Branch: Information Technology	**Year: II**	**Semester: ODD 2021-22**
Subject Code: KCS301	**Subject Name:** Data Structure	
Course Outcomes	1. Describe how arrays, linked lists, stacks, queues, trees, and graphs are represented in memory, used by the algorithms and their common applications.	
	2. Discuss the computational efficiency of the sorting and searching algorithms.	
	3. Implementation of Trees and Graphs and perform various operations on these data structure.	
	4. Understanding the concept of recursion, application of recursion and its implementation and removal of recursion.	
	5. Identify the alternative implementations of data structures with respect to its performance to solve a real world problem.	

Branch: Information Technology	**Year: II**	**Semester: ODD 2021-22**
Subject Code: KCs 302	**Subject Name:** Computer Organization & Architecture	
Course Outcomes	1. Study of the basic structure and operation of a digital computer system.	
	2. Analysis of the design of arithmetic & logic unit and understanding of the fixed point and floating point arithmetic operation	
	3. Implementation of control unit techniques and the concept of Pipelining	
	4. Understanding the hierarchical memory system, cache memories and virtual memory	
	5. Understanding the different ways of communicating with I/O devices and standard I/O interfaces	

Branch: Information Technology	**Year: II**	**Semester: ODD 2021-22**
Subject Code: KCS 303	**Subject Name:** Discrete Structures & Theory of Logic	
Course Outcomes	1. Write an argument using logical notation and determine if the argument is or is not valid.	
	2. Understand the basic principles of sets and operations in sets.	
	3. Demonstrate an understanding of relations and functions and be able to determine their properties.	
	4. Demonstrate different traversal methods for trees and graphs.	
	5. Model problems in Computer Science using graphs and trees.	

Branch: Information Technology	**Year: II**	**Semester: ODD 2021-22**
Subject Code: KOE 038	**Subject Name :** Electric Engineering	
Course Outcomes	1. Understand the concept of PN junction and special purpose diodes.	
	2. Study the application of conventional diode and semiconductor diode.	
	3. Analyze the I-V characteristics of BJT and FET	
	4. Analyze the Op-Amp, amplifiers, integrator, and differentiator.	
	5. Understand the concept of digital storage oscilloscope and compare of DSO with analog oscilloscope	

Branch: Information Technology	**Year: II**	**Semester: ODD 2021-22**
Subject Code: KAS301	**Subject Name:** Technical Communication	
Course Outcomes	1. Understand the nature and objective of Technical Communication relevant for the work place as Engineers.	
	2. Utilize the technical writing for the purposes of Technical Communication and its exposure in various dimensions.	
	3. Enhance confidence in face of diverse audience.	
	4. Create a vast know-how of the application of the learning to promote their technical competence.	
	5. EValuate their efficacy as fluent & efficient communicators by learning the voice-dynamics.	

Branch: Information Technology	**Year: II**	**Semester: ODD 2021-22**
Subject Code: KNC 302	**Subject Name:** PYTHON PROGRAMMING	
Course Outcomes	1. To read and write simple Python programs.	
	2. To develop Python programs with conditionals and loops	
	3. To define Python functions and to use Python data structures –- lists, tuples, dictionaries	
	4. To do input/output with files in Python	
	5. To do searching ,sorting and merging in Python	

Branch: Information Technology	**Year: II**	**Semester: ODD 2021-22**
Subject Code: KCS 351	**Subject Name:** Data Structure Lab	
Course Outcomes	1. Demonstrate familiarity with major algorithms and data structures	
	2. Choose the appropriate data structure and algorithm design method for a specified application.	
	3. Identify which algorithm or data structure to use in different scenarios.	
	4. Familiar with writing recursive methods.	
	5. Implement indexing and hashing techniques used in several other fields of computer science eg Database, Networks etc.	

Branch: Information Technology	**Year: II**	**Semester: ODD 2021-22**
Subject Code: KCS302	**Subject Name:** Computer Organization & Architecture Lab	
Course Outcomes	1. Implement the basic logic gates.	
	2. Design various combinational circuits such as adders, code converter, multiplier decoder, and multiplexer using logic gates and verify their working.	
	3. Implement the basic building block of the sequential circuits (i.e. Flip Flop).	
	4. Design the 8-bit Arithmetic Logic Unit.	
	5. Design of data path and control unit of the computer	

Branch: Information Technology	**Year: II**	**Semester: ODD 2021-22**
Subject Code: KCS353	**Subject Name:** DSTL Lab	
Course Outcomes	1. Understand and implement the concepts of set theory and mathematical induction.	
	2. Implement the concept of recursion and Boolean algebra.	
	3. Implement state of art problems using the concepts of discrete structures.	

Branch: Information Technology	**Year: II**	**Semester: ODD 2021-22**
Subject Code: KCS354	**Subject Name:** Mini project	
Course Outcomes	1. Discover potential research areas in the field of IT	
	2. Compare and contrast the several existing solutions for research challenge	
	3. Demonstrate an ability to work in teams and manage the conduct of the research study	
	4. Formulate and propose a plan for creating a solution for the research plan identified	
	5. To report and present the findings of the study conducted in the preferred domain	

	Year: II	**Semester: EVEN 2021-22**
Subject Code: KAS 402	**Subject Name: Mathematics IV**	
Course Outcomes	1. Remember the concept of partial differential equation and to solve partial differential equations.	
	2. Analyze the concept of partial differential equations to evaluate the problems concerned with partial differential equations	
	3. Understand the concept of correlation, moments, skewness and kurtosis and curve fitting	
	4. Remember the concept of probability to evaluate probability distributions	
	5. Apply the concept of hypothesis testing and statistical quality control to create control charts.	

Branch: Information Technology	**Year: II**	**Semester: EVEN 2021-22**
Subject Code: KVE401	**Subject Name: Universal Human Values and Professional Ethics**	
Course Outcomes	1. Understand the significance of value inputs in a classroom, distinguish between values and skills, understand the need, basic guidelines, content and process of value education, explore the meaning of happiness and prosperity and do a correct appraisal of the current scenario in the society.	
	2. Distinguish between the Self and the Body, understand the meaning of Harmony in the Self the Co-existence of Self and Body.	
	3. Understand the value of harmonious relationship based on trust, respect and other naturally acceptable feelings in human-human relationships and explore their role in ensuring a harmonious society.	
	4. Understand the harmony in nature and existence, and work out their mutually fulfilling participation in the nature.	
	5. Distinguish between ethical and unethical practices, and start working out the strategy to	

	actualize a harmonious environment wherever they work

Branch: Information Technology	**Year: II**	**Semester: EVEN 2021-22**
Subject Code: KCS401	**Subject Name: Operating System**	
Course Outcomes	1. Understand the structure and functions of OS	
	2. Learn about Processes, Threads and Scheduling algorithms	
	3. Understand the principles of concurrency and Deadlocks	
	4. Learn various memory management scheme	
	5. Study I/O management and File systems.	

Branch: Information Technology	**Year: II**	**Semester: EVEN 2021-22**
Subject Code: KCS402	**Subject Name: Theory of Automata and Formal Languages**	
Course Outcomes	1. Analyse and design finite automata, pushdown automata, Turing machines, formal languages, and grammars	
	2. Analyse and design, Turing machines, formal languages, and grammars	
	3. Demonstrate the understanding of key notions, such as algorithm, computability, decidability, and complexity through problem solving	
	4. Prove the basic results of the Theory of Computation.	
	5. State and explain the relevance of the Church-Turing thesis	

Branch: Information Technology	**Year: II**	**Semester: EVEN 2021-22**
Subject Code: KIT401	**Subject Name:** Web Designing	
Course Outcomes	1. Understand principle of Web page design and about types of websites	
	2. Visualize and recognize the basic concept of HTML and application in web designing.	
	3. Recognize and apply the elements of Creating Style Sheet (CSS).	

	4. Understanding the basic concept of Java Script and its application.
	5. Introduce basics concept of Web Hosting and apply the concept of SEO

Branch: Information Technology	**Year: II**	**Semester: EVEN 2021-22**
Subject Code: KNC401	**Subject Name: Computer System Security**	
Course Outcomes	1. To discover software bugs that pose cyber security threats and to explain how to fix the bugs to mitigate such threats	
	2. To discover cyber-attack scenarios to web browsers and web servers and to explain how to mitigate such threats	
	3. To discover and explain mobile software bugs posing cyber security threats, explain and recreate exploits, and to explain mitigation techniques	
	4. To articulate the urgent need for cyber security in critical computer systems, networks, and world wide web, and to explain various threat scenarios	
	5. To articulate the well known cyber attack incidents, explain the attack scenarios, and explain mitigation techniques	

Branch: Information Technology	**Year: II**	**Semester: EVEN 2021-22**
Subject Code: KCS451	**Subject Name: Operating System Lab**	
Course Outcomes	1. Simulate CPU Scheduling Algorithms like FCFS, RR, SJF, Priority and Banker's Algorithm for deadlock avoidance and prevention.	
	2. Program the FIFO, LRU, and OPTIMAL page replacement algorithms.	
	3. Use basic UNIX/LINUX Commands	

Branch: Information Technology	**Year: II**	**Semester: EVEN 2021-22**
Subject Code: KIT451	**Subject Name: Web Designing Lab**	
Course Outcomes	1. Design webpages using HTML / XML and CSS.	
	2. Create user interface using Javascripts.	
	3. Create dynamic webpages using serverside scripting	

Branch: Information Technology	**Year: II**	**Semester: EVEN 2021-22**
Subject Code: KCS453	**Subject Name: Python Language Programming Lab**	
Course Outcomes	1. Write, test, and debug simple Python programs. Implement Python programs with conditionals and loops.	
	2. Develop Python programs step-wise by defining functions and calling them.	
	3. Use Python lists, tuples, dictionaries for representing compound data. Read and write data from/to files in Python.	