Graph Theory	3	0	0	3
6	IT	Object Oriented Programming through C++ Lab	0	0	3	1.5
7	IT	Operating Systems Lab	0	0	3	1.5
8	IT	Database Management Systems Lab	0	0	3	1.5
9	SO	Skill oriented Course - I 1) Animations- 2D Animation 2) Distributed Technologies- NoSQL	0	0	4	2
10	MC	Constitution of India	2	0	0	0
		Total Credits				**21.5**

II Year – II SEMESTER

II Year – II SEMESTER						
S.No	**Course Code**	**Courses**	**L**	**T**	**P**	**Credits**
1	BS	Statistics with R	2	0	2	3
2	IT	Principles of Software Engineering	3	0	0	3
3	IT	Automata Theory and Compiler Design	3	0	0	3
4	ES	Java Programming	3	0	0	3
5	HS	Managerial Economics and Financial Accountancy	3	0	0	3
6	IT	UML Lab	0	1	2	2
7	IT	FOSS Lab	0	0	2	1
8	ES	Java Programming Lab	0	0	3	1.5
9	SO	**Skill Oriented Course II** 1) Animations- 3D Animation 2) Distributed Technologies- MongoDB	0	0	4	2
Total Credits						**21.5**
10	Minor	Object Oriented Programming through C++$	3	0	2	4
11	Honors	Any course from the Pool, as per the opted track	4	0	0	4

$- Integrated Course

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I Year - I Semester		L	T	P	C
		2	0	0	0
ENVIRONMENTAL SCIENCE (MC1101)					

Course Objectives:

The objectives of the course are to impart:

- Overall understanding of the natural resources.
- Basic understanding of the ecosystem and its diversity.
- Acquaintance on various environmental challenges induced due to unplanned anthropogenic activities.
- An understanding of the environmental impact of developmental activities.
- Awareness on the social issues, environmental legislation and global treaties.

UNIT I

Multidisciplinary nature of Environmental Studies: Definition, Scope and Importance – Sustainability: Stockholm and Rio Summit–Global Environmental Challenges: Global warming and climate change, acid rains, ozone layer depletion, population growth and explosion, effects. Role of information technology in environment and human health.

Ecosystems: Concept of an ecosystem. - Structure and function of an ecosystem; Producers, consumers and decomposers. - Energy flow in the ecosystem - Ecological succession. - Food chains, food webs and ecological pyramids; Introduction, types, characteristic features, structure and function of Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems.

UNIT II

Natural Resources: Natural resources and associated problems.

Forest resources: Use and over – exploitation, deforestation – Timber extraction – Mining, dams and other effects on forest and tribal people.

Water resources: Use and over utilization of surface and ground water – Floods, drought, conflicts over water, dams – benefits and problems.

Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.

Food resources: World food problems, changes caused by non-agriculture activities-effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity.

Energy resources: Growing energy needs, renewable and non-renewable energy sources use of alternate energy sources.

Land resources: Land as a resource, land degradation, Wasteland reclamation, man induced landslides, soil erosion and desertification; Role of an individual in conservation of natural resources; Equitable use of resources for sustainable lifestyles.

UNIT III

Biodiversity and its conservation: Definition: genetic, species and ecosystem diversity-classification - Value of biodiversity: consumptive use, productive use, social-Biodiversity at national and local levels. India as a mega-diversity nation - Hot-sports of biodiversity - Threats to biodiversity: habitat loss, man-wildlife conflicts. - Endangered and endemic species of India – Conservation of biodiversity: conservation of biodiversity.

UNIT IV

Environmental Pollution: Definition, Cause, effects and control measures of Air pollution, Water pollution, Soil pollution, Noise pollution, Nuclear hazards. Role of an individual in prevention of pollution. - Pollution case studies, Sustainable Life Studies. Impact of Fire Crackers on Men and his well being.

Solid Waste Management: Sources, Classification, effects and control measures of urban and industrial solid wastes. Consumerism and waste products, Biomedical, Hazardous and e – waste management.

UNIT V

Social Issues and the Environment: Urban problems related to energy -Water conservation, rain water harvesting-Resettlement and rehabilitation of people; its problems and concerns. Environmental ethics: Issues and possible solutions. Environmental Protection Act -Air (Prevention and Control of Pollution) Act. –Water (Prevention and control of Pollution) Act - Wildlife Protection Act -Forest Conservation Act-Issues involved in enforcement of environmental legislation. -Public awareness.

Environmental Management: Impact Assessment and its significance various stages of EIA, preparation of EMP and EIS, Environmental audit. Ecotourism, Green Campus – Green business and Green politics.

The student should Visit an Industry / Ecosystem and submit a report individually on any issues related to Environmental Studies course and make a power point presentation.

Text Books:

1) Environmental Studies, K. V. S. G. Murali Krishna, VGS Publishers, Vijayawada
2) Environmental Studies, R. Rajagopalan, 2nd Edition, 2011, Oxford University Press.
3) Environmental Studies, P. N. Palanisamy, P. Manikandan, A. Geetha, and K. Manjula Rani; Pearson Education, Chennai

Reference Books:

1) Text Book of Environmental Studies, Deeshita Dave & P. UdayaBhaskar, 3rded, Cengage Learning.
2) A Textbook of Environmental Studies, ShaashiChawla, TMH, New Delhi
3) Environmental Studies, Benny Joseph, Tata McGraw Hill Co, New Delhi
4) Perspectives in Environment Studies, AnubhaKaushik, C P Kaushik, New Age International Publishers, 2014

e-learning resources:

- http://nptel.ac.in/courses.php
- http://jntuk-coeerd.in/

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KAKINADA – 533 003, Andhra Pradesh, India

I Year - II Semester		L	T	P	C
		2	0	0	0
CONSTITUTION OF INDIA (MC1201)					

Course Objectives:

- To Enable the student to understand the importance of constitution
- To understand the structure of executive, legislature and judiciary
- To understand philosophy of fundamental rights and duties
- To understand the autonomous nature of constitutional bodies like Supreme Court and high court controller and auditor general of India and election commission of India.
- To understand the central and state relation financial and administrative

Course Outcomes:

At the end of the course, the student will be able to have a clear knowledge on the following:

- Understand historical background of the constitution making and its importance for building a democratic India.
- Understand the functioning of three wings of the government ie., executive, legislative and judiciary.
- Understand the value of the fundamental rights and duties for becoming good citizen of India.
- Analyze the decentralization of power between central, state and local self-government.
- Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.
    1. Know the sources, features and principles of Indian Constitution.
    2. Learn about Union Government, State government and its administration.
    3. Get acquainted with Local administration and Pachayati Raj.
    4. Be aware of basic concepts and developments of Human Rights.
    5. Gain knowledge on roles and functioning of Election Commission

UNIT I

Introduction to Indian Constitution: Constitution meaning of the term, Indian Constitution - Sources and constitutional history, Features - Citizenship, Preamble, Fundamental Rights and Duties, Directive Principles of State Policy.

Learning outcomes:After completion of this unit student will

- Understand the concept of Indian constitution
- Apply the knowledge on directive principle of state policy
- Analyze the History, features of Indian constitution
- Evaluate Preamble Fundamental Rights and Duties

UNIT II

Union Government and its Administration Structure of the Indian Union: Federalism, Centre-State relationship, President: Role, power and position, PM and Council of ministers, Cabinet and Central Secretariat, LokSabha, RajyaSabha, The Supreme Court and High Court: Powers and Functions;

Learning outcomes: After completion of this unit student will

- Understand the structure of Indian government
- Differentiate between the state and central government
- Explain the role of President and Prime Minister
- Know the Structure of supreme court and High court

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UNIT III

State Government and its Administration Governor, Role and Position, CM and Council of ministers, State Secretariat: Organisation, Structure and Functions

Learning outcomes: After completion of this unit student will

- Understand the structure of state government
- Analyze the role Governor, state Secretariat and Chief Minister
- Differentiate between structure and functions of state secretariat

UNIT IV

A.Local Administration, District's Administration Head, Role and Importance, Municipalities, Mayor and role of Elected Representative, CEO of Municipal Corporation PachayatiRaj: Functions PRI: ZilaPanchayat, Elected officials and their roles, CEO ZilaPanchayat: Block level Organizational Hierarchy(Different departments), Village level, Role of Elected and Appointed officials, Importance of grass root democracy

Learning outcomes:-After completion of this unit student will

- Understand the local Administration
- Compare and contrast district administration role and importance
- Analyze the role of Myer and elected representatives of Municipalities
- Evaluate Zillapanchayat block level organisation

UNIT V

Election Commission: Election Commission, Role of Chief Election Commissioner and Election Commissionerate State Election Commission:, Functions of Commissions for the welfare of SC/ST/OBC and women

Learning outcomes: After completion of this unit student will

- Know the role of Election Commission apply knowledge
- Contrast and compare the role of Chief Election commissioner and Commissiononerate
- Analyze role of state election commission
- Evaluate various commissions of viz SC/ST/OBC and women

References:

1) Durga Das Basu, Introduction to the Constitution of India, Prentice Hall of India Pvt. Ltd.
2) SubashKashyap, Indian Constitution, National Book Trust
3) J.A. Siwach, Dynamics of Indian Government & Politics
4) D.C. Gupta, Indian Government and Politics
5) H.M.Sreevai, Constitutional Law of India, 4th edition in 3 volumes (Universal Law Publication)
6) J.C. Johari, Indian Government andPolitics Hans
7) J. Raj IndianGovernment and Politics
8) M.V. Pylee, Indian Constitution Durga Das Basu, Human Rights in Constitutional Law, Prentice – Hall of India Pvt. Ltd.. New Delhi
9) Noorani, A.G., (South Asia Human Rights Documentation Centre), Challenges to Civil Rights Guarantees in India, Oxford University Press 2012

esources:

1) nptel.ac.in/courses/109104074/8
2) nptel.ac.in/courses/109104045/
3) nptel.ac.in/courses/101104065/
4) www.hss.iitb.ac.in/en/lecture-details
5) www.iitb.ac.in/en/event/2nd-lecture-institute-lecture-series-indian-constitution

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Academic Year: 2021-22 **Class: IT** **Semester: II** **w.e.f: 18-04-2022**

		Section I									
Time	**9:00-9:50**	**9:50-10:40**	**10:40-11:30**	**5 Min**	**11:35-12:25**	**12:25-01:15**	**01:15-02:00**	**2:00-2:55**	**2:55-3:50**	**5 Min**	**03:55-04:50**
Period	**1**	**2**	**3**		4	5		6	7		8
MON	PP	AC	ES	**BREAK**	DS	CO	**LUNCH**	M-II		**BREAK**	SPORTS
TUE	PP	CO	M-II		AC	DS		----AC LAB----			**AC**
WED	---PP LAB----				CO			M-II	AC		PP
THU	PP	M-II	SS		ES	DS		AC	M-II		DS
FRI	PP	----DS LAB-----			**DS**	COU		M-II	AC		CO
SAT	PP	CO	YOGA / M-II		AC			DS			SS

S.No.	Name of the Subject	Name of the Faculty
1	Mathematics-II (R201201)	Mr.Basava Raju
2	Applied Chemistry (R201215)	Dr.T.V.Nagalakshmi
3	Computer Organization (R201216)	Ms.V. Lalitha
4	Data Structures (R201218)	Ms.Akhila
5	Python Programming (R201225)	Ms. P.Sai Charitha
6	Environmental Science (R201228)	Ms.G.L.Sarvani
7	Applied Chemistry Laboratory (R201239)	Dr.T.V.Nagalakshmi/ Dr.B.Sowjanya
8	Data Structures Laboratory (R201241)	Ms.Akhila
9	Python Programming Laboratory (R201250)	Ms. P.Sai Charitha
10	Soft Skills	Ms. N.Gayathri
11	Yoga	Mr.Yellamanda Vusa

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SRK INSTITUTE OF TECHNOLOGY VIJAYAWADA	**SRK INSTITUTE OF TECHNOLOGY** **Enikepadu, Vijayawada 521108** **Department of Information Technology** **CLASS TIME TABLE**	**SRKIT / IT / 10.1**

w.e.f.: 01-10-2021 **Room no: 408**

II/IV B. Tech – I SEM Time Table(2021-22)

PERIOD	1	2	3	4	12.25P.M to 01.10 P.M Lunch Break	5	6	7	8
TIME/ DAY	9:00A.M to 09.50 A.M	09.50A.M to 10.40A.M	10.45 A.M to 11.35 A.M	11.35 A.M to 12.25P.M		01.10P.M to 02.00P.M	02.00 P.M to 02.45 P.M	02.50P.M to 03.35 P.M	03.35P.M to 04.20 P.M
MON	OS	OOPS	DMG			OS LAB			
TUE	OOPS LAB			DBMS		DBMS	M-III	OOPS	SPORT
WED	M-III	DMG	OS	OOPS		M-III	DBMS LAB		
THU	OS	DBMS	OOPS	OS		OOPS	DMG	DBMS	COUNSELLING
FRI	SKILL ORIENTED PRO LAB		DBMS	OS		DMG	OOPS	M-III	CI
SAT	OS	DBMS	M-III	DMG		M-III	CI	LIBRARY	--

NAME OF THE SUBJECT	NAME OF THE FACULTY
Mathematics - III	Mr.RAMA KRISHNA
Object Oriented Programming through C++	Mrs.Y.V.NANDINI
Operating Systems	Mrs.AMRITHA MISHRA
Data base Management Systems	Mrs.A.VEDA SRI
Discrete Mathematics and Graph Theory	Mrs. G.KOTESWARAMMA
Object Oriented Programming through C++ Lab	Mrs.Y.V.NANDINI
Operating Systems Lab	Mrs. AMRITHA MISHRA/P.SAI CHARITHA
Database Management Systems Lab	Mrs.A.VEDA SRI/ S.MOSHE DAYAN
Skill oriented Course - I	Mr.M.SURESH BABU/ S.MOSHE DAYAN
1) Animations- 2D Animation	
2) Distributed Technologies- NoSQL	
Constitution of India	Mrs.N.GAYATHRI

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