Branch: Information Technology	Year: II	Semester: ODD 2022-23
Subject Code: KCS 301	**Subject Name:** Data Structure	
Course Outcomes	**KCS 301.1** Describe how arrays, linked lists, stacks, queues, trees, and graphs are represented in memory, used by the algorithms and their common applications.	
	KCS 301.2 Discuss the computational efficiency of the sorting and searching algorithms.	
	KCS 301.3 Implementation of Trees and Graphs and perform various operations on these data structure.	
	KCS 301.4 Understanding the concept of recursion, application of recursion and its implementation and removal of recursion.	
	KCS 301.5 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 2022-23
Subject Code: KCS 302	**Subject Name:** Computer Organization & Architecture	
Course Outcomes	**KCS 302.1** Study of the basic structure and operation of a digital computer system.	
	KCS 302.2 Analysis of the design of arithmetic & logic unit and understanding of the fixed point and floating point arithmetic operations.	
	KCS 302.3 Implementation of control unit techniques and the concept of Pipelining.	
	KCS 302.4 Understanding the hierarchical memory system, cache memories and virtual memory.	
	KCS 302.5 Understanding the different ways of communicating with I/O devices and standard I/O interfaces.	

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Branch: Information Technology	Year: II	Semester: ODD 2022-23
Subject Code: KCS 303	**Subject Name:** Discrete Structures & Theory of Logic	
Course Outcomes	**KCS 303.1** Write an argument using logical notation and determine if the argument is or is not valid.	
	KCS 303.2 Understand the basic principles of sets and operations in sets.	
	KCS 303.3 Demonstrate an understanding of relations and functions and be able to determine their properties.	
	KCS 303.4 Demonstrate different traversal methods for trees and graphs.	
	KCS 303.5 Model problems in Computer Science using graphs and trees.	

Branch: Information Technology	Year: II	Semester: ODD 2022-23
Subject Code: KOE 038	**Subject Name :** Electronics Engineering	
Course Outcomes	**KOE 038.1** Understand fundamentals and working of electronic devices.	
	KOE 038.2 Characterize semiconductors, diodes, transistors and operational amplifiers.	
	KOE 038.3 Design simple analog circuits.	
	KOE 038.4 Analyze communication systems.	

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Branch: Information Technology	Year: II	Semester: ODD 2022-23
Subject Code: KVE 301	**Subject Name:** Universal Human Values	
Course Outcomes	**KVE 301.1** 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	
	KVE 301.2 Distinguish between the Self and the Body, understand the meaning of Harmony in the Self the Co-existence of Self and Body.	
	KVE 301.3 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.	
	KVE 301.4 Understand the harmony in nature and existence, and work out their mutually fulfilling participation in the nature.	
	KVE 301.5 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: ODD 2022-23
Subject Code: KNC 302	**Subject Name:** Python Programming	
Course Outcomes	**KNC 302.1** To read and write simple Python programs.	
	KNC 302.2 To develop Python programs with conditionals and loops.	
	KNC 302.3 To define Python functions and to use Python data structures – lists, tuples, dictionaries.	
	KNC 302.4 To do input/output with files in Python.	
	KNC 302.5 To do searching ,sorting and merging in Python.	

Branch: Information Technology	Year: II	Semester: ODD 2022-23
Subject Code: KCS 351	**Subject Name:** Data Structure using C Lab	
Course Outcomes	**KCS 351.1** Demonstrate familiarity with major algorithms and data structures.	
	KCS 351.2 Choose the appropriate data structure and algorithm design method for a specified application.	
	KCS 351.3 Identify which algorithm or data structure to use indifferent scenarios.	
	KCS 351.4 Familiar with writing recursive methods.	
	KCS 351.5 Implement indexing and hashing techniques used in several other fields of computer science eg. Database, Networks etc.	

Branch: Information Technology	Year: II	Semester: ODD 2022-23
Subject Code: KCS 352	**Subject Name:** Computer Organization Lab	
Course Outcomes	**KCS 352.1** Implement the basic logic gates.	
	KCS 352.2 Design various combinational circuits such as adders,code converter, multiplier decoder, and multiplexer using logic gates and verify their working.	
	KCS 352.3 Implement the basic building block of the sequentialcircuits (i.e. Flip Flop).	
	KCS 352.4 Design the 8-bit Arithmetic Logic Unit.	
	KCS 352.5 Design of data path and control unit of the computer	

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Branch: Information Technology	Year: II	Semester: ODD 2022-23
Subject Code: KCS 353	**Subject Name:** Discrete Structure & Logic Lab	
Course Outcomes	**KCS 353.1** Understand and implement the concepts of set theoryand mathematical induction.	
	KCS 353.2 Implement the concept of recursion and Boolean algebra.	
	KCS 353.3 Implement state of art problems using the concepts ofdiscrete structures.	

Branch: Information Technology	Year: II	Semester: ODD 2022-23
Subject Code: KCS 354	**Subject Name:** Mini project or Internship Assessment	
Course Outcomes	**KCS 354.1** Discover potential research areas in the field of IT	
	KCS 354.2 Compare and contrast the several existing solutions forresearch challenge	
	KCS 354.3 Demonstrate an ability to work in teams and managethe conduct of the research study	
	KCS 354.4 Formulate and propose a plan for creating a solutionfor the research plan identified	
	KCS 354.5 To report and present the findings of the study conducted in the preferred domain	

Branch: Information Technology	Year: II	Semester: EVEN 2022-23
Subject Code: KAS 402	**Subject Name:** Mathematics IV	
Course Outcomes	**KAS 402.1** The idea of partial differentiation and types of partial differential equations.	
	KAS 402.2 The idea of classification of second partial differential equations, wave, heat equation and transmission lines.	
	KAS 402.3 The basic ideas of statistics including measures of central tendency, correlation, regression and their properties.	
	KAS 402.4 The ideas of probability and random variables and various discrete and continuous probability distributions and their properties.	
	KAS 402.5 The statistical methods of studying data samples, hypothesis testing and statistical quality control, control charts and their properties.	

Branch: Information Technology	Year: II	Semester: EVEN 2022-23
Subject Code: KAS 401	**Subject Name:** Technical Communication	
Course Outcomes	**KAS 401.1** Students will be enabled to understand the nature and objective of Technical Communication relevant for the work place as Engineers.	
	KAS 401.2 Students will utilize the technical writing for the purposes of Technical Communication and its exposure in various dimensions.	
	KAS 401.3 Students would imbibe inputs by presentation skills to enhance confidence in face of diverse audience.	
	KAS 401.4 Technical communication skills will create a vast know-how of the application of the learning to promote their technical competence.	
	KAS 401.5 It would enable them to evaluate their efficacy as fluent & efficient communicators by learning the voice-dynamics.	

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Branch: Information Technology	Year: II	Semester: EVEN 2022-23
Subject Code: KCS 401	**Subject Name:** Operating Systems	
Course Outcomes	**KCS 401.1** Understand the structure and functions of OS	
	KAS 401.2 Learn about Processes, Threads and Scheduling algorithms.	
	KAS 401.3 Understand the principles of concurrency and Deadlocks	
	KAS 401.4 Learn various memory management scheme	
	KAS 401.5 Study I/O management and File systems.	

Branch: Information Technology	Year: II	Semester: EVEN 2022-23
Subject Code: KCS 402	**Subject Name:** Theory of Automata and Formal Languages	
Course Outcomes	**KCS 402.1** Analyse and design finite automata, pushdown automata, Turing machines, formal languages, and grammars	
	KAS 402.2 Analyse and design, Turing machines, formal languages, and grammars	
	KAS 402.3 Demonstrate the understanding of key notions, such as algorithm, computability, decidability, and complexity through problem solving	
	KAS 402.4 Prove the basic results of the Theory of Computation.	
	KAS 402.5 State and explain the relevance of the Church-Turing thesis.	

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Branch: Information Technology	Year: II	Semester: EVEN 2022-23
Subject Code: KIT 401	**Subject Name:** Web Designing	
Course Outcomes	**KIT 401.1** Understand principle of Web page design and about types of websites	
	KIT 401.2 Visualize and Recognize the basic concept of HTML and application in web designing.	
	KIT 401.3 Recognize and apply the elements of Creating Style Sheet (CSS).	
	KIT 401.4 Understanding the basic concept of Java Script and its application.	
	KIT 401.1 Introduce basics concept of Web Hosting and apply the concept of SEO	

Branch: Information Technology	Year: II	Semester: EVEN 2022-23
Subject Code: KNC 401	**Subject Name:** Computer System Security	
Course Outcomes	**KNC 401.1** To discover software bugs that pose cyber security threats and to explain how to fix the bugs to mitigate such threats.	
	KNC 401.2 To discover cyber attack scenarios to web browsers and web servers and to explain how to mitigate such threats.	
	KNC 401.3 To discover and explain mobile software bugs posing cyber security threats, explain and recreate exploits, and to explain mitigation techniques.	
	KNC 401.4 To articulate the urgent need for cyber security in critical computer systems, networks, and world wide web, and to explain various threat scenarios.	
	KNC 401.5 To articulate the well known cyber attack incidents, explain the attack scenarios, and explain mitigation techniques.	

Branch: Information Technology	Year: II	Semester: EVEN 2022-23
Subject Code: KCS 451	**Subject Name:** Operating System Lab	
Course Outcomes	**KCS 451.1** Simulate CPU Scheduling Algorithms like FCFS, RR, SJF, Priority and Banker's Algorithm for deadlock avoidance and prevention.	
	KCS 451.2 Program the FIFO, LRU, and OPTIMAL page replacement algorithms.	
	KCS 451.3 Use basic UNIX/LINUX Commands	

Branch: Information Technology	Year: II	Semester: EVEN 2022-23
Subject Code: KIT 451	**Subject Name:** Web Designing Lab	
Course Outcomes	**KIT 451.1** Design webpages using HTML / XML and CSS.	
	KIT 451.2 Create user interface using Javascripts.	
	KIT 451.3 Create dynamic web pages using server side Scripting.	

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Branch: Information Technology	Year: II	Semester: EVEN 2022-23
Subject Code: KCS 453	**Subject Name:** Python Language Programming Lab	
Course Outcomes	**KCS 453.1** Write, test, and debug simple python programs.	
	KCS 453.2 Implement python programs with conditionals and loops.	
	KCS 453.3 Develop python programs step-wise by defining functions and calling them.	
	KCS 453.4 Use python lists, tuples, dictionaries for representing compound data.	
	KCS 453.5 Read and write data from/to files in Python.	