

B.TECH

INFORMATION TECHNOLOGY

III YEAR

COURSE OUTCOMES

2021-22

THIRD YEAR

YEAR OF STUDY 2021-22

III YEAR(2021-22)		
COURSE CODE	UNIVERSITY CODE	COURSE NAME
C-301	KCS-501	DATABASE MANAGEMENT SYSTEM
C-302	KCS-503	DESIGN AND ANALYSIS OF ALGORITHM
C-303	KIT-501	WEB TECHNOLOGY
C-304	KCS-056	APPLICATIONS OF SOFT COMPUTING
C-305	KCS-054	OBJECT ORIENTED SYSTEM DESIGN
C-306	KNC-502	INDIAN TRADITION, CULTURE & SOCIETY
C-307	KCS-551	DATABASE MANAGEMENT SYSTEM LAB
C-308	KCS-553	DESIGN AND ANALYSIS OF ALGORITHM LAB
C-309	KIT-551	WT LAB
C-310	KCS-554	MINI PROJECT
C-311	KNC-601	CONSTITUTION OF INDIA
C-312	KCS-603	COMPUTER NETWORKS
C-313	KIT-601	DATA ANALYTICS
C-314	KCS-601	SOFTWARE ENGINEERING
C-315	KIT-061	BLOCKCHAIN ARCHITECTURE DESIGN
C-316	KOE-064	SOFTWARE PROJECT MANAGEMENT
C-317	KCS-653	COMPUTER NETWORKS LAB
C-318	KCS-651	SOFTWARE ENGINEERING LAB
C-319	KIT-651	DATA ANALYTICS LAB
		INDIAN TRADITION, CULTURE & SOCIETY

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C-301 : (KCS - 501) DATABASE MANAGEMENT SYSTEM		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-301.1	To understand the concepts of DBMS and would have acquired skills to analyse the real world problem domains in the context of DBMS and demonstrate the same through ER diagram.	K1,K2,K3
C-301.2	To apply and demonstrate with understanding of relational query languages such as SQL, Relational Algebra and Relational Calculus.	K3,K4
C-301.3	To relate the concepts of inference rules, data constraints and normalization. Students would also have acquired skills to identify application of the same.	K2,K3
C-301.4	To appraise the basic issues of Transaction processing and Serializability.	K2,K4
C-301.5	To classify various concurrency control techniques and recovery procedures.	K3,K6

C-301 : (KCS - 501) DATABASE MANAGEMENT SYSTEM

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-301.1	3	3	3	3	3		2	2	2	3	3	3
C-301.2	3	3	3	3	3		2	2	3	3	3	3
C-301.3	3	3	3	3	3		2	2	3	2	3	3
C-301.4	3	3	2	2	3	2	2	2	2	3	2	2
C-301.5	2	3	2	2	3	3	2	2	3	3	3	3
C-301	3	3	3	3	3	3	2	2	3	3	3	3

C-301 : (KCS - 501) DATABASE MANAGEMENT SYSTEM

CO	PSO1	PSO2
C-301.1	3	3
C-301.2	3	3
C-301.3	3	3
C-301.4	3	3
C-301.5	3	3
C-301	3	3

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C-302 : (KCS - 503) DESIGN AND ANALYSIS OF ALGORITHMS		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-302.1	To remember the performance of various sorting algorithms and use inductive proofs and invariants to analyse worst-case running times of iterative and recursive algorithms.	K4,K6
C-302.2	Will develop an understanding of various advanced data structures and their applications.	K5,K6
C-302.3	Apply the approaches like divide and conquer and greedy for solving like optimization problems like shortest path, convex hull, and MST.	K2,K5
C-302.4	Understand the dynamic-programming paradigm and analyse the situation where to use it. Able to develop the logic to solve a problem by way of guessing a good solution and backtrack to the original configuration if the solution is not optimal.	K2,K4
C-302.5	Distinguish between Approximation and NP-complete problems. Will be able to implement string matching and use randomized algorithms to improve performance.	K2,K3

C-302 : (KCS - 503) DESIGN AND ANALYSIS OF ALGORITHMS

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-302.1	3	3	3	3	2		2			2	3	3
C-302.2	3	3	3	3	3			2		3	3	3
C-302.3	3	3	3	3	3		2	2	2	3	3	3
C-302.4	3	3	3	3	3		2	2	2	3	3	3
C-302.5	3	3	3	3	3		2	2	2	3	3	3
C- 302	3	3	3	3	3		2	2	2	3	3	3

C-302 : (KCS - 503) DESIGN AND ANALYSIS OF ALGORITHMS

CO	PSO1	PSO2
C-302.1	3	3
C-302.2	3	3
C-302.3	3	3
C-302.4	3	3
C-302.5	3	3
C-302	3	3

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C-303 (KIT-501) WEB TECHNOLOGY		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-303.1	To understand the concept of Web technologies, Internet, Client-Server Computing and elementary Core Java.	K3,K6
C-303.2	To understand fundamental language in Web Technologies i.e. the HTML, XML and its variations.	K2,K3
C-303.3	To acquire the skill to do Network programming and Java script	K3,K6
C-303.4	To gain knowledge of syntactical and implementation of Enterprise Java Beans and Java Database Connectivity	K2,K4,K6
C-303.5	To impart the skill necessary for server-side programming	K2,K3,K4

C-303 (KIT-501) WEB TECHNOLOGY

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-303.1	3	2	3	3	2	2	2				2	2
C-303.2	3	2	3	3	2	2	2				2	2
C-303.3	3	2	3	3	2	2	2				2	2
C-303.4	3	2	3	3	2	2	2				2	2
C-303.5	3	2	3	3	2	2	2				3	2
C-303	3	2	3	3	2	2	2				2	2

C-303 (KIT-501) WEB TECHNOLOGY

CO	PSO1	PSO2
C-303.1	3	3
C-303.2	3	3
C-303.3	3	3
C-303.4	3	3
C-303.5	3	3
C-303	3	3

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C-304 : (KCS-056) APPLICATIONS OF SOFT COMPUTING		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-304.1	Recognize the feasibility of applying a soft computing methodology for a particular problem	K2,K4
C-304.2	Know the concepts and techniques of soft computing and foster their abilities in designing and implementing soft computing based solutions for real-world and engineering problems.	K4,K6
C-304.3	Apply neural networks to pattern classification and regression problems and compare solutions by various soft computing approaches for a given problem.	K3,K5
C-304.4	Apply fuzzy logic and reasoning to handle uncertainty and solve engineering problems	K3,K4
C-304.5	Apply genetic algorithms to combinatorial optimization problems	K3

C-304 : (KCS-056) APPLICATIONS OF SOFT COMPUTING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-304.1	2	3	3	2		2	2	2				
C-304.2	2	3	3	2		3	2	3	2	2	3	
C-304.3	3	2	3	2		2	3	3	2	2	3	3
C-304.4	2	3	2	3		2	3	2	2	2		3
C-304.5	2	3	2	2		1	2	2	1	1	1	1
C-304	2	2	3	2		2	2	2	2	2	3	3

C-304 : (KCS-056) APPLICATIONS OF SOFT COMPUTING

CO	PSO1	PSO2
C-304.1	3	3
C-304.2	3	3
C-304.3	3	3
C-304.4	3	3
C-304.5	3	3
C-304	3	3

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C-305: (KCS-054) OBJECT ORIENTED SYSTEM DESIGN		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-305.1	To understand the principles of object-oriented design, and have the ability to apply them. Students will understand and apply the Conceptual model of UML in object-oriented software modelling	K1,K2,K4,K5
C-305.2	To gain knowledge about basic Structural modelling, Behavioural modelling and Architectural modelling. To understand and apply terms as well as concepts of Collaboration diagrams.	K1,K2
C-305.3	To gain knowledge about the concepts of Object oriented analysis and design like Structured Analysis and Structured Design. To understand and apply object oriented programming style.	K2,K3
C-305.4	To understand the difference between object oriented and procedural oriented programming and Basics of C++ programming. To understand the concepts of C++ Functions like method overloading, inline function, friend function and virtual function and have ability to apply them.	K1,K2
C-305.5	To understand and program using C++ features such as Class, Objects, composition of objects, Operator overloading, inheritance, Polymorphism.	K4

C-305: (KCS-054) OBJECT ORIENTED SYSTEM DESIGN

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-305.1	3											3
C-305.2	3	3	3	2	1							3
C-305.3	3			2	1							3
C-305.4	3	3	3	2	1	3					3	3
C-305.5	3	3	3	2	1	3					3	3
C-305	3	3	3	2	1	3					3	3

C-313: (KCS-054) OBJECT ORIENTED SYSTEM DESIGN

CO	PSO1	PSO2
C-305.1	3	3
C-305.2	3	3
C-305.3	3	3
C-305.4	3	3
C-305.5	3	3
C-305	3	3

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C-306:(KNC-502) INDIAN TRADITION, CULTURE & SOCIETY		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-306.1	To recall & state thought process of social setting in ancient India to identify the roots and details of some contemporary issues faced by Indians and try to formulate & construct possible solutions to these challenges by digging deep into our past.	K1, K3, K5
C-306.2	The students are able to identify & inspect the importance of our surroundings & culture to design & formulate sustainable developmental solutions of prevailing social evils.	K2, K4, K5
C-306.3	The students are able to understand the issues related to 'Indian' culture, tradition and its composite character to apply the same in the socio-technological developments in present scenario.	K2, K3
C-306.4	The students will be able to identify and understand the holistic life styles of Yogic-science and wisdom described in ancient literatures that are important to design & develop sustainability in modern society with rapid technological advancements and societal disruptions.	K2, K5
C-306.5	The students are able to relate & assess Indian Knowledge System, Indian perspective of modern scientific world-view and basic principles of Yoga and holistic health care system to illustrate, devise, manage, the health care, architecture, water management & other systems in the present scenario.	K1, K3, K5, K6,

C-311:(KNC-602) INDIAN TRADITION, CULTURE & SOCIETY

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-306.1						2		2				2
C-306.2						2						2
C-306.3			2	2		2	2	2			2	2
C-306.4			2	2		2	2				2	2
C-306.5			2	2		2	2				2	2
C-306			2	2		2	2				2	2

C-311:(KNC-602) INDIAN TRADITION, CULTURE & SOCIETY

CO	PSO1	PSO2
C-306.1	2	
C-306.2	2	
C-306.3	2	
C-306.4	2	2
C-306.5	2	2
C-306	2	2

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C-307 : (KCS - 551) DATABASE MANAGEMENT SYSTEM LAB		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C307.1	To design and implement a database schema for a given problem-domain.	K1,K2
C307.2	To us Declare and enforce integrity constraints on a database using RDBMS. Student will design different views of tables.	K3
C307.3	To apply simple, embedded and nested queries on database.	K4,K6
C307.4	To understand and apply SQL Functions in various queries.	K5
C307.5	To program PL/SQL including stored procedures, stored functions, cursors, packages.	K2

C-307 : (KCS - 551) DATABASE MANAGEMENT SYSTEM LAB

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-307.1	3	3	3	3	2		2	3		2	2	3
C-307.2	3	3	3	3	3			3		3	2	3
C-307.3	3	3	3	3	3		2	3	2	3	2	3
C-307.4	3	3	3	2	3		2	3	2	3	2	3
C-307.5	3	3	3	2	3		2	3	2	3	3	3
C-307	3	3	3	3	3		2	3	2	3	2	3

C-307 : (KCS - 551) DATABASE MANAGEMENT SYSTEM LAB

CO	PSO1	PSO2
C-307.1	3	3
C-307.2	3	3
C-307.3	3	3
C-307.4	3	3
C-307.5	3	3
C-307	3	3

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C-308 : (KCS - 553) DESIGN AND ANALYSIS OF ALGORITHMS LAB		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-308.1	To identify the problem given and design the algorithm using various algorithm design techniques.	K3,K4
C-308.2	To implement various sorting, searching and graph traversal algorithms in a high level language	K2,K6
C-308.3	To analyse the performance of various algorithms in best case , average case and worst case	K1,K2,K5
C-308.4	To develop better understanding of data structures like stack, queues, lists, array and graph for efficient implementation of specified algorithmic design.	K2,K6
C-308.5	To investigate the importance of different algorithmic paradigms by comparing the performance of different algorithms for same problem in team.	K2,K4

C-308 : (KCS - 553) DESIGN AND ANALYSIS OF ALGORITHMS LAB

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-308.1	3	3	3	3	3		3	2	3	3	3	3
C-308.2	3	3	3	3	3		3	2	3	3	3	3
C-308.3	3	3	3	3	3		3	2	3	3	3	3
C-308.4	3	3	3	3	3	2	3	2	3	3	2	2
C-308.5	3	3	3	3	3	2	3	2	3	3	3	3
C-308	3	3	3	3	3	2	3	2	3	3	3	3

C-308 : (KCS - 553) DESIGN AND ANALYSIS OF ALGORITHMS LAB

CO	PSO1	PSO2
C-308.1	3	3
C-308.2	3	3
C-308.3	3	3
C-308.4	3	3
C-308.5	3	3
C-308	3	3

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C-309: (KIT-551) WEB TECHNOLOGY LAB		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-309.1	To understand and apply the languages like HTML, DHTML, CSS, XML and to design web pages and identify the elements and attributes of each tag.	K2,K6
C-309.2	To understand java and apply JavaScript to design and validate web pages	K1,K3
C-309.3	To create dynamic web pages using JDBC, Servlet, JSP ,DTD and Cascading Styles sheets/XSL	K3,K5,K6
C-309.4	To install Tomcat and APACHE Web Server and use the same to deploy web pages	K3
C-309.5	To develop a small project using session tracking, Filter and Listeners	K4,K6

C-309: (KIT-551) WEB TECHNOLOGY LAB

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-309.1	3	3	3	3	3		2		3	2	3	3
C-309.2	3	3	3	3	3	2	2		3		3	3
C-309.3	3	3	3	3	3		2		3		3	3
C-309.4	3	3	3	3	3		2		3		3	3
C-309.5	3	3	3	3	3		2		3		3	3
C-309	3	3	3	3	3		2		3	2	3	3

C-309: (KIT-551) WEB TECHNOLOGY LAB

CO	PSO1	PSO2
C-309.1	3	3
C-309.2	3	3
C-309.3	3	3
C-309.4	3	3
C-309.5	3	3
C-309	3	3

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C-310 : (KCS-554) MINI PROJECT		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C310.1	Developing a technical artifact requiring new technical skills and effectively utilizing a new software tool to complete a task.	K4,K5
C310.2	Writing requirements documentation, Selecting appropriate technologies, identifying and creating appropriate test cases for systems.	K5, K6
C310.3	Demonstrating understanding of professional customs & practices and working with professional standards.	K4,K5
C310.4	Improving problem-solving, critical thinking skills and report writing.	K4,K5
C310.5	Learning professional skills like exercising leadership, behaving professionally, behaving ethically, listening effectively, participating as a member of a team, developing appropriate workplace attitudes.	K2, K4

C-310 : (KCS-554) MINI PROJECT

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-310.1	3	3		3		3	3	3	3	3	2	3
C-310.2	2	2		3				3	3	3		3
C-310.3	2	3	3	2	3	2		3	3	3		3
C-310.4	3		3		3		3	3	3	3	3	3
C-310.5			3		3	3	3	3	3	2	3	3
C-310	3	3	3	3	3	3	3	3	3	3	3	3

C-310 : (KCS-554) MINI PROJECT

CO	PSO1	PSO2
C-310.1	3	3
C-310.2	3	3
C-310.3	3	3
C-310.4	3	3
C-310.5	3	3
C-310	3	3

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C-311 : (KNC-601) CONSTITUTION OF INDIA		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-311.1	Identify and explore the basic features and modalities about Indian constitution.	K1, K2
C-311.2	Differentiate and relate the functioning of Indian parliamentary system at the center and state level.	K2, K4, K6
C-311.3	Differentiate different aspects of Indian Legal System and its related bodies.	K2, K3, K4, K6
C-311.4	Discover and apply different laws and regulations related to engineering practices.	K2, K3, K4, K5
C-311.5	Correlate role of engineers with different organizations and governance models	K3, K4, K6

C-311 : (KNC-501) CONSTITUTION OF INDIA

CO	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010	P011	P012
C-311.1												
C-311.2				2	2		3	3			2	3
C-311.3				2	2		3	3			2	3
C-311.4				2	2		3	3			2	3
C-311.5				2	2		3	3			2	3
C-311				2	2		3	3			2	3

C-311 : (KNC-501) CONSTITUTION OF INDIA

CO	PSO1	PSO2
C-311.1	2	
C-311.2	2	
C-311.3	2	
C-311.4	2	
C-311.5	2	
C-311	2	

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C312: (KCS-603) COMPUTER NETWORKS		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-312.1	Study the basic taxonomy and terminology of the computer networking and enumerate the layers of OSI model and TCP/IP model.	K1,K2
C-312.2	Students gets the understanding of data link layer concepts, design issues, and protocols.	K1,K2,K3
C-312.3	Students acquires the skills of the Network layer protocols and also classify the various routing protocols and analyse how to assign the IP addresses for the given network.	K2,K3,K4,K5
C-312.4	Students acquires the skills of the Transport layer protocols and interpreting congestion control algorithms in the sub-networks.	K2,K4
C-312.5	Student can understand various Application layer protocols.	K1,K2

C312: (KCS-603) COMPUTER NETWORKS

CO	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010	P011	P0 12
C-312.1	3	3	3	2	2	3	2		2			3
C-312.2	3	3	3	2	2	3	2		2			2
C-312.3	3	3	3	3	2	3	2		3			2
C-312.4	3	3	2	2	2	3	2		3			2
C-312.5	3	3	2	2	2	3	2		3			3
C-312	3	3	3	2	2	3	2		3			2

C312: (KCS-603) COMPUTER NETWORKS

CO	PSO1	PSO2
C-312.1	3	3
C-312.2	3	3
C-312.3	3	3
C-312.4	3	3
C-312.5	3	3
C-312	3	3

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C-313: (KIT-601) DATA ANALYTICS		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-313.1	Discuss various concepts of data analytics pipeline	K1,K2
C-313.2	Apply classification and regression techniques	K1,K2,K3
C-313.3	Explain and apply mining techniques on streaming data	K2,K3,K4,K5
C-313.4	Compare different clustering and frequent pattern mining algorithms	K2,K4
C-313.5	Describe the concept of R programming and implement analytics on Big data using R.	K1,K2

C-313: (KIT-601) DATA ANALYTICS

CO	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010	P011	P0 12
C-313.1	3	3	3	3	2		2	3		2	2	3
C-313.2	3	3	3	3	3			3		3	2	2
C-313.3	3	3	3	3	3		2	2	2	3	2	2
C-313.4	3	3	3	3	3		2	3	2	3	2	2
C-313.5	3	3	3	3	3		2	3	2	3	3	3
C-313	3	3	3	3	3		2	3	2	3	2	2

C-313: (KIT-601) DATA ANALYTICS

CO	PSO1	PSO2
C-313.1	3	3
C-313.2	3	3
C-313.3	3	3
C-313.4	3	3
C-313.5	3	3
C-313	3	3

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C-314: (KCS-601) SOFTWARE ENGINEERING		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-314.1	Explain various software characteristics and analyse different software Development Models	K1,K2,K3,K6
C-314.2	Demonstrate the contents of a SRS and apply basic software quality assurance practices to ensure that design, development meet or exceed applicable standards	K1,K3
C-314.3	Compare and contrast various methods for software design.	K1,K6
C-314.4	Formulate testing strategy for software systems, employ techniques such as unit testing, Test driven development and functional testing	K4,K5
C-314.5	Manage software development process independently as well as in teams and make use of Various software management tools for development, maintenance and analysis.	K3,K6

C-314: (KCS-601) SOFTWARE ENGINEERING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-314.1	3	2	3	3	2	2	2				2	2
C-314.2	3	2	3	3	2	2	2				2	2
C-314.3	3	2	3	3	2	2	2				2	2
C-314.4	3	2	3	3	2	2	2				2	2
C-314.5	3	2	3	3	2	2	2				3	2
C-314	3	2	3	3	2	2	2				2	2

C-314: (KCS-601) SOFTWARE ENGINEERING

CO	PSO1	PSO2
C-314.1	3	3
C-314.2	3	3
C-314.3	3	3
C-314.4	3	3
C-314.5	3	3
C-314	3	3

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C315 : (KIT-061) Blockchain Architecture Design		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-315.1	To understand the Blockchain Architecture, Blockchain design primitives, working of crypto currency and digital ledger. Students recall the crypto- primitives and understand their importance in Blockchain technology.	K1, K2
C-315.2	To understand various consensus protocols like RAFT, PBFT, Proof of Work and their applications in permissioned blockchain and crypto currencies. Students acquire skill to analyze consensus protocols on scalability and throughput parameters.	K2, K3, K4
C-315.3	To understand the working of Hyperledger fabric, its components, SDK, and frontend. Student acquire skills to design, build and deploy smart contract on Hyperledger fabric.	K2, K3, K5
C-315.4	To apply, analyze and evaluate the use of blockchain in Financial software, Capital markets, Supply chain Industries, Government initiatives like land record settlement and public distribution systems.	K3, K4, K5
C-315.5	To understand the security considerations for blockchain and learn to apply and evaluate Membership and Access control policies, Privacy in a Blockchain System and confidentiality for smart contracts. Students can integrate ideas from blockchain technology into their own projects.	K2, K3, K5, K6

C315 : (KIT-061) Blockchain Architecture Design

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-315.1	2	3	3							3	3	3
C-315.2	3	3	3	3	3						2	3
C-315.3	3	2			2						3	3
C-315.4	2	2	2		3	3		3	3		3	3
C-315.5	2	2	3		3	3		3		3	3	3
C-315	2	2	3	3	3	3		3	3	3	3	3

C315 : (KIT-061) Blockchain Architecture Design

CO	PSO1	PSO2
C-315.1	3	3
C-315.2	3	3
C-315.3	3	3
C-315.4	3	3
C-315.5	3	3
C-315	3	3

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Session 2021-22

C-316 : (KOE-068) SOFTWARE PROJECT MANAGEMENT		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-316.1	Identify project planning objectives, along with various cost/effort estimation models.	K3
C-316.2	Organize & schedule project activities to compute critical path for risk analysis	K3
C-316.3	Monitor and control project activities.	K4,K5
C-316.4	Formulate testing objectives and test plan to ensure good software quality under SEI-CMM.	K6
C-316.5	Configure changes and manage risks using project management tools.	K2,K4

C-316 : (KOE-068) SOFTWARE PROJECT MANAGEMENT

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-316.1	3											3
C-316.2	3	3	3	2	1							3
C-316.3	3			2	1							3
C-316.4	3	3	3	2	1	3					3	3
C-316.5	3	3	3	2	1	3					3	3
C-316	3	3	3	2	1	3					3	3

C-316 : (KOE-068) SOFTWARE PROJECT MANAGEMENT

CO	PSO1	PSO2
C-316.1	3	3
C-316.2	3	3
C-316.3	3	3
C-316.4	3	3
C-316.5	3	3
C-316	3	3

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Session 2021-22

C-317 : (KCS-653) COMPUTER NETWORK LAB		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-317.1	To understand and simulate various network topologies using CISCO packet tracer.	K1,K2
C-317.2	To create network in CISCO Packet Tracer using Routers connected with other network access equipment (like switches and buses) subsequently connected with end devices. Use commands to establish connectivity among them.	K2,K3,K4
C-317.3	To implement network layer protocols (like DHCP, RIP, OSPF) using CISCO packet tracer.	K2,K4
C-317.4	To resolve IP address to host name and host name to IP address using JAVA/C.	K2,K4,K5,K6
C-317.5	To implement a TCP based Client-Server System for one sided communication in JAVA/C.	K5,K6

C-317 : (KCS-653) COMPUTER NETWORK LAB

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C-317.1	2	2	2	2	2	2	2		2			2
C-317.2	2	2	2	2	2	2	2		2			2
C-317.3	3	3	3	3	2	3	2		3			2
C-317.4	3	3	3	3	3	3	2		3			2
C-317.5	3	3	2	2	2	3	2		3			2
C-317	3	3	2	2	2	3	2		3			2

C-317 : (KCS-653) COMPUTER NETWORK LAB

CO	PSO1	PSO2
C-317.1	3	2
C-317.2	3	2
C-317.3	3	3
C-317.4	3	3
C-317.5	3	3
C-317	3	3

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Session 2021-22

C-318: (KCS-651) SOFTWARE ENGINEERING LAB		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-318.1	Identify ambiguities, inconsistencies and incompleteness from a requirements specification and state functional and non-functional requirement	K1,K2
C-318.2	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	K4
C-318.3	Draw a class diagram after identifying classes and association among them	K3,K4
C-318.4	Graphically represent various UML diagrams, and associations among them and identify the logical sequence of activities undergoing in a system, and represent them pictorially	K2,K3
C-318.5	Able to use modern engineering tools for specification, design, implementation and testing	K5,K6

C-318: (KCS-651) SOFTWARE ENGINEERING LAB

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-318.1	3	3	3	3	2			3	3	2		2
C-318.2	3	3	3	3	3			3	3	3		2
C-318.3	3	3	3	3	3			3	3	3		3
C-318.4	2	3	3	3	3			3	3	3		3
C-318.5	3	3	3	3	3			3	3	2		3
C-318	3	3	3	3	3			3	3	3		3

C-318: (KCS-651) SOFTWARE ENGINEERING LAB

CO	PSO1	PSO2
C-318.1	3	2
C-318.2	3	3
C-318.3	2	3
C-318.4	3	3
C-318.5	3	3
C-318	3	3

III Year B.Tech (IT)

Session 2021-22

C-319: (KIT-651) DATA ANALYTICS LAB		
Course Outcomes (CO)		Bloom's Knowledge Level (KL)
C-319.1	Implement numerical and statistical analysis on various data sources	K1,K2
C-319.2	Apply data pre-processing and dimensionality reduction methods on raw data	K4
C-319.3	Implement linear regression technique on numeric data for prediction	K3,K4
C-319.4	Execute clustering and association rule mining algorithms on different datasets	K2,K3
C-319.5	Implement and evaluate the performance of KNN algorithm on different datasets	K5,K6

C-319: (KIT-651) DATA ANALYTICS LAB

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
C-319.1	3	3	3	3	1	3	3	2		2	2	3
C-319.2	3	3	3	3	2	3	3	2	2	2	2	3
C-319.3	3	3	3	3		3	3	2		2	2	3
C-319.4	3	3	3	3		3	3	2	2	2	2	3
C-319.5	3	3	3	3	3	3	3	2	2	2	2	3
C-319	3	3	3	3	2	3	3	2	2	2	2	3

C-319: (KIT-651) DATA ANALYTICS LAB

CO	PSO1	PSO2
C-319.1	3	3
C-319.2	3	3
C-319.3	3	3
C-319.4	3	3
C-319.5	3	3
C-319	3	3

Program Level Course Mapping With PO –Third Year (2021-22)

C O	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C-301												
C-302												
C-303												
C-304												
C-305												
C-306												
C-307												
C-308												
C-309												
C-310												
C-311												
C-312												
C-313												
C-314												
C-315												
C-316												
C-317												
C-318												
C-319												

Program Level Course mapping with PSO - Third Year (2021-22)

CO	PSO1	PSO2
C-301		
C-302		
C-303		
C-304		
C-305		
C-306		
C-307		
C-308		
C-309		
C-310		
C-311		
C-312		
C-313		
C-314		
C-315		
C-316		
C-317		
C-318		
C-319		