

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING (AIML)

Academic Year -2024-25

Course Outcomes

B.TECH.6th SEM

**Software Engineering
(BCS601)**

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

Machine Learning Techniques (BCA1601)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	To understand the need for machine learning for various problem solving	K1, K2
(CO2)	To understand a wide variety of learning algorithms and how to evaluate models generated from data	K1, K3
(CO3)	To understand the latest trends in machine learning	K2, K3
(CO4)	To design appropriate machine learning algorithms and apply the algorithms to a realworld problems	K4, K6
(CO5)	To optimize the models learned and report on the expected accuracy that can be achieved by applying the models	K4, K5

Computer Networks (BCS603)

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.	K2, K3
(CO6)	Explain the different protocols used at application layer i.e. HTTP, SNMP, SMTP, FTP, TELNET and VPN.	K2

Software Engineering Lab (BCS651)

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

Machine Learning Lab (BCA1651)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Understand the fundamental concepts, terminologies, and scope of Machine Learning (ML)	K2
(CO2)	Explain different types of ML algorithms (Supervised, Unsupervised, Reinforcement Learning) and their applications.	K4
(CO3)	Implement ML algorithms using Python and ML libraries such as Scikit-learn, TensorFlow, or Keras.	K3
(CO4)	Evaluate and compare different ML models based on performance metrics (accuracy, precision, recall, etc.).	K5
(CO5)	Optimize and fine-tune ML models to improve their efficiency and accuracy.	K5,K6

Computer Networks Lab (BCS653)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Understand the fundamental concepts of computer networks, including network topologies, protocols, and models.	K2
(CO2)	Implement various network protocols and analyze their working using simulation tools such as Cisco Packet Tracer, NS2, or Wireshark.	K3
(CO3)	Configure and troubleshoot network devices (routers, switches) to establish and maintain network communication.	K3
(CO4)	Analyze and compare different routing algorithms and techniques used in computer networks.	K4
(CO5)	Evaluate network security measures, including firewalls and encryption techniques, for securing data transmission.	K5

Social Media Analytics and Data Analysis (BCAM061)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Understand basic concepts and need of social media analysis	K2
(CO2)	Understand the fundamental of graphs and matrices in social media analysis	K3
(CO3)	Understand networking fundamentals of social media analysis	K4
(CO4)	Understand social networking and modelling concepts and methods	K4
(CO5)	Understand processing and visualizing social media data	K5

Constitution of India (BNC601)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Identify and explore the basic features, principles, and significance of the Indian Constitution.	K2
(CO2)	Differentiate and relate the functioning of the Indian parliamentary system at the central and state levels.	K4
(CO3)	Examine the structure, powers, and functions of various constitutional bodies and the Indian legal system.	K4
(CO4)	Discover and apply different laws and regulations relevant to engineering practices and professional ethics.	K3
(CO5)	Correlate the role of engineers in governance, policy-making, and contributions to societal development.	K5

SOFTWARE PROJECT MANAGEMENT (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