

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING (AIML)

Academic Year -2024-25

Course Outcomes

B.TECH.5th SEM

**Database Management
System (BCS501)**

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Apply knowledge of database for real life applications.	K3
(CO2)	Apply query processing techniques to automate the real time problems of databases.	K3, K4
(CO3)	Identify and solve the redundancy problem in database tables using normalization.	K2, K3
(CO4)	Understand the concepts of transactions, their processing so they will familiar with broad range of database management issues including data integrity, security and recovery.	K2, K4
(CO5)	Design, develop and implement a small database project using database tools.	K3, K6

Artificial Intelligence (BCA1501)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Understand the basics of the theory and practice of Artificial Intelligence as a discipline and about intelligent agents.	K2
(CO2)	Understand search techniques and gaming theory.	K2, K3
(CO3)	The student will learn to apply knowledge representation techniques and problem-solving strategies to common AI applications.	K3, K4
(CO4)	Student should be aware of techniques used for classification and clustering.	K2, K3
(CO5)	Student should aware of basics of pattern recognition and steps required for it.	K2, K4

Design and Analysis of Algorithm (BCS503)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Design new algorithms, prove them correct, and analyze their asymptotic and absolute runtime and memory demands.	K4, K6
(CO2)	Find an algorithm to solve the problem (create) and prove that the algorithm solves the problem correctly (validate).	K5, K6
(CO3)	Understand the mathematical criterion for deciding whether an algorithm is efficient, and know many practically important problems that do not admit any efficient algorithms.	K2, K5
(CO4)	Apply classical sorting, searching, optimization and graph algorithms.	K2, K4
(CO5)	Understand basic techniques for designing algorithms, including the techniques of recursion, divide-and-conquer, and greedy.	K2, K3

Database Management System Lab (BCS551)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Understand and apply oracle 11 g products for creating tables, views, indexes, sequences and other database objects.	K2, K4
(CO2)	Design and implement a database schema for company data base, banking data base, library information system, payroll processing system, student information system.	K3, K5, K6
(CO3)	Write and execute simple and complex queries using DDL, DML, DCL and TCL	K4, K5
(CO4)	Write and execute PL/SQL blocks, procedure functions, packages and triggers, cursors.	K4, K5
(CO5)	Enforce entity integrity, referential integrity, key constraints, and domain constraints on database.	K3, K4

Artificial Intelligence Lab (BCA1551)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Use of python to understand the concept of AI	K3
(CO2)	Implementation of Different AI Techniques	K4, K5
(CO3)	Application of AI techniques in practical Life	K4
(CO4)	Understanding of Natural Language Tool Kit.	K2
(CO5)	Practical Application of Natural Language Tool Kit	K4, K5

Design and Analysis of Algorithm Lab (BCS553)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Implement algorithm to solve problems by iterative approach.	K2, K4
(CO2)	Implement algorithm to solve problems by divide and conquer approach	K3, K5
(CO3)	Implement algorithm to solve problems by Greedy algorithm approach.	K4, K5
(CO4)	Implement algorithm to solve problems by Dynamic programming, backtracking, branch and bound approach.	K4, K5
(CO5)	Implement algorithm to solve problems by branch and bound approach.	K3, K4

Mini Project (BCS554)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	<i>Identify & Define</i> real-world problems and propose innovative solutions using Artificial Intelligence (AI) and Machine Learning (ML) techniques.	K1
(CO2)	<i>Apply</i> fundamental AI/ML algorithms and tools to develop functional models for solving computational problems.	K3
(CO3)	<i>Analyze & Evaluate</i> different datasets to extract meaningful insights and improve model performance.	K4,K5
(CO4)	<i>Design & Implement</i> AI/ML-based solutions using appropriate programming frameworks and libraries (e.g., Python, TensorFlow, Scikit-learn, etc.).	K3,K6
(CO5)	<i>Integrate & Optimize</i> AI/ML models for better accuracy, efficiency, and deployment in real-world applications.	K5

Constitution of India (BNC501)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Understand the fundamental rights, duties, and directive principles of the Indian Constitution.	K2
(CO2)	Explain the structure, powers, and functions of the Legislative, Executive, and Judiciary branches of the government.	K2
(CO3)	Analyze the federal structure, center-state relations, and the role of constitutional amendments in governance.	K4
(CO4)	Evaluate the electoral process, emergency provisions, and role of statutory bodies like Election Commission, UPSC, and CAG.	K5
(CO5)	Apply constitutional knowledge to real-life legal, administrative, and governance issues.	K3

DATA ANALYTICS(BCS052)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Describe the life cycle phases of Data Analytics through discovery, planning and building.	K1
(CO2)	Understand and apply Data Analysis Techniques.	K2, K3
(CO3)	Implement various Data streams.	K3
(CO4)	Understand item sets, Clustering, frame works & Visualizations.	K2
(CO5)	Apply R tool for developing and evaluating real time applications.	K3, K5, K6

CLOUD COMPUTING (BCAM051)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Describe architecture and underlying principles of cloud computing.	K3
(CO2)	Explain need, types and tools of Virtualization for cloud.	K3, K4
(CO3)	Describe Services Oriented Architecture and various types of cloud services.	K2, K3
(CO4)	Explain Inter cloud resources management cloud storage services and their providers Assess security services and standards for cloud computing.	K2, K4
(CO5)	Analyze advanced cloud technologies.	K3, K6