

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**
**Course Outcomes-2021 Scheme**

Sl. No.	Subject Code	Course Code	Course Outcomes
1	21MAT11 Calculus And Differential Equation	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

Sl. No.	Subject Code	Course Code	Course Outcomes
2	21PHY12 Engineering Physics	C102.1	Interpret the types of mechanical vibrations and their applications, the role of Shock waves in various fields.
		C102.2	Demonstrate the quantisation of energy for microscopic system.
		C102.3	Apply LASER and Optical fibers in opto electronic system.
		C102.4	Illustrate merits of quantum free electron theory and applications of Hall effect
		C102.5	Analyse the importance of XRD and Electron Microscopy in Nano material characterization

Sl. No.	Subject Code	Course Code	Course Outcomes
3	21ELE13 Basic Electrical Engineering	C103.1	Analyse basic DC and AC electric circuits.
		C103.2	Explain the working principles of transformers and electrical machines.
		C103.3	Explain the concepts of electric power transmission and distribution of power.
		C103.4	Understand the electricity billing, and working principles of circuit protective devices and personal safety measures.

Sl. No.	Subject Code	Course Code	Course Outcomes
4	21CIV14 Elements Of Civil Engineering And Mechanics	C104.1	Understand the various fields of civil engineering
		C104.2	compute the resultant of force system and resolution of a force
		C104.3	comprehend action of forces ,moments and other types of loads on rigid bodies and compute reactive forces
		C104.4	locate the centroid and compute the moment of inertia of regular and built up sections
		C104.5	Analyze the bodies in motion

Sl. No.	Subject Code	Course Code	Course Outcomes
5	21PHYL16 Engineering Physics Lab	C105.1	Understand the measuring techniques
		C105.2	Operate different instruments and be capable to analyse the experimental results.
		C105.3	Construct the circuits and their analysis

Sl. No.	Subject Code	Course Code	Course Outcomes
6	21ELEL17 Basic Electrical Engineering Lab	C106.1	Verify KCL and KVL and maximum power transfer theorem for DC circuits.
		C106.2	Compare power factors of different types of lamps.
		C106.3	Demonstrate the measurement of the impedance of an electrical circuit and power consumed by a 3-phase load.
		C106.4	Analyze two-way and three-way control of lamps.
		C106.5	Explain the effects of open and short circuits in simple circuits.

Sl. No.	Subject Code	Course Code	Course Outcomes
7	21EVN15 Engineering Graphics	C107.1	Prepare and understand Engineering Drawings
		C107.2	Identify and apply the principles of orthographic projections of lines, planes and solids
		C107.3	Identify and apply the principles of orthographic projections and prepare development of lateral surfaces
		C107.4	Visualize 3D objects and Develop isometric projections

Sl. No.	Subject Code	Course Code	Course Outcomes
		C108.1	Understand and apply the Fundamentals of Communication Skills in their communication skills.

8	21EGH18 Communicative English	C108.2	Identify the nuances of phonetics, in to nation 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 the presentation.

Sl. No.	Subject Code	Course Code	Course Outcomes
9	21IDT19 Innovation and Design Thinking	C108.1	Appreciate various design process procedure
		C108.2	Generate and develop design ideas through different technique
		C108.3	Identify the significance of reverse Engineering to Understand products
		C108.4	Draw technical drawing for design ideas

Sl. No.	Subject Code	Course Code	Course Outcomes
10	21MAT21 Advanced Calculus And Numerical Methods	C109.1	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
		C109.2	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
		C109.3	Formulate physical problems to partial differential equations and to obtain solution for standard practical PDE's
		C109.4	Apply the knowledge of numerical methods in modelling of various physical and engineering phenomena
		C109.5	Solve first order ordinary differential equations arising in engineering problems.

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11	21CHE12 Engineering Chemistry	C110.1	Discuss the electrochemical energy systems such as electrodes and batteries
		C110.2	Explain the fundamental concepts of corrosion ,its control and surface modification methods namely electroplating and electroless plating
		C110.3	Enumerate the importance, synthesis and applications of polymers. Understand properties and applications of nanomaterials
		C110.4	Describe the principles of green chemistry , understand properties and application alternative fuels

		C110.5	Illustrate the fundamental principles of water chemistry , applications of volumetric and analytical instrumentations
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12	21PSP13 Problem Solving Through C Programming	C111.1	Elucidate the basic architecture and functionalities of a computer and also recognize the hardware parts
		C111.2	Apply programming constructs of C language to solve the real world problem
		C111.3	Explore user-defined data structures like arrays in implementing solutions to problems like searching and sorting
		C111.4	Explore user-defined data structures like structures, unions and pointers in implementing solutions
		C111.5	Design and Develop Solutions to problems using modular programming constructs using functions

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13	21ELN14 Basic Electronics	C112.1	Describe the concepts of electronic circuits encompassing power supplies, amplifiers and oscillators.
		C112.2	Present the basics of digital logic engineering including data representation, circuits and the microcontroller system with associated sensors and actuators.
		C112.3	Discuss the characteristics and technological advances of embedded systems
		C112.4	Relate to the fundamentals of communication engineering spanning from the frequency spectrum to the various circuits involved including antennas
		C112.5	Explain the different modes of communications from wired to wireless and the computing involved.

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14	21EME15 Elements Of Mechanical Engineering	C113.1	Identify different sources of energy and their conversion process.
		C113.2	Apply the principles of thermodynamics to evaluate the properties of steam and explain the concepts of energy generation.
		C113.3	Understand the types of IC engines, analyze and compute performance parameters of IC engines and explain the principle of refrigeration system
		C113.4	Apply the knowledge of engineering materials, joining processes and power transmission elements in various engineering applications.
		C113.5	Identify the different types of machine tools and their applications in performing various machining operations

			through conventional and computer control methods
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15	21CHEL16 Engineering Chemistry Lab	C114.1	Determine the pKa and coefficient of Viscosity of a given organic liquid
		C114.2	Estimate the amount of substance present in the given solution using Potentiometer Conductometric and Colorimetric
		C114.3	Determine the total hardness and chemical oxygen demand in the given solution by volumetric analysis method
		C114.4	Estimate the percentage of Nickel, copper and Iron in the given analyte solution by titration method
		C114.5	Demonstrate flame photometric estimation of sodium & potassium and the synthesis of nanomaterials by Precipitation method

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16	21CPL17 C Programming Lab	C115.1	Define the problem statement and identify the need for computer programming
		C115.2	Make use of C compiler, IDE for programming, identify and correct the syntax and syntactic errors in programming
		C115.3	Develop algorithm, flowchart and write programs to solve the given problem
		C115.4	Demonstrate use of functions, recursive functions, arrays, strings, structures and pointers in problem solving.
		C115.5	Document the inference and observations made from the implementation.

Sl. No.	Subject Code	Course Code	Course Outcomes
17	21EGH28 Professional writing skills in English	C116.1	To understand and identify the Common Errors in Writing and Speaking
		C116.2	To Achieve better Technical writing and Presentation skills
		C116.3	To read Technical proposals properly and make them to Write good technical reports
		C116.4	Acquire Employment and Workplace communication skills
		C116.5	To learn about Techniques of Information Transfer through presentation in different level

S.No.	Subject Code	Course Code	Course Outcomes
18	21SFH29 Scientific Foundations of Health	C118.1	To understand Health and wellness (and its Beliefs)
		C118.2	To acquire Good Health & It's balance for positive mindset
		C118.3	To inculcate and develop the healthy lifestyle habits for good health.
		C118.4	To Create of Healthy and caring relationships to meet the requirements of MNC and LPG world
		C118.5	To adopt the innovative & positive methods to avoid risks from harmful habits in their campus & outside the campus.
		C118.6	To positively fight against harmful diseases for good health through positive mindset.

Sl. No.	Subject Code	Course Code	Course Outcomes
19	21MAT31 Transform Calculus, Fourier Series And Numerical Techniques	C201.1	Explain the fundamentals of data structures and their applications essential for implementing solutions to problems.
		C201.2	Illustrate representation of data structures: Stack, Queues, Linked Lists, Trees and Graphs
		C201.3	Design and Develop Solutions to problems using Arrays, Structures, Stack, Queues, Linked Lists.
		C201.4	Explore usage of Trees and Graph for application development.
		C201.5	Apply the Hashing techniques in mapping key value pairs.

Sl. No.	Subject Code	Course Code	Course Outcomes
20	21CS32 Data Structures And Application	C202.1	Explain different data structures and their applications
		C202.2	Apply array, stack and queue data structures to solve the given problems
		C202.3	Use the concept of linked list in problem solving.
		C202.4	Develop solutions using trees and graphs to model the real-world problem
		C202.5	Explain the advanced Data Structures concepts such as Hashing Techniques and Optimal Binary Search Trees

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21	21CS33 Analog and Digital Electronics	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

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22	21CS34 Computer Organization	C204.1	Understand the organization and architecture of computer systems, their structure and operation and logical operations with different data types
		C204.2	Illustrate the concept of machine instructions and programs
		C204.3	Demonstrate different ways of communicating with I/O devices
		C204.4	Describe different types memory devices and their functions
		C204.5	Explain arithmetic and logical operations with different data types

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23	21CSL35 Object Oriented Programming with JAVA Lab	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/IO and GUI concepts

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24	21SCR36 Social Connect and Responsibilities	C206.1	Understand social responsibility
		C206.2	Practice sustainability and creativity
		C206.3	Showcase planning and organizational skills

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25	21CSL381	C207.1	Understand the basics of computers and prepare

	Mastering Office		documents and small presentations.
		C207.2	Attain the knowledge about spreadsheet/worksheet with various options.
		C207.3	Create simple presentations using templates various options available
		C207.4	Demonstrate the ability to apply application software in an office environment.
		C207.5	Use MS Office to create projects, applications.

Sl. No.	Subject Code	Course Code	Course Outcomes
26	21KSK37 Samskrutika Kannada	C208.1	ಕನ್ನಡ ಭಾಷೆ, ಸಾಹಿತ್ಯ ಮತ್ತು ಕನ್ನಡದ ಸಂಸ್ಕೃತಿಯ ಪರಿಚಯವಾಗುತ್ತದೆ.
		C208.2	ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಆಧುನಿಕ ಪೂರ್ವ ಮತ್ತು ಆಧುನಿಕ ಕಾವ್ಯಗಳು ಮತ್ತು ಸಂಸ್ಕೃತಿಯ ಬಗ್ಗೆ ಅಸಕ್ತಿಯು ಮೂಡುತ್ತದೆ.
		C208.3	ತಾಂತ್ರಿಕ ವ್ಯಕ್ತಿಗಳ ಪರಿಚಯವಾಗುತ್ತದೆ.
		C208.4	ಕನ್ನಡ ಭಾಷಾಭ್ಯಾಸ, ಸಾಮಾನ್ಯ ಕನ್ನಡ ಹಾಗೂ ಆಡಳಿತ ಕನ್ನಡದ ಪದಗಳ ಪರಿಚಯವಾಗುತ್ತದೆ.
	OR		
	21KSK38 Balake Kannada	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 conversation.

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27	21MATDIP31 Additional Mathematics-I	C209.1	Use derivatives and partial derivatives to calculate the rate of change of multivariate functions.
		C209.2	Apply concepts of complex numbers and vector algebra to analyse the problems arising in a related area.
		C209.3	Analyse position, velocity and acceleration in two and three dimensions of vector-valued functions.
		C209.4	Learn techniques of integration including the evaluation of double and triple integrals.
		C209.5	Identify and solve first-order ordinary differential equations



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28	21MATCS41 Mathematical Foundations for Computing, Probability Statistics	C210.1	Apply the concepts of logic for effective computation and relating problem in the Engineering domain
		C210.2	Analyze the concepts of functions and relations to various fields of engineering comprehend the concepts of Graph Theory for various applications of computational sciences
		C210.3	Apply discrete and continuous probability distributions in analyzing the probability models arising in the engineering field
		C210.4	Make use of the correlation and regression analysis to fit a suitable mathematical model for the statistical data
		C210.5	Construct joint probability distributions and demonstrate the validity of testing hypothesis

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29	21CS42 Design Analysis and Algorithms	C211.1	Analyze the performance of the algorithms, state the efficiency using asymptotic notations and analyze mathematically the complexity of the algorithm.
		C211.2	Apply divide and conquer approaches and decrease and conquer approaches in solving the problems analyze the same
		C211.3	Apply the appropriate algorithmic design technique like greedy method, transform and conquer approaches and compare the efficiency of algorithms to solve the given problem
		C211.4	Apply and analyze dynamic programming approaches to solve some problems. and improve an algorithm time efficiency by sacrificing space.
		C211.5	Apply and analyze backtracking, branch and bound methods and to describe P, NP and NP-Complete problems.

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30	21CS43 Microcontroller and Embedded Systems	C212.1	Describe the architectural features and instructions of ARM microcontroller.
		C212.2	Apply the knowledge gained for programming ARM for different applications.
		C212.3	Interface external device and I/O with ARM microcontroller and Interpret the basic hardware components and their selection method based on the characteristics.
		C212.4	Develop the hardware/software c0-design and firmware design approaches.
		C212.5	Demonstrate the need of real time operating system for

			embedded system applications.
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31	21CS44 Operating system	C213.1	Identify the structure of the operating system and it's scheduling mechanism
		C213.2	Demonstrate the allocation of resources for a process using scheduling algorithms
		C213.3	Identify the root cause of deadlock and provide the solution for deadlock elimination
		C213.4	Explore about the storage structure and learn about the Linux Operating system
		C213.5	Analyse storage structure and implement customized case Study

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32	21BE45 Biology For Engineers	C214.1	Familiarize the students with the basic biological concepts and their engineering applications
		C214.2	Enable the students with an understanding of bio design principles to create novel devices and structures.
		C214.3	Provide the students an appreciation of how biological systems can be re-designed as substitute products for natural systems.
		C214.4	Motivate the students develop the interdisciplinary vision of biological engineering.

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33	21CSL46 Python Programming Laboratory	C215.1	Demonstrate proficiency in handling of loops and creation of functions
		C215.2	Identify the methods to create and manipulate lists, tuples and dictionaries.
		C215.3	Discover the commonly used operations involving regular expressions and file system.
		C215.4	Interpret the concepts of Object-Oriented Programming as used in Python.
		C215.5	Determine the need for scraping websites and working with PDF, JSON and other file formats.

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34	21CIP47 Constitution of India & Professional	C216.1	Analyse the basic structure of Indian Constitution.
		C216.2	Remember their Fundamental Rights, DPSP's and Fundamental Duties (FD's) of our constitution.
		C216.3	know about our Union Government, political structure &

			codes, procedures.
		C216.4	Understand our State Executive & Elections system of India.
		C216.5	Remember the Amendments and Emergency Provisions, other important provisions given by the constitution.

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35	21CSL481 Web Programming	C217.1	Describe the fundamentals of web and concept of HTML
		C217.2	Use the concepts of HTML, XHTML to construct the web pages.
		C217.3	Interpret CSS for dynamic documents.
		C217.4	Evaluate different concepts of JavaScript & Construct dynamic documents.
		C217.5	Design a small project with JavaScript and XHTML.

Sl. No.	Subject Code	Course Code	Course Outcomes
36	21INT49 Internship	C218.1	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.
		C218.2	Determine the challenges and future potential for his / her internship organization in particular and the sector in general.
		C218.3	Test the theoretical learning in practical situations by accomplishing the tasks assigned during the internship period.
		C218.4	Apply various soft skills such as time management, positive attitude and communication skills during performance of the tasks assigned in internship organization
		C218.5	Analyze the functioning of internship organization and recommend changes for improvement in processes.

Sl. No.	Subject Code	Course Code	Course Outcomes
37	21UH49 Universal Human Values	C219.1	To help the students appreciate the essential complementarily between 'VALUES' and 'SKILLS'. To ensure sustained happiness and prosperity which are the core aspirations of all human beings.
		C219.2	To ensure sustained happiness and prosperity which are the core aspirations of all human beings.
		C219.3	To facilitate the development of a Holistic perspective among students towards life and profession as well as towards happiness and prosperity based on a correct understanding of the Human reality and the rest of

			existence.
		C219.4	Create a holistic perspective forms the basis of Universal Human Values and movement towards value-based living in a natural way.
		C219.5	To highlight plausible implications of such a Holistic understanding in terms of ethical human conduct, trustful and mutually fulfilling human behavior and mutually enriching interaction with Nature.

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38	21MATDIP41 Additional Mathematics-II	C220.1	Test for consistency and solve the system of linear equations
		C220.2	Solve higher order differential equations
		C220.3	Apply elementary probability theory and solve related problems
		C220.4	To interpolate/extrapolate from the given data
		C220.5	Apply the knowledge of numerical methods in modelling and solving engineering problems

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39	21CS51 Automata Theory and compiler design	C301.1	Explain the fundamental concepts in automata theory and formal languages, Illustrate basics of finite automata and Compiler design.
		C301.2	Demonstrate and apply the concepts of Regular Expressions in the design and development of lexical analyzers.
		C301.3	Construct Grammars for different language classes and demonstrate its applications in the design of Parser.
		C301.4	Build Push down Automata to recognize context free languages and develop bottom-up parsers for any given Context free grammars.
		C301.5	Demonstrate the working principle of Turing machine and its variance, illustrate the compiler phases in generating target code.

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40	21CS52 Computer Networks	C302.1	Describe the architectural features and instructions of ARM microcontroller.
		C302.2	Apply the knowledge gained for programming ARM for different applications.
		C302.3	Interface external device and I/O with ARM microcontroller and Interpret the basic hardware components and their selection method based on the characteristics.

		C302.4	Develop the hardware/software c0-design and firmware design approaches.
		C302.5	Demonstrate the need of real time operating system for embedded system applications.

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41	21CS53 Database Management System	C303.1	Identify, analyze and define database objects, enforce integrity constraints on a database using RDBMS
		C303.2	Use Structured Query Language (SQL) for database manipulation and also demonstrate the basic of query evaluation.
		C303.3	Design and build simple database systems and relate the concept of transaction, concurrency control and recovery in database
		C303.4	Develop application to interact with databases, relational algebra expression.
		C303.5	Develop applications using tuple and domain relation expression from queries.

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42	21CS54 Artificial Intelligence & Machine learning	C304.1	To Apply the knowledge of searching & reasoning techniques for different applications.
		C304.2	To understand Machine learning in relation to other fields and fundamental issues and challenges of machine learning.
		C304.3	To apply the knowledge of classification algorithms on various datasets and compare the results.
		C304.4	To model the neuron and neural network, and to analyze ANN learning and its applications.
		C304.5	To identify suitable clustering algorithm for different pattern.

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43	21RMI56 Research Methodology & Intellectual property Rights	C305.1	Understand the meaning of engineering research.
		C305.2	Understand the procedure of Literature Review and Technical Reading
		C305.3	Explain the fundamentals of patent laws and drafting procedure
		C305.4	Understanding the copyright laws and subject matters of copyrights and designs
		C305.5	Understanding the basic principles of design rules.

Sl. No.	Subject Code	Course Code	Course Outcomes
44	21CSL57 Database Management System Laboratory	C306.1	Identify, analyze and define database objects, enforce integrity constraints on a database using RDBMS
		C306.2	Use Structured Query Language (SQL) for database manipulation and also demonstrate the basic of query evaluation.
		C306.3	Design and build simple database systems and relate the concept of transaction, concurrency control and recovery in database
		C306.4	Develop application to interact with databases, relational algebra expression.
		C306.5	Develop applications using tuple and domain relation expression from queries.

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45	21CIV57 Environmental studies	C307.1	Understand the principles of ecology and environmental issues that apply to air, land, and water issues on a global scale,
		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
		C307.4	Apply their ecological knowledge to illustrate and graph a problem and describe the realities that managers face when dealing with complex issues.

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46	21CSL581 Angular JS and node JS	C308.1	Develop Angular JS programs using basic features
		C308.2	Develop dynamic Web applications using AngularJS modules
		C308.3	Make use of form validations and controls for interactive applications
		C308.4	Apply the concepts of Expressions, data bindings and filters in developing Angular JS programs
		C308.5	Make use of modern tools to develop Web applications

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47	21CS61 Software Engineering &	C309.1	Understand the activities involved in software engineering and analyze the role of various process models.

	Project Management	C309.2	Develop a comprehensive understanding of requirements engineering and to apply UML models and data modeling concepts to supplement use cases
		C309.3	Describe various software testing methods and to understand the importance of agile methodology
		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.

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48	21CS62 Full Stack Development	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 non HTML contents like CSV and PDF.
		C310.5	Perform jQuery based AJAX integration to Django Apps to build responsive full stack web applications.

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49	21CS63 Computer Graphics and Image Processing	C311.1	Construct geometric objects using Computer Graphics principles and OpenGL APIs.
		C311.2	Use OpenGL APIs and related mathematics for 2D and 3D geometric Operations on the objects.
		C311.3	Design GUI with necessary techniques required to animate the created objects
		C311.4	Apply OpenCV for developing Image processing applications.
		C311.5	Apply Image segmentation techniques along with programming, using OpenCV, for developing simple applications.

Sl. No.	Subject Code	Course Code	Course Outcomes
50	21CS644 Data Science And Visualization	C312.1	To introduce data collection and pre-processing techniques for data science
		C312.2	Explore analytical methods for solving real life problems through data exploration techniques
		C312.3	Illustrate different types of data and its visualization
		C312.4	Find different data visualization techniques and tools
		C312.5	Design and map element of visualization well to

			perceive information
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Sl. No.	Subject Code	Course Code	Course Outcomes
51	21CV654 Conservation of Natural Resources	C313.1	Learn types of land forms , soil conservation and sustainable land use planning.
		C313.2	Apprehend water resources, types, distribution, planning and conservation.
		C313.3	Know the atmospheric composition of air, pollution and effects on human beings, animals and plants. Air pollution control.
		C313.4	Apprehend basics of biodiversity and ecosystems.

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52	21CSL66 Computer Graphics and Image Processing Laboratory	C314.1	Use openGL /OpenCV for the development of mini Projects.
		C314.2	Analyze the necessity mathematics and design required to demonstrate basic geometric transformation techniques.
		C314.3	Demonstrate the ability to design and develop input interactive techniques.
		C314.4	Apply the concepts to Develop user friendly applications using Graphics and IP concepts.

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53	21CSMP67 Mini Project	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
		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
		C315.1	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

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54	21INT68 Internship	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.
		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.