COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

Course Outcomes-2021 Scheme

Sl.No.	Subject Code	Course Code	Course Outcomes
1	CALCULUS & DIFFERENTIAL EQUATIONS 21MAT11	C101.1	Apply the knowledge of calculus to solve problems related to polar curves and its applications in determining the bentness of a curve
		C101.2	Learn the notion of partial differentiation to calculate rate of change of multivariate functions and solve problems related to composite functions and Jacobian
		C101.3	Solve first-order linear/nonlinear ordinary differential equations analytically using standard methods
		C101.4	Demonstrate various models through higher order differential equations and solve such linear ordinary differential equations
		C101.5	Test the consistency of a system of linear equations and to solve them by direct and iterative methods

S.No.	Subject Code	Course Code	Course Outcomes
2	ENGINEERING CHEMISTRY 21CHE12	C102.1	Discuss the electrochemical energy systems such as electrodes and batteries
		C102.2	Explain the fundamental concepts of corrosion ,its control and surface modification methods namely electroplating and electroless plating
		C102.3	Enumerate the importance, synthesis and applications of polymers. Understand properties and applications od nanomaterials
		C102.4	Describe the principles of green chemistry , understand properties and application alternative fuels
		C102.5	Illustrate the fundamental principles of water chemistry, applications of volumetric nd analytical instrumentations

S.No.	Subject Code	Course Code	Course Outcomes
	PROBLEM- SOLVING THROUGH PROGRAMMING 21PSP13	C103.1	Elucidate the basic architecture and functionalities of a computer and also recognize the hardware parts
		C103.2	Apply programming constructs of C language to solve the real world problem
3		C103.3	Explore user-defined data structures like arrays in implementing solutions to problems like searching and sorting
		C103.4	Explore user-defined data structures like structures, unions and pointers in implementing solutions
		C103.5	Design and Develop Solutions to problems using modular programming constructs using functions

S.No.	Subject Code	Course Code	Course Outcomes
	BASIC ELECTRONICS & COMMUNICATION ENGINEERING 21ELN14	C104.1	Describe the concepts of electronic circuits encompassing power supplies, amplifiers and oscillators.
4		C104.2	Present the basics of digital logic engineering including data representation, circuits and the microcontroller system with associated sensors and actuators.
		C104.3	Discuss the characteristics and technological advances of embedded systems
		C104.4	Relate to the fundamentals of communication engineering spanning from the frequency spectrum to the various circuits involved including antennas
		C104.5	Explain the different modes of communications from wired to wireless and the computing involved.

S.No.	Subject Code	Course Code	Course Outcomes
5	ELEMENTS OF MECHANICAL ENGINEERING 21EME15	C105.1	Identify different sources of energy and their conversion process.
		C105.2	Apply the principles of thermodynamics to evaluate the properties of steam and explain the concepts of energy generation.
		C105.3	Understand the types of IC engines, analyze and compute performance parameters of IC engines and explain the principle of refrigeration system
		C105.4	Apply the knowledge of engineering materials, joining processes and power transmission elements in various engineering applications.
		C105.5	Identify the different types of machine tools and their applications in performing various machining operations through conventional and computer control methods

Sl.No.	Subject Code	Course Code	Course Outcomes
6	ENGINEERING CHEMISTRY LABORATORY 21CHEL16	C106.1	Determine the pKa and coefficient of Viscosity of a given organic liquid
		C106.2	Estimate the amount of substance present in the given solution using Potentiometer Conductometric and Colorimetric
		C106.3	Determine the total hardness and chemical oxygen demand in the given solution by volumetric analysis method
		C106.4	Estimate the percentage of Nickel, copper and Iron in the given analyte solution by titration method
		C106.5	Demonstrate flame photometric estimation of sodium & potassium and the synthesis of nanomaterials by Precipitation method

S.No.	Subject Code	Course Code	Course Outcomes
7	COMPUTER PROGRAMMING LABORATORY 21CPL17	C107.1	Define the problem statement and identify the need for computer programming
		C107.2	Make use of C compiler, IDE for programming, identify and correct the syntax and syntactic errors in programming
		C107.3	Develop algorithm, flowchart and write programs to solve the given problem
		C107.4	Demonstrate use of functions, recursive functions, arrays, strings, structures and pointers in problem solving.
		C107.5	Document the inference and observations made from the implementation.

S.No.	Subject Code	Course Code	Course Outcomes
8	COMMUNICATIVE ENGLISH 21EGH18	C108.1	Understand and apply the Fundamentals of Communication Skills in their communication skills
		C108.2	Identify the nuances of phonetics, intonation and enhance pronunciation skills
		C108.3	To impart basic English grammar and essentials of language skills as per present requirement
		C108.4	Understand and use all types of English vocabulary and language proficiency
		C108.5	Adopt the Techniques of Information Transfer through presentation

S.No.	Subject Code	Course Code	Course Outcomes
	SCIENTIFIC FOUNDATIONS OF HEALTH 21SFH19	C109.1	To understand Health and wellness (and its beliefs)
9		C109.2	To acquire Good Health & its Balance for positive mindset
		C109.3	To inculcate and develop the healthy lifestyle habits for good health
		C109.4	To create of healthy and caring relationships to meet the requirements of MNC and LPG world
		C109.5	To adopt the innovative and positive methods to avoid risks from harmful habits in their campus & outside the campus

Sl.No.	Subject Code	Course Code	Course Outcomes
	ADVANCED	C110.1	Apply the concept of change of order of integration and change of variables to evaluate multiple integrals and their usage in computing the area and volume
10	CALCULUS AND 21MAT21	C110.2	Illustrate the applications of multivariate calculus to understand the solenoidal and irrotational vectors and also exhibit the inter dependence of line, surface and volume integrals
		C110.3	Formulate physical problems to partial differential equations

			and to obtain solution forstandard practical PDE's
		C110.4	Apply the knowledge of numerical methods in modelling of
			various physical and engineering phenomena
		C110.5	Solve first order ordinary differential equations arising in
			engineering problems.

S.No.	Subject Code	Course Code	Course Outcomes
	ENGINEE- RING PHYSICS 21PHY22	C111.1	Interpret the types of mechanical vibrations and their applications, the role of Shock waves in various fields.
		C111.2	Demonstrate the quantisation of energy for microscopic system.
11		C111.3	Apply LASER and Optical fibers in opto electronic system.
11		C111.4	Illustrate merits of quantum free electron theory and applications of Hall effect
		C111.5	Analyse the importance of XRD and Electron Microscopy in Nano material characterization

S.No.	Subject Code	Course Code	Course Outcomes
		C112.1	Analyse basic DC and AC electric circuits.
12	BASIC ELECTRICAL ENGINEERING 21ELE23	C112.2	Explain the working principles of transformers and electrical machines.
		C112.3	Explain the concepts of electric power transmission and distribution of power.
		C112.4	Understand the electricity billing, and working principles of circuit protective devices and personal safety measures.

S.No.	Subject Code	Course Code	Course Outcomes
		C113.1	Understand the various fields of civil engineering
13	ELEMENTS OF CIVIL ENGINEERING AND MECHANICS 21CIV24	C113.2	compute the resultant of force system and resolution of a force
		C113.3	comprehend action of forces ,moments and other types of loads on rigid bodies and compute reactive forces
		C113.4	locate the centroid and compute the moment of inertia of regular and built up sections
		C113.5	Analyze the bodies in motion

S.No.	Subject Code	Course Code	Course Outcomes
	ENCINEE	C114.1	Prepare and uncerstand Engineering Drawings
14	RING VISUALIZA- TION 21EVN25	C114.2	Identify and apply the principles of orthographic projections
			of lines, planes and solids
		C114.3	Identify and apply the principles of orthographic projections
			and prepare development of lateral surfaces
		C114.4	Visualize 3D objects and Develop isometric projections

Sl.No.	Subject Code	Course Code	Course Outcomes
	ENGINEERING	C115.1	Understand the measuring techniques
	PHYSICS	C115.2	Operate different instruments and be capable to analyse the
15	LABORATORY	C115.2	experimental results.
	21PHYL26	C115.3	Construct the circuits and theiranalys

S.No.	Subject Code	Course Code	Course Outcomes
		C116.1	Verify KCL and KVL and maximum power transfer theorem for DC circuits.
	DACIC	C116.2	Compare power factors of different types of lamps.
16	ELECTRICAL ENGINEERING LABORATORY 21ELEL27	C116.3	Demonstrate the measurement of the impedance of an electrical circuit and power consumed by a 3-phase load.
		C116.4	Analyze two-way and three-way control of lamps.
		C116.5	Explain the effects of open and short circuits in simple circuits.
		C116.6	Interpret the suitability of earth resistance measured.

S.No.	Subject Code	Course Code	Course Outcomes
	COMMUNICAT IVE ENGLISH 21EGH28	C117.1	To understand and identify the Common Errors in Writing and Speaking
		C17.2	To Achieve better technical writing and Presentation skills
17		C117.3	To read Technical proposals properly and make them to Write good technical reports
		C117.4	Acquire Employment and Workplace communication skills
		C117.5	To learn about Techniques of Information Transfer through presentation in different level

S.No.	Subject Code	Course Code	Course Outcomes
		C118.1	Appreciate various design process procedure
18	INNOVATION AND DESIGN THINKING 21IDT19/29	C118.2	Generate and develop design ideas through different technique
		C118.3	Identify the significance of reverse Engineering to Understand products
		C118.4	Draw technical drawing for design ideas

Sl.No.	Subject Code	Course Code	Course Outcomes
	TRANSFORM CALCULUS, FOURIER SERIES AND NUMERICAL TECHNIQUES 21MAT31	C201.1	To solve ordinary differential equations using Laplace transform.
19		C201.2	Demonstrate Fourier series to study the behaviour of periodic functions and their applications in system communications, digital signal processing and field theory.
		C201.3	To use Fourier transforms to analyze problems involving continuous-time signals and to apply ZTransform techniques to solve difference equations
		C201.4	To solve mathematical models represented by initial or boundary value problems involving partial differential equations
		C201.5	Determine the extremals of functionals using calculus of

	variations and solve problems arising in dynamics of rigid
	bodies and vibrational analysis.

Sl.No.	Subject Code	Course Code	Course Outcomes
		C202.1	Identify different data structures and their applications.
20	DATA	C202.2	Apply stack and queues in solving problems
	STRUCTURES	C202.3	Demonstrate applications of linked list.
	AND APPLICATIONS	C202.4	Explore the applications of trees and graphs to model and
			solve the real-world problem
	21CS32	C202.5	Make use of Hashing techniques and resolve collisions
		C202.3	during mapping of key value pairs

Sl.No.	Subject Code	Course Code	Course Outcomes
21	ANALOG AND DIGITAL ELECTRONICS 21CS33	C203.1	Design and analyze application of analog circuits using photo devices, timer IC, power supply and regulator IC and op-amp.
		C203.2	Explain the basic principles of A/D and D/A conversion circuits and develop the same.
		C203.3	Simplify digital circuits using Karnaugh Map, and Quine- McClusky Methods
		C203.4	Explain Gates and flip flops and make us in designing different data processing circuits, registers and counters and compare the types.
		C203.5	Develop simple HDL programs

Sl.No.	Subject Code	Course Code	Course Outcomes
	COMPUTER ORGANIZATION AND ARCHITECTURE 21CS34	C204.1	Explain the organization and architecture of computer systems with machine instructions and programs
22		C204.2	Analyze the input/output devices communicating with computer system
		C204.3	Demonstrate the functions of different types of memory devices
		C204.4	Apply different data types on simple arithmetic and logical unit
		C204.5	Analyze the functions of basic processing unit, Parallel processing and pipelining

Sl.No.	Subject Code	Course Code	Course Outcomes
23	OBJECT ORIENTED PROGRAMMING WITH JAVA LABORATORY 21CSL35	C205.1	Use Eclipse/NetBeans IDE to design, develop, debug Java Projects
		C205.2	Analyze the necessity for Object Oriented Programming paradigm over structured programming and become familiar with the fundamental concepts in OOP.
		C205.3	Demonstrate the ability to design and develop java programs, analyze, and interpret object oriented data and document results.
		C205.4	Apply the concepts of multiprogramming, exception/event handling, abstraction to develop robust programs
		C205.5	Develop user friendly applications using File I/O and GUI concepts.

Sl.No.	Subject Code	Course Code	Course Outcomes
		C206.1	Communicate and connect to the surrounding.
		C206.2	Create a responsible connection with the society.
		C206.3	Involve in the community in general in which they work.
24	SOCIAL CONNECT AND RESPONSIBILITY 21UH36	C206 4	Notice the needs and problems of the community and
		C200.4	involve them in problem –solving.
		C206.5	Develop among themselves a sense of social & civic responsibility & utilize their knowledge in finding practical solutions to individual and community problems.
		C206.6	Develop competence required for group-living and sharing of responsibilities & gain skills in mobilizing community participation to acquire leadership qualities and democratic attitudes.

Sl.No.	Subject Code	Course Code	Course Outcomes		
		C207.1	ಕನ್ನಡ ಭಾಷೆ, ಸಾಹಿತ್ಯ ಮತ್ತು ಕನ್ನಡದ ಸಂಸ್ಕೃತಿಯ ಪರಿಚಯವಾಗುತ್ತದೆ.		
	SAMSKRUTIKA KANNADA	C207.2	ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಆಧುನಿಕ ಪೂರ್ವ ಮತ್ತು ಆಧುನಿಕ ಕಾವ್ಯಗಳು ಮತ್ತು ಸಂಸ್ಕೃತಿಯ ಬಗ್ಗೆ ಅಸಕ್ತಿಯು ಮೂಡುತ್ತದೆ.		
	21KSK37	C207.3	ತಾಂತ್ರಿಕ ವ್ಯಕ್ತಿಗಳ ಪರಿಚಯವಾಗುತ್ತದೆ.		
25		C207.4	ಕನ್ನಡ ಭಾಷಾಭ್ಯಾಸ, ಸಾಮಾನ್ಯ ಕನ್ನಡ ಹಾಗೂ ಆಡಳಿತ ಕನ್ನಡದ ಪದಗಳ ಪರಿಚಯವಾಗುತ್ತದೆ		
	OR				
	BALAKE KANNADA 21KBK37	C208.1	To understand the necessity of learning of local language for comfortable life.		
		C208.2	To Listen and understand the Kannada language properly.		
		C208.3	To speak, read and write Kannada language as per requirement.		
		C208.4	To communicate (converse) in Kannada language in their daily life with kannada speakers.		
		C208.5	To speak in polite conservation.		

Sl.No.	Subject Code	Course Code	Course Outcomes
26	MASTERING OFFICE 21CSL381	C209.1	Know the basics of computers and prepare documents, spreadsheets, make small presentations with audio, video and graphs and would be acquainted with internet
		C209.2	Create, edit, save and print documents with list tables, header, footer, graphic, spellchecker, mail merge and grammar checker
		C209.3	Attain the knowledge about spreadsheet with formula, macros spell checker etc.
		C209.4	Demonstrate the ability to apply application software in an office environment.
		C209.5	Use Google Suite for office data management tasks

S.No.	Subject Code	Course	Course Outcomes
		Code	
27	21MATDIP31 ADDITIONAL MATHEMATICS-I	C210.1	Use derivatives and partial derivatives to calculate the rate of change of multivariate functions.
		C210.2	Apply concepts of complex numbers and vector algebra to analyse the problems arising in a related area.
		C210.3	Analyse position, velocity and acceleration in two and three dimensions of vector-valued functions.
		C210.4	Learn techniques of integration including the evaluation of double and triple integrals.
		C210.5	Identify and solve first-order ordinary differential equations

Sl.No.	Subject Code	Course Code	Course Outcomes
28	MATHEMATICAL FOUNDATIONS FOR COMPUTING 21CS41	C211.1	Apply the concepts of logic for effective computation and relating problems in the Engineering domain.
		C211.2	Analyze the concepts of functions and relations to various fields of Engineering. Comprehend the concepts of Graph Theory for various applications of Computational sciences.
		C211.3	Apply discrete and continuous probability distributions in analysing the probability models arising in the engineering field.
		C211.4	Make use of the correlation and regression analysis to fit a suitable mathematical model for the statistical data.
		C211.5	Construct joint probability distributions and demonstrate the validity of testing the hypothesis.

Sl.No.	Subject Code	Course Code	Course Outcomes
29	DESIGN AND ANALYSIS OF ALGORITHMS 21CS42	C212.1	Analyze the performance of the algorithms, state the efficiency using asymptotic notations and analyze mathematically the complexity of the algorithm.
		C212.2	Apply divide and conquer approaches and decrease and conquer approaches in solving the problems analyze the same
		C212.3	Apply the appropriate algorithmic design technique like greedy method, transform and conquer approaches and compare the efficiency of algorithms to solve the given problem
		C212.4	Apply and analyze dynamic programming approaches to solve some problems. and improve an algorithm time efficiency by sacrificing space.
		C212.5	Apply and analyze backtracking, branch and bound methods and to describe P, NP and NPComplete problems.

Sl.No.	Subject Code	Course Code	Course Outcomes
	MICRO	C213.1	Explain C-Compilers and optimization
	CONTROLLER	C212.2	Describe the ARM microcontroller's architectural features
30	AND	C215.2	and program module.
	EMBEDDED	C213.3	Apply the knowledge gained from programming on ARM

	SYSTEM 21CS43		to different applications.
		C213.4	Program the basic hardware components and their application selection method.
		C213.5	Demonstrate the need for a real-time operating system for embedded system applications.

Sl.No.	Subject Code	Course Code	Course Outcomes
31	OPERATING SYSTEM 21CS44	C214.1	Identify the structure of an operating system and its scheduling mechanism.
		C214.2	Demonstrate the allocation of resources for a process using scheduling algorithm.
		C214.3	Identify root causes of deadlock and provide the solution for deadlock elimination
		C214.4	Explore about the storage structures and learn about the Linux Operating system.
		C214.5	Analyze Storage Structures and Implement Customized Case study

Sl.No.	Subject Code	Course Code	Course Outcomes
32	BIOLOGY FOR ENGINEERS 21BE45	C215.1	Elucidate the basic biological concepts via relevant industrial applications and case studies
		C215.2	Evaluate the principles of design and development, for exploring novel bioengineering projects.
		C215.3	Corroborate the concepts of biomimetics for specific requirements.
		C215.4	Think critically towards exploring innovative biobased solutions for socially relevant problems.

Sl.No.	Subject Code	Course Code	Course Outcomes
	PYTHON	C216.1	Demonstrate proficiency in handling of loops and creation of functions.
		C216.2	Identify the methods to create and manipulate lists, tuples and dictionaries.
33	PROGRAMMING LABORATORY	C216.3	Discover the commonly used operations involving regular expressions and file system.
	21CSL46	C216.4	Interpret the concepts of Object-Oriented Programming as used in Python.
		C216.5	Determine the need for scraping websites and working with PDF, JSON and other file formats.
Sl.No.	Subject Code	Course Code	Course Outcomes
		C217.1	Analyse the basic structure of Indian Constitution.
34	CONSTITUTION OF INDIA & PROFESSIONAL ETHICS 21CIP47	C217.2	Remember their Fundamental Rights, DPSP's and Fundamental Duties (FD's) of our constitution.
		C217.3	know about our Union Government, political structure & codes, procedures.
		C217.4	Understand our State Executive & Elections system of India.
		C217.5	Remember the Amendments and Emergency Provisions, other important provisions given by the constitution

Sl.No.	Subject Code	Course Code	Course Outcomes
		C218.1	Describe the fundamentals of web and concept of HTML.
	WEB PROGRAMMING 21CSL481	C218.2	Use the concepts of HTML, XHTML to construct the web
			pages.
25		C218.3	Interpret CSS for dynamic documents.
55		C218.4	Evaluate different concepts of JavaScript & Construct
		C210.7	dynamic documents.
		C218.5	Design a small project with JavaScript and XHTML.

Sl.No.	Subject Code	Course Code	Course Outcomes
UNIVER HUMA 36 VALU 21UH		C219.1	They would become more responsible in life, and in handling problems with sustainable solutions, while keeping human relationships and human nature in mind.
		C219.2	They would have better critical ability.
	HUMAN VALUES	C219.3	They would also become sensitive to their commitment towards what they have understood (human values, human relationship and human society).
	210H49	C219.4	It is hoped that they would be able to apply what they have learnt to their own self in different day to-day settings in real life, at least a beginning would be made in this direction.

Sl.No.	Subject Code	Course Code	Course Outcomes
		C220.1	Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.
	INTER/INTRA	C220.2	Determine the challenges and future potential for his / her internship organization in particular and the sector in general.
37	37 INTERNSHIP 21INT49	C220.3	Test the theoretical learning in practical situations by accomplishing the tasks assigned during the internship period.
		C220.4	Apply various soft skills such as time management, positive attitude and communication skills during performance of the tasks assigned in internship organization
		C220.5	Analyze the functioning of internship organization and recommend changes for improvement in processes.

S.No.	Subject Code	Course	Course Outcomes
		Code	
		C221.1	Test for consistency and solve the system of linear equations
38 21MATDIP41 Additional		C221.2	Solve higher order differential equations
	21MATDIP41	C221.3	Apply elementary probability theory and solve related problems
	C221.4	To interpolate/extrapolate from the given data	
	Mathematics- II	C221.5	Apply the knowledge of numerical methods in modelling and solving engineering problems

Sl.No.	Subject Code	Course Code	Course Outcomes
		C301.1	Acquire fundamental understanding of the core concepts in automata theory and Theory of Computation
	AUTOMATA THEORY AND 39 COMPILER DESIGN 21CS51	C301.2	Design and develop lexical analyzers, parsers and code generators
39		C301.3	Design Grammars and Automata (recognizers) for different language classes and become knowledgeable about restricted models of Computation (Regular, Context Free) and their relative powers
		C301.4	Acquire fundamental understanding of the structure of a Compiler and Apply concepts automata theory and Theory of Computation to design Compilers
		C301.5	Design computations models for problems in Automata theory and adaptation of such model in the field of compilers

Sl.No.	Subject Code	Course Code	Course Outcomes
		C302.1	Learn the basic needs of communication system.
	COMPUTER	C302.2	Interpret the communication challenges and its solution.
40	NETWORKS	C302 3	Identify and organize the communication system network
40	21CS52	C302.3	components
		C302.4	Design communication networks for user requirements.

Sl.No.	Subject Code	Course Code	Course Outcomes
		C303.1	Identify, analyze and define database objects, enforce integrity constraints on a database using RDBMS
41 DATABASE MANAGE- MENT SYSTEMS 21CS53	DATABASE	C303.2	Use Structured Query Language (SQL) for database manipulation and also demonstrate the basic of query evaluation.
	MANAGE- MENT	C303.3	Design and build simple database systems and relate the concept of transaction, concurrency control and recovery in database
	21CS53	C303.4	Develop application to interact with databases, relational algebra expression.
		C303.5	Develop applications using tuple and domain relation expression from queries

Sl.No.	Subject Code	Course Code	Course Outcomes
		C304.1	Apply the knowledge of searching and reasoning techniques for different applications.
	ARTIFICIAL INTELLIG- ENCE AND	C304.2	Have a good understanding of machine leaning in relation to other fields and fundamental issues and challenges of machine learning.
42	42 MACHINE LEARNING	C304.3	Apply the knowledge of classification algorithms on various dataset and compare results
	21CS54	C304.4	Model the neuron and Neural Network, and to analyze ANN learning and its applications.
		C304.5	Identifying the suitable clustering algorithm for different pattern

Sl.No.	Subject Code	Course Code	Course Outcomes
	DATABASE	C305.1	Create, Update and query on the database
43	MANAGEM-	C305.2	Demonstrate the working of different concepts of DBMS

ENT SYSTEMS									
LABORATORY									
WITH	C205 2	Implement,	analyze	and	evaluate	the	project	developed	for an
MINI	C303.5	application							
PROJECT		11							
21CSL55									

S.No.	Subject Code	Course Code	Course Outcomes		
	RESEARCH	C306.1	To know the meaning of engineering research.		
	METHODO-	C_{20}	To know the procedure of Literature Review and Technical		
	LOGY & C306.2	Reading			
	INTELLE-	C306.3	To know the fundamentals of patent laws and drafting procedure.		
44	CTUAL	C20C 4	Understanding the copyright laws and subject matters of		
	PROPERTY	C306.4	copyrights and designs		
	RIGHTS	C206 5	Understanding the basis miniples of design rights		
	21RMI56	C300.5	Understanding the basic principles of design rights.		

S.No.	Subject Code	Course Code	Course Outcomes				
		C307.1	Understand the principles of ecology and environmental issues that apply to air land, and water issues on a global scale				
ENVIRONM- ENTAL 45 STUDIES 21CIV57	C307.2	Develop critical thinking and/or observation skills, and apply them to the analysis of a problem or question related to the environment.					
	C307.3	Demonstrate ecology knowledge of a complex relationship between biotic and a biotic components.					
	2101037	C307.4	Apply their ecological knowledge to illustrate and graph a problem and describe the realities that managers face when dealing with complex issues.				

Sl.No.	Subject Code	Course Code	Course Outcomes
	ANCHIAD	C308.1	Describe the features of Angular JS. CO
46	JS AND NODE JS 21CSL581	C308.2	Recognize the form validations and controls.
		C308.3	Implement Directives and Controllers.
		C308.4	Evaluate and create database for simple application.
		C308.5	Plan and build webservers with node using Node .JS.

Sl.No.	Subject Code	Course Code	Course Outcomes
	SOFTWARE ENGINEE- RING AND PROJECT MANAGE- MENT 21CS61	C309.1	Understand the activities involved in software engineering and analyze the role of various process models
47		C309.2	Explain the basics of object-oriented concepts and build a suitable class model using modelling techniques
		C309.3	Describe various software testing methods and to understand the importance of agile methodology and DevOps
		C309.4	Illustrate the role of project planning and quality management in software development
		C309.5	Understand the importance of activity planning and different planning models

Sl.No.	Subject Code	Course Code	Course Outcomes
48	FULL- STACK DEVELOP- MENT 21CS62	C310.1	Understand the working of MVT based full stack web development with Django.
		C310.2	Designing of Models and Forms for rapid development of web pages.
		C310.3	Analyze the role of Template Inheritance and Generic views for developing full stack web applications.
		C310.4	Apply the Django framework libraries to render nonHTML contents like CSV and PDF.
		C310.5	Perform jQuery based AJAX integration to Django Apps to build responsive full stack web applications,

Sl.No.	Subject Code	Course Code	Course Outcomes
49	SOFTWARE TESTING 21IS63	C311.1	Explain the significance of software testing and quality assurance in software development
		C311.2	Apply the concepts of software testing to assess the most appropriate testing method.
		C311.3	Analyze the importance of testing in software development.
		C311.4	Evaluate the suitable testing model to derive test cases for any given software
		C311.5	Develop appropriate document for the software artefact.

S.No.	Subject Code	Course Code	Course Outcomes
		C312.1	Understand the data in different forms
50	DAIA SCIENCE AND VISUALIZ- ATION 21CS644	C312.2	Apply different techniques to Explore Data Analysis and the Data Science Process
		C312.3	Analyze feature selection algorithms & design a recommender system
		C312.4	Evaluate data visualization tools and libraries and plot graphs.
		C312.5	Develop different charts and include mathematical expressions.

S.No.	Subject Code	Course Code	Course Outcomes
51	REMOTE SENSING AND GIS 21CV651	C313.1	Understand and remember the principle of Remote Sensing (RS) and Geographical Information Systems (GIS) data acquisition and its applications
		C313.2	Apply RS and GIS technologies in various fields of engineering and social needs
		C313.3	Analyse and evaluate the information obtained by applying RS and GIS technologies.
		C313.4	Create a feasible solution in the different fields of application of RS and GIS

S.No.	Subject Code	Course Code	Course Outcomes
	SOFTWARE	C314.1	List out the requirements for the given problem and develop test
52	TESTING		cases for any given problem.
	LABORA-	C314.2	Design and implement the solution for given problem and to
	TORY	C314.2	design flow graph
	21ISL66	C314.3	Use Eclipse/NetBeans IDE and testing tools to design, develop,

			debug the Project and create appropriate document for the software artifact.
		C314.4	Use the appropriate functional testing strategies. Compare the different testing techniques.
		C314.5	Classify and Compare the problems according to a suitable testing model applying the test coverage metrics.

S.No.	Subject Code	Course Code	Course Outcomes
	MINI PROJECT 21ISMP67	C315.1	Perform a literature search to review current knowledge and developments in the chosen technical area.
		C315.2	Undertake detailed technical work in the chosen area
53		C315.3	Prepare reports to establish work completed, and to schedule any additional changes to be done within the specified time frame for the project.
		C315.4	Deliver presentation on the area of work being done and any specific contributions done related to the field of work
		C315.5	Prepare a formal report describing the work undertaken and results obtained also to publish work in National / International proceedings to compete and upgrade the work

S.No.	Subject Code	Course Code	Course Outcomes	
54	INNOVA- TION / ENTREPR- ENEURSHIP /SOCIETAL INTERN- SHIP 21INT68	C316.1	Construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.	
		C316.2	Determine the challenges and future potential for his / her internship organization in particular and the sector in general.	
		C316.3	Test the theoretical learning in practical situations by accomplishing the tasks assigned during the internship period.	
		INTERN- SHIP 21INT68	C316.4	Apply various soft skills such as time management, positive attitude and communication skills during performance of the tasks assigned in internship organization
		C316.5	Analyze the functioning of internship organization and recommend changes for improvement in processes.	