

Department: Computer Science & Information Technology

Academic Year -2024-25

Course Outcomes

B.TECH.6th SEM

**Software Engineering
(KCS-601)**

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Explain various software characteristics and analyze Different software Development Models..	K1,K2
(CO2)	Demonstrate the contents of a SRS and apply basic software quality assurance practices to ensure that design, development meet or exceed applicable standards.	K1,K2
(CO3)	Compare and contrast various methods for software Design	K2, K3
(CO4)	Formulate testing strategy for software systems, employ techniques such as unit testing, Test driven development and functional testing.	K3
(CO5)	Manage software development process independently as well as in teams and make use of Various software management tools for development, maintenance and analysis.	K5

**SOFTWARE PROJECT MANAGEMENT (OPEN ELECTIVE)
(KOE-068)**

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Identify project planning objectives, along with various cost/effort estimation models.	K3
(CO2)	Organize & schedule project activities to compute critical path for risk analysis.	K3
(CO3)	Monitor and control project activities.	K4,K5
(CO4)	Formulate testing objectives and test plan to ensure good software quality under SEI-CMM.	K6
(CO5)	Configure changes and manage risks using project management tools.	K2,K4

Computer Networks (KCS- 603)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	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	K1, K2
(CO2)	Apply channel allocation, framing, error and flow control techniques.	K3
(CO3)	Describe the functions of Network Layer i.e. Logical addressing, subnetting & Routing Mechanism.	K2, K3
(CO4)	Explain the different Transport Layer function i.e. Port addressing, Connection Management, Error control and Flow control mechanism.	K2,K3
(CO5)	Explain the functions offered by session and presentation layer and their Implementation and Explain the different protocols used at application layer i.e. HTTP, SNMP, SMTP, FTP, TELNET and VPN.	K2, K3

Software Engineering Lab (KCS-661)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Identify ambiguities, inconsistencies and incompleteness from a requirements specification and state functional and non-functional requirement	K2,K4
(CO2)	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	K3,K5
(CO3)	Draw a class diagram after identifying classes and association among them.	K4,K5
(CO4)	Graphically represent various UML diagrams , and associations among them and identify the logical sequence of activities undergoing in a system, and represent them pictorially	K4,K5
(CO5)	Able to use modern engineering tools for specification, design, implementation and testing	K3,K4

Computer Networks Lab (KCS-663)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Simulate different network topologies.	K3,K4
(CO2)	Implement various framing methods of Data Link Layer.	K3,K4
(CO3)	Implement various Error and flow control techniques.	K3,K4
(CO4)	Implement network routing and addressing techniques.	K3,K4
(CO5)	Implement transport and security mechanisms	K3,K4

Big Data (KCS-061)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Demonstrate knowledge of Big Data Analytics concepts and its applications in business.	K1,K2
(CO2)	Demonstrate functions and components of Map Reduce Framework and HDFS.	K1,K2
(CO3)	Discuss Data Management concepts in NoSQL environment.	K6
(CO4)	Explain process of developing Map Reduce based distributed processing applications.	K2,K5
(CO5)	Explain process of developing applications using HBASE, Hive, Pig etc.	K2,K5

Data Analytics (KIT 601)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Discuss various concepts of data analytics pipeline	K1,K2
(CO2)	Apply classification and regression techniques	K3
(CO3)	Explain and apply mining techniques on streaming data	K2,K3
(CO4)	Compare different clustering and frequent pattern mining algorithms	K4
(CO5)	Describe the concept of R programming and implement analytics on Big data using R	K2,K3

Data Analytics Lab (KIT 651)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Implement numerical and statistical analysis on various data sources	K3
(CO2)	Apply data preprocessing and dimensionality reduction methods on raw data	K3
(CO3)	Implement linear regression technique on numeric data for prediction	K3
(CO4)	Execute clustering and association rule mining algorithms on different datasets	K3
(CO5)	Implement and evaluate the performance of KNN algorithm on different datasets	K3,K4

INDIAN TRADITIONS, CULTURAL AND SOCIETY (KNC602)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Ability to understand, connect up and explain basics of Indian Traditional knowledge modern scientific perspective.	K2, K4
(CO2)	To sensitize students towards issues related to 'Indian' culture, tradition and its composite character.	K3,K5
(CO3)	To understand the importance of our surroundings and encourage the students to contribute towards sustainable development.	K2
(CO4)	To sensitize students towards issues related to 'Indian' culture, tradition and its composite character.	K4, K5
(CO5)	To acquaint students with Indian Knowledge System, Indian perspective of modern scientific world-view and basic principles of Yoga and holistic health care system.	K3, K4