Branch: Information Technology	**Year: III**	**Semester: ODD 2021-22**
Subject Code: KCS501	**Subject Name:** Database Management System	
Course Outcomes	1. Apply knowledge of database for real life applications.	
	2. Apply query processing techniques to automate the real time problems of databases	
	3. Identify and solve the redundancy problem in database tables using normalization	
	4. Understand the concepts of transactions, their processing so they will familiar with broad range of database management issues including data integrity, security and recovery.	
	5. Design, develop and implement a small database project using database tools.	

Branch: Information Technology	**Year: III**	**Semester: ODD 2021-22**
Subject Code: KIT501	1. **Subject Name:** Web Technology	
Course Outcomes	2. Apply the knowledge of the internet and related internet concepts that are vital in understanding web application development and analyze the insights of internet programming to implement complete application over the web.	
	3. Understand, analyze and apply the role of mark up languages like HTML, DHTML, and XML in the workings of the web and web applications.	
	4. Use web application development software tools i.e. XML, Apache Tomcat etc. and identifies the environments currently available on the market to design web sites.	
	5. Understand, analyze and build dynamic web pages using client side programming JavaScript and also develop the web application using servlet and JSP	
	6. Understand the impact of web designing by database connectivity with JDBC in the current market place where everyone use to prefer electronic medium for shopping, commerce, fund transfer and even social life also	

Branch: Information Technology	**Year: III**	**Semester: ODD 2021-22**
Subject Code: DAA503	**Subject Name:** Design and Analysis of Algorithm	
Course Outcomes	1. Design new algorithms, prove them correct, and analyze their asymptotic and absolute runtime and memory demands.	
	2. Find an algorithm to solve the problem (create) and prove that the algorithm solves the problem correctly (validate).	
	3. Understand the mathematical criterion for deciding whether an algorithm is efficient, and know many practically important problems that do not admit any efficient algorithms.	
	4. Apply classical sorting, searching, optimization and graph algorithms.	
	5. Understand basic techniques for designing algorithms, including the techniques of recursion, divide-and-conquer, and greedy	

Branch: Information Technology	**Year: III**	**Semester: ODD 2021-22**
Subject Code: KCS054	**Subject Name :** Object Oriented System Design	
Course Outcomes	1. To Understand the application development and analyze the insights of object oriented programming to implement application	
	2. To Understand, analyze and apply the role of overall modeling concepts (i.e. System, structural)	
	3. To Understand, analyze and apply oops concepts (i.e. abstraction, inheritance)	
	4. To know the concepts of C++ for understanding the implementation of object oriented concepts	
	5. To understand and apply object oriented paradigm concepts to implement real world problems.	

Branch: Information Technology	**Year: III**	**Semester: ODD 2021-22**
Subject Code: KCS055	1. **Subject Name:** Machine Learning Techniques	
Course Outcomes	2. To understand the need for machine learning for various problem solving	
	3. To understand a wide variety of learning algorithms and how to evaluate models generated from data	
	4. To understand the latest trends in machine learning	
	5. To design appropriate machine learning algorithms and apply the algorithms to a real-world problems	
	6. To optimize the models learned and report on the expected accuracy that can be achieved by applying the models	

Branch: Information Technology	**Year: III**	**Semester: ODD 2021-22**
Subject Code: KNC502	**Subject Name:** Indian Tradition, Culture and Society	
Course Outcomes	Ability to understand, connect up and explain basics of Indian Traditional knowledge modern scientific perspective.	

Branch: Information Technology	**Year: III**	**Semester: ODD 2021-22**
Subject Code: KCS 551	**Subject Name:** Database Management System Lab	
Course Outcomes	1. Understand and apply oracle 11 g products for creating tables, views, indexes, sequences and other database objects	
	2. Design and implement a database schema for company data base, banking data base, library information system, payroll processing system, student information system.	
	3. Write and execute simple and complex queries using DDL, DML, DCL and TCL.	
	4. Write and execute PL/SQL blocks, procedure functions, packages and triggers, cursors.	
	5. Enforce entity integrity, referential integrity, key constraints, and domain constraints on database.	

Branch: Information Technology	**Year: III**	**Semester: ODD 2021-22**
Subject Code: KIT551	**Subject Name:** Web Technology Lab	
Course Outcomes	1. Understand fundamentals of web development and Java, including defining classes, invoking methods, using class libraries, Applet, AWT.	
	2. Understand, analyze and apply the role of scripts/languages like HTML, DHTML, CSS, XML, DOM, and SAX to solve real world problems.	
	3. Understand, analyze and design the role of JavaScript for dynamic web pages.	
	4. Design and deploy different components using EJB, and database tables using JDBC and produce various results based on given query.	
	5. Design and deploy a server-side java application called Servlet & JSP tools to catch form data sent from client, process it and store it on database	

Branch: Information Technology	**Year: III**	**Semester: ODD 2021-22**
Subject Code: KCS553	**Subject Name:** Design and Analysis of Algorithm Lab Lab	
Course Outcomes	1. Understand and implement algorithm to solve problems by iterative approach.	
	2. Understand and implement algorithm to solve problems by divide and conquer approach.	
	3. Understand and implement algorithm to solve problems by Greedy algorithm approach	
	4. Understand and analyze algorithm to solve problems by Dynamic programming, backtracking	
	5. Understand and analyze the algorithm to solve problems by branch and bound approach	

Branch: Information Technology	**Year: II**	**Semester: ODD 2021-22**
Subject Code: KCS 554	**Subject Name:** Mini project	
Course Outcomes	1. Identify a problem and gather its requirements.	
	2. Design a solution of the problem using latest tools & techniques.	
	3. Develop a project using latest technology.	
	4. Develop professional skills and critical thinking to prepare for major project.	
	5. Demonstrate an ability to present project works to the evaluators	

Branch: Information Technology	**Year: III**	**Semester: EVEN 2021-22**
Subject Code: KCS601	**Subject Name:** Software Engineering	
Course Outcomes	1. Explain various software characteristics and analyze different software Development Models	
	2. Demonstrate the contents of a SRS and apply basic software quality assurance practices to ensure that design, development meet or exceed applicable standards	
	3. Compare and contrast various methods for software design.	
	4. Formulate testing strategy for software systems, employ techniques such as unit testing, Test driven development and functional testing	
	5. Manage software development process independently as well as in teams and make use of Various software management tools for development, maintenance and analysis.	

Branch: Information Technology	**Year: III**	**Semester: EVEN 2021-22**
Subject Code: KIT 601	**Subject Name:** Data Analytics	
Course Outcomes	1. Discuss various concepts of data analytics pipeline	
	2. Apply classification and regression techniques	
	3. Explain and apply mining techniques on streaming data	
	4. Compare different clustering and frequent pattern mining algorithms	
	5. Describe the concept of R programming and implement analytics on Big data using R	

Branch: Information Technology	**Year: III**	**Semester: EVEN 2021-22**
Subject Code: KCS 603	**Subject Name:** Computer Networks	
Course Outcomes	Explain basic concepts, OSI reference model, services and role of each layer of OSI model and TCP/IP, networks devices and transmission media, Analog and digital data transmission	
	Apply channel allocation, framing, error and flow control techniques	
	Describe the functions of Network Layer i.e. Logical addressing, subnetting & Routing Mechanism	
	Explain the different Transport Layer function i.e. Port addressing, Connection Management, Error control and Flow control mechanism.	
	Explain the functions offered by session and presentation layer and their Implementation.	
	Explain the different protocols used at application layer i.e. HTTP, SNMP, SMTP, FTP, TELNET and VPN.	

Branch: Information Technology	**Year: III**	**Semester: EVEN 2021-22**
Subject Code: KCS 061	**Subject Name:** Big Data	
Course Outcomes	Demonstrate knowledge of Big Data Analytics concepts and its applications in business.	
	Demonstrate functions and components of Map Reduce Framework and HDFS	
	Discuss Data Management concepts in NoSQL environment.	
	Explain process of developing Map Reduce based distributed processing applications.	
	Explain process of developing applications using HBASE, Hive, Pig etc.	

Branch: Information Technology	**Year: III**	**Semester: EVEN 2021-22**
Subject Code: KCS 062	**Subject Name:** Image Processing	
Course Outcomes	1. Explain the basic concepts of two-dimensional signal acquisition, sampling, quantization and color model.	
	2. Apply image processing techniques for image enhancement in both the spatial and frequency domains.	
	3. Apply and compare image restoration techniques in both spatial and frequency domain	
	4. Compare edge based and region based segmentation algorithms for ROI extraction	

	5. Explain compression techniques and descriptors for image processing

Branch: Information Technology	**Year: III**	**Semester: EVEN 2021-22**
Subject Code: KIT 061	**Subject Name:** Blockchain Architecture Design	
Course Outcomes	1. Describe the basic understanding of Blockchain architecture along with its primitive.	
	2. Explain the requirements for basic protocol along with scalability aspects.	
	3. Design and deploy the consensus process using frontend and backend	
	4. Apply Blockchain techniques for different use cases like Finance, Trade/Supply and Government activities.	

Branch: Information Technology	**Year: III**	**Semester: EVEN 2021-22**
Subject Code: KOE068	1. **Subject Name:** Software Project Management	
Course Outcomes	2. Identify project planning objectives, along with various cost/effort estimation models.	
	3. Organize & schedule project activities to compute critical path for risk analysis	
	4. Monitor and control project activities	
	5. Formulate testing objectives and test plan to ensure good software quality under SEI-CMM	
	6. Configure changes and manage risks using project management tools	

Branch: Information Technology	**Year: III**	**Semester: EVEN 2021-22**
Subject Code: KNC601	1. **Subject Name:** CONSTITUTION OF INDIA, LAW AND ENGINEERING	
Course Outcomes	2. Identify and explore the basic features and modalities about Indian constitution	
	3. Differentiate and relate the functioning of Indian parliamentary system at the center and state level	
	4. Differentiate different aspects of Indian Legal System and its related bodies	
	5. Discover and apply different laws and regulations related to engineering practices	
	6. Correlate role of engineers with different organizations and governance models	

Branch: Information Technology	**Year: III**	**Semester: EVEN 2021-22**
Subject Code: KCS651	**Subject Name:** Software Engineering Lab	
Course Outcomes	1. Identify ambiguities, inconsistencies and incompleteness from a requirements specification and state functional and non-functional requirement.	
	2. Identify different actors and use cases from a given problem statement and draw use case diagram to associate use cases with different types of relationship.	
	3. Draw a class diagram after identifying classes and association among them.	
	4. Graphically represent various UML diagrams, and associations among them and identify the logical sequence of activities undergoing in a system, and represent them pictorially.	
	5. Able to use modern engineering tools for specification, design, implementation and testing.	

Branch: Information Technology	**Year: III**	**Semester: EVEN 2021-22**
Subject Code: KIT651	**Subject Name:** Data Analytics Lab	
Course Outcomes	1. Implement numerical and statistical analysis on various data sources.	
	2. Apply data preprocessing and dimensionality reduction methods on raw data.	
	3. Implement linear regression technique on numeric data for prediction.	
	4. Execute clustering and association rule mining algorithms on different datasets.	
	5. Implement and evaluate the performance of KNN algorithm on different datasets.	

Branch: Information Technology	**Year: III**	**Semester: EVEN 2021-22**
Subject Code: KCS653	**Subject Name:** Computer Networks Lab	
Course Outcomes	1. Simulate different network topologies.	
	2. Implement various framing methods of Data Link Layer.	
	3. Implement various Error and flow control techniques. Implement network routing and addressing techniques.	
	4. Execute clustering and association rule mining algorithms on different datasets	
	5. Implement transport and security mechanisms	