

APPLIED PHYSICS (1st/2nd Semester)

Course Code: BPHY0-101

Course Outcomes:

The students after undertaking this course will be able to:

CO1: Understand the role of uncertainty in quantum mechanics and knowledge of behavior of microscopic particle

CO2: Understand physical significance of gradient, divergence, curl and Maxwell equation

CO3: Understand the different types of magnetic material and crystal structure

CO4: Understand the principle, construction and working of laser/ optical fiber.

CO5: Understand concept of the relativistic motion of body

APPLIED MATHEMATICS-I (1st/2nd Semester)

Course Code: BMAT0-101

Course Outcomes:

The students after undertaking this course will be able to:

CO1: The students after undertaking this course will be able to:

CO2: The tools of differentiation and integration of functions of a complex variable that are used in various techniques dealing engineering problems.

CO3: Recognition of sequences and series and able to test their convergence.

CO4: The effective mathematical tools for the solutions of differential equations that model physical processes.

COMMUNICATIVE ENGLISH (1st/2nd Semester)

Course Code: BHUM0-101

Course Outcomes:

The students after undertaking this course will be able to:

CO1: Understand and appreciate the need of communication training.

CO2: Use different strategies of effective communication and select the most appropriate mode of communication for a given situation.

CO3: Speak effectively and assertively

CO4: Correspond effectively through different modes of written communication.

CO5: Present himself/herself professionally through effective resumes and interviews.

BASICS OF ELECTRICAL ENGINEERING (1st/2nd Semester)

Course Code: BELE0-101

Course Outcomes:

The students after undertaking this course will be able to:

CO1: To understand and analyze basic DC and AC circuits.

CO2: To study the use and working principle of single-phase transformers.

CO3: To study the application and working principles of three phase and single-phase induction motors.

CO4: To introduce to the components of low voltage electrical installations.

HUMAN VALUES & PROFESSIONAL ETHICS (1st/2nd Semester)

Course Code: BHUM0-103

Course Outcomes:

The students after undertaking this course will be able to:

CO1: They will learn to understand meaning of values, Values as social fact and Universal values

CO2: They will learn to understand values, morality, ethics and their relation with Religion

CO3: They will learn to understand meaning and types of Professional Ethics, Goals of professional work and their problems

CO4: They will learn to understand the technology for and against mankind and environment

ENVIRONMENTAL SCIENCE (1st/2nd Semester)

Course Code: BESE0-101

Course Outcomes:

The students after undertaking this course will be able to:

CO1: Students will be able to identify global environmental problems arising due to various engineering/industrial and technological activities and the science behind these problems

CO2: Students will be able to realize the importance of ecosystem and biodiversity for maintaining ecological balance.

CO3: Students will be able to identify the major pollutants and abatement devices for environmental management and sustainable development.

CO4: Students will be able to estimate the current world population scenario and thus calculating the economic growth, energy requirement and demand.

CO5: Students will be able to understand the conceptual process related with the various climatologically associated problems and their plausible solutions.

APPLIED PHYSICS LAB. (1st/2nd Semester)

Course Code: BPHY0-102

Course Outcomes:

After undergoing this course student will be able to:

CO1: To Understand the working of CRO.

CO2: To understand the concept of oscillation in LCR Circuits

CO3: To understand the properties of Magnetic material

CO4: Knowledge about the electric circuit (LC and RC circuits)

COMMUNICATIVE ENGLISH LAB (1st/2nd Semester)

Course Code: BHUM0-102

Course Outcomes:

The students after undertaking this course will be able to:

CO1: Understand and appreciate the need of communication skills in personal and professional life.

CO2: Use different medias/channels of communication and select the most appropriate for a given situation.

CO3: Speak and present himself/herself professionally and socially effectively through effective talks, resumes, interviews etc.

BASICS OF ELECTRICAL ENGINEERING LAB. (1st/2nd Semester)

Course Code: BELE0-102

Course Outcomes:

After undergoing this course student will be able to:

CO1: Get an exposure to common electrical components and their ratings

CO2: Make electrical connections by wires of appropriate ratings

CO3: Understand the usage of common electrical measuring instruments.

CO4: Understand the basic characteristics of transformers and electrical induction motors.

MANUFACTURING PRACTICES (1st/2nd Semester)

Course Code: BMFP0-101

Course Outcomes:

The students after undertaking this course will be able to:

CO1: Student will develop skills for welding on arc welding and gas welding.

CO2: Students will learn about safety precautions while handling tool and machinery.

CO3: Acquire skill for machining on lathe machines.

CO4: Acquire skills for marking, cutting, fitting practices in fitting shops and learn about various materials used for making molds, cores and casting.

CO5: Students will acquire skills to fabricate projects involving operations of carpentry shop, welding shop, fitting and foundry shops.

CO6: Student will develop skills for welding on arc welding and gas welding.

APPLIED CHEMISTRY (1st/2nd Semester)

Course Code: BCHM0-101

Course Outcomes:

After undergoing this course student will be able to:

CO1: To understand Atomic and molecular nature of various molecule.

CO2: To understand Band structure

CO3: To elaborate the application of various spectroscopic Techniques

CO4: To understand thermodynamic function and their application

CO5: To rationalize periodic properties

CO6: To understand the concept of stereochemistry and preparation of organic molecule

APPLIED MATHEMATICS-II (1st/2nd Semester)

Course Code: BMAT0-201

Course Outcomes:

After undergoing this course student will be able to:

CO1: To learn the application of differentiation and integration.

CO2: Basic knowledge of Fundamentals of Multivariable calculus regarding the differentiation.

CO3: The mathematical tools needed in evaluating multiple integrals and their usage.

CO4: Applicability of Basic properties of Gradient, Curl and divergence and directional derivatives.

BASICS OF ELECTRONICS ENGINEERING (1st/2nd Semester)

Course Code: BECE0-101

Course Outcomes:

After undergoing this course student will be able to:

CO1: To understand and analyze basic DC and AC circuits.

CO2: To study the use and working principle of single-phase transformers.

CO3: To study the application and working principles of three phase and single-phase induction motors.

CO4: To introduce to the components of low voltage electrical installations.

BASICS OF ELECTRONICS ENGINEERING LAB. (1st/2nd Semester)

Course Code: BECE0-102

Course Outcomes:

After undergoing this course student will be able to:

CO1: Get an exposure to common electrical components and their ratings

CO2: Make electrical connections by wires of appropriate ratings

CO3: Understand the usage of common electrical measuring instruments.

CO4: Understand the basic characteristics of transformers and electrical induction motors.

ELEMENTS OF MECHANICAL ENGINEERING (1st/2nd Semester)

Course Code: BMEE0-101

Course Outcomes:

After undergoing this course student will be able to:

CO1: Learn about work and heat interactions, and balance of energy between system and its surroundings

CO2: Learn about application of 1st law and 2nd law to various energy conversion devices

CO3: Learn about basics of automobile, its components and their functionalities

CO4: Understand basic laws and properties of fluids

CO5: Solve the simple problems related to Co-planar and concurrent forces using different techniques and to understand the concepts of friction and its applications

CO6: Understand and apply the concept of Centre of gravity, centroid and moment of inertia

BASICS OF COMPUTER PROGRAMMING (1st/2nd Semester)

Course Code: BCSE0-101

Course Outcomes:

After undergoing this course student will be able to:

CO1: Understand, analyze and implement software development tools like algorithm, pseudo codes and programming structure

CO2: Study, analyze and understand logical structure of a computer program, and different construct to develop a program in 'C' language

CO3: Write small programs related to simple/ moderate mathematical, and logical problems in 'C'.

CO4: Study, analyze and understand simple data structures, use of pointers, memory allocation and data handling through files in 'C'.

ENGINEERING DRAWING (1st/2nd Semester)

Course Code: BMEE0-102

Course Outcomes:

After undergoing this course student will be able to:

CO1: The students will be able to understand various concepts of engineering drawing like dimensioning, conventions and scales.

CO2: The students will be able to understand orthographic projections in first and third angles.

CO3: The students will be able to understand interior details and surface layout of various objects.

CO4: The students will be able to understand and acquire knowledge of projection of 3D objects.

CO5: The students will be able to understand the various concepts of interpretation of joints.

APPLIED CHEMISTRY LAB. (1st/2nd Semester)

Course Code: BCHM0-102

Course Outcomes:

After undergoing this course student will be able to:

CO1: To learn the preparation and standardization of solutions

CO2: To learn the estimation of various physical properties of given liquid samples

CO3: To estimate various crucial parameters for water sample

CO4: To learn the preparation of various molecules and detection of functional groups.

BASICS OF COMPUTER PROGRAMMING LAB. (1st/2nd Semester)

Course Code: BCSE0-102

Course Outcomes:

After undergoing this course student will be able to:

CO1: Familiarization with Computer System

CO2: Familiarization with MS-Office

CO3: Practical exercises on mathematical and logical problems in C

CO4: Practical exercises on simple data structures, pointers, memory allocation and data handling through files in 'C'

DATA STRUCTURES (3rd Semester)

Course Code- BCSE1-302

Course Outcomes:

After undergoing this course student will be:

CO1: Able to comprehend the basic concepts of memory management, data structure, Algorithms and Asymptotic notation.

CO2: Able to understand and implement linear data structures such as arrays, linked lists, stacks and Queues.

CO3: Able to understand the concepts of non-linear data structures such as graphs, trees and heaps.

CO4: Able to describe and implement hashing, Searching and Sorting Techniques.

OBJECT ORIENTED PROGRAMMING USING C++ (3rd Semester)

Course Code- BCSE1-303

Course Outcomes:

After undergoing this course student will be able:

CO1: To introduce the basic concepts of object-oriented programming language and its representation.

CO2: To allocate dynamic memory, access private members of class and the behavior of inheritance and its implementation.

CO3: To introduce polymorphism, interface design and overloading of operator.

CO4: To handle backup system using file, general purpose template and handling of raised exception during programming.

DIGITAL CIRCUITS & LOGICAL DESIGN (3rd Semester)

Course Code- BCSE1-304

Course Outcomes:

After undergoing this course student will be able to:

CO1: Represent numerical values and perform number conversions between different number systems. Also acquire knowledge of Boolean algebra and minimization methods for designing combinational Systems.

CO2: Study and analyze the basic logic gates and various logic families. To Analyze and Design digital combinational circuits.

CO3: Analyze and design flip-flops and latches and design sequential systems composed of standard sequential modules, such as counters and registers.

CO4: To acquire Knowledge of the nomenclature and technology in the area of memory devices and about various analog and digital signals with their conversion techniques.

COMPUTER ARCHITECTURE & ORGANISATION (3rd Semester)

Course Code- BCSE1-305

Course Outcomes:

After undergoing this course student will be able to:

CO1: Understand how computer hardware has evolved to meet the needs of multiprocessing systems, Instruction Set Architecture: Instruction format, types, various addressing modes, the basic components and design of the CPU: the ALU and control unit.

CO2: Understand the memory organization: SRAM, DRAM, concepts on cache memory, Memory Interleaving, Associative memory, Virtual memory organization.

CO3: Ability to understand the parallelism both in terms of a single processor and multiple processors.

CO4: Understand the I/O Organization: Basics of I/O, Memory-mapped I/O & I/O mapped I/O, types of I/O transfer: Program controlled I/O, Interrupt-driven I/O, DMA.

DISCRETE STRUCTURES (3rd Semester)

Course Code- BCSE1-306

Course Outcomes:

After undergoing this course student will be able:

- CO1: To study various fundamental concepts of Set Theory and Logics.
- CO2: To study the Functions and Combinatorics.
- CO3: To study and understand the Relations, diagraphs and
- CO4: To study the Algebraic Structures.

DATA STRUCTURES LAB. (3rd Semester)

Course Code- BCSE1-307

Course Outcomes:

After undergoing this course student will be able:

- CO1: To introduce the basic concepts of Data structure, basic data types, searching and sorting based on array data types.
- CO2: To introduce the structured data types like Stacks and Queue and its basic operation's implementation.
- CO3: To introduces dynamic implementation of linked list.
- CO4: To introduce the concepts of Tree and graph and implementation of traversal algorithms.

OBJECT ORIENTED PROGRAMMING USING C++ LAB. (3rd Semester)

Course Code- BCSE1-308

Course Outcomes:

After undergoing this course student will be able to:

- CO1: Design and solve real world problems with modern tool usage.
- CO2: Practice the professional ethics and lifelong learning in technical aspects.
- CO3: Lead a team on work as an individual in a team.
- CO4: Understand and implement the complex problems with effective solutions.

DIGITAL CIRCUIT & LOGICAL DESIGN LAB (3rd Semester)

Course Code- BCSE1-309

Course Outcomes:

After undergoing this course student will be able:

CO1: To Familiarization with Digital Trainer Kit and associated equipment.

CO2: To Study and design of TTL gates.

CO3: To learn the formal procedures for the analysis and design of combinational circuits.

CO4: To learn the formal procedures for the analysis and design of sequential circuits.

SOFT SKILLS-I (3rd Semester)

Course Code: BHUM0-F91

Course Outcomes:

After undergoing this course student will be able to:

CO1: At the end of the course, the student will be able to develop his/her personal traits and expose their personality effectively.

OPERATING SYSTEMS (4th Semester)

Course Code: BCSE1-411

Course Outcomes:

After undergoing this course student will be able to:

CO1: Understanding operating system functions, Role of operating system, different structures and views of Operating system.

CO2: Understand process management CPU scheduling, Scheduling Algorithms, PCB, Process synchronization, Deadlocks, Prevention, Detection and Recovery.

CO3: Understand Memory Management Overlays, Memory management policies, Fragmentation and its types, Portioned memory managements, Paging, Segmentation, Ned of Virtual memories, Page replacement Algorithms, Concept of Thrashing.

CO4: Understand Device Management, I/O system and secondary storage structure, Device management policies, Role of I/O traffic controller File Management File System Architecture, Layered Architecture, Physical and Logical File Systems, Protection and Security. Brief study to multiprocessor and distributed operating systems.

DATABASE MANAGEMENT SYSTEMS-I (4th Semester)

Course Code- BCSE1-412

Course Outcomes:

After undergoing this course student will be able:

CO1: To provide introduction to database systems and various models.

CO2: To provide introduction to relational model and SQL

CO3: To understand about Query Processing and Transaction Processing.

CO4: To learn the concept of failure recovery and concurrency control

COMPUTER NETWORKS-I (4th Semester)

Course Code- BCSE1-413

Course Outcomes:

After undergoing this course student will be able:

CO1: To provide knowledge about various types of networking, networks and network topologies. Also acquire knowledge about concepts of OSI reference model and real- world protocol suite such as TCP/IP.

CO2: To outline the basic network configurations, various Multiplexing and Switching Techniques.

CO3: To analyze, specify and design the Addressing Schemes and routing strategies for an IP based networking infrastructure.

CO4: To understand the operations of TCP/UDP, FTP, HTTP, SMTP, SNMP and Security and protection issues etc.

DESIGN & ANALYSIS OF ALGORITHMS (4th Semester)

Course Code- BCSE1-414

Course Outcomes:

After undergoing this course student will be able to:

CO1: Understand the basic ability to analyze algorithms and to determine algorithm correctness and time efficiency class.

CO2: Understand the ability to apply and implement learned algorithm design techniques and data structures to solve problems.

CO3: Differentiate between various algorithms for sorting, searching, and selection and know the concepts of tractable and intractable problems and the classes P, NP and NP-complete problems.

CO4: Analyze the Geometric algorithms (range searching, convex hulls, segment intersections, closest pairs) Know various Text pattern matching, tries, KMP Algorithm.

MICROPROCESSORS & ASSEMBLY LANGUAGES (4th Semester)

Course Code- BCSE1-415

Course Outcomes:

After undergoing this course student will be able:

CO1: To study and differentiate microprocessors, microcomputers and microcontrollers.

CO2: To understand the detailed architecture of 8085 and learn assembly language programming using the instruction set of 8085.

CO3: To study the interfacing of microprocessors with memory and I/O devices.

CO4: To give an overview of higher order microprocessors and know about the various applications of microprocessors using the interfaces.

DATABASE MANAGEMENT SYSTEMS-I LAB. (4th Semester)

Course Code- BCSE1-416

Course Outcomes:

After undergoing this course student will be able:

CO1: To understand basic DDL, DML, DCL commands

CO2: To understand the SQL queries using SQL operators

CO3: To understand the concept of relational algebra, date and group functions

CO4: To learn view, cursors and triggers.

COMPUTER NETWORKS-I LAB. (4th Semester)

Course Code- BCSE1-417

Course Outcomes:

After undergoing this course student will be able to:

CO1: Classify latest desktops and laptops based upon their specifications.

CO2: Recognize various networking components, devices, topologies, transmission media and tool.

CO3: Prepare various networking cables and LAN topologies.

CO4: Configure TCP/IP protocols and resource sharing in Windows and Linux.

CO5: Plan, Design and implement network classes and subnets.

CO6: Install FTP server and client.

DESIGN & ANALYSIS OF ALGORITHM LAB. (4th Semester)

Course Code- BCSE1-418

Course Outcomes:

After undergoing this course student will be able to:

CO1: Analyze and code GCD, Median method and Majority methods to solve engineering problems.

CO2: Understand a given problem and design an appropriate approach to solve it.

CO3: Demonstrate the use of BFS, DFS, minimum spanning tree algorithms to solve real world problems.

CO4: Apply KMP to find all occurrences of a pattern P in a given string S.

CO5: Compute the convex hull of a set of points in the plane.

CO6: Implement various sorting and searching algorithms like quick sort, merge sort, heap sort to solve real world problems.

MICROPROCESSORS AND ASSEMBLY LANGUAGES LAB. (4th Semester)

Course Code- BCSE1-419

Course Outcomes:

After undergoing this course student will be able to:

CO1: Understand different steps to develop program such as Problem definition, Analysis, Design of logic, Coding, Testing, Maintenance

CO2: Apply different logics to solve given problem.

CO3: Able to write program using different implementations for the same problem

CO4: Use of programming language constructs in program implementation

SOFT SKILLS-II (4th Semester) Course

Code: BHUM0-F92

Course Outcomes:

After undergoing this course student will be able to:

CO1: Understand the importance of goal setting. They will also be able to handle stress in their lives and future in a better way.

COMPUTER NETWORKS-II (5th Semester)

Course Code: BCSE1- 520

Course Outcomes:

After undergoing this course student will be able to:

CO1: Able to define the Fundamentals of network security, Characteristics of IPv6 and their addressing format and schemes.

CO2: Acquire the Knowledge about various concepts of IPSec and able to explain about various concepts of Ad-hoc and Cellular Networks.

CO3: Acquire the Knowledge about wireless communication systems and their generations with different Technologies.

CO4: Able to explain about Third Generation Networks, their Technologies, wireless System Design and their various strategies.

AUTOMATA THEORY (5th Semester)

Course Code BCSE1-521

Course Outcomes:

After undergoing this course student will be able to:

CO1: Design Finite State Machine.

CO2: Explain Regular Expressions and Construct Grammar and Languages.

CO3: Define the CFLs and can design Pushdown Automata.

CO4: Define and Design the Turing Machine. Also explain the decidability and Un- decidability of various problems.

JAVA PROGRAMMING (5th Semester)

Course Code BCSE1-522

Course Outcomes:

After undergoing this course student will be able:

CO1: To learn the basics of Java and to understand the implementation of Classes and Inheritance with respect to Java.

CO2: To describe the concept of handling of exceptions and multithreading.

CO3: To understand how to implement I/O, Applets and Graphics in Java

CO4: To comprehend the advanced topics of Java Programming

ENTERPRISE RESOURCE PLANNING (5th Semester)

Course Code: BCSE1-556

Course Outcomes:

After undergoing this course student will be able:

CO1: To understand the concepts of ERP and its related technologies.

CO2: To understand the implementation of ERP in an organization.

CO3: To have a deep understanding of different business modules of an organization.

CO4: To have a basic understanding of applications of ERP and various ERP software's.

DIGITAL MARKETING (5th Semester)

Course Code BCSE1-557

Course Outcomes:

After undergoing this course student will be able:

CO1: To appreciate and understand Digital Marketing Concept.

CO2: To apply SEO, Web Analytics and Social Media Marketing.

CO3: To Understand Email Marketing and Display Marketing.

CO4: Knowledge of Mobile Marketing, WordPress, online Reputation Management.

COMPUTER GRAPHICS (5th Semester)

Course Code BCSE1-558

Course Outcomes:

After undergoing this course student will be able to:

CO1: Learn about the basics of graphics, its applications, uses and Knowledge to draw different shapes in graphics on computer.

CO2: Apply different 2-D and 3-D transformations on an object.

CO3: Learn clipping operations and various object filling techniques, different projections techniques. Various hidden surface removal.

CO4: Knowledge of Rendering techniques, Fractals and different colour models.

COMPUTER NETWORKS –II LAB. (5th Semester)

Course Code BCSE1-523

Course Outcomes:

After undergoing this course student will be able to:

CO1: Implement security measures for detection and removal of spyware, malware, viruses and worms from computers.

CO2: Understand network utilities and packet capturing tools.

CO3: Implement IPsec, WLAN and VoIP using simulation environment.

CO4: Configure a mobile device for setting PAN using mobile application.

CO5: Install and configure wireless devices for a wireless network.

CO6: Design of Ad-hoc network scenario to analyse network communication.

JAVA PROGRAMMING LAB. (5th Semester)

Course Code: BCSE1-524

Course Outcomes:

After undergoing this course student will be able to:

CO1: Build Software Development Skills to determine the logic for problem solving in Real World Application.

CO2: Demonstrate the use of OOPs concepts with the help of program.

CO3: Use the JAVA Environment to create, debug and execute programs.

CO4: Understand the use of Interfaces and Packages.

CO5: Recall the Exception Handling mechanism to handle the errors at run-time.

CO6: Carry out the various graphical operations inside the Applet.

SOFT SKILLS-III (5th Semester)

Course Code: BHUM0-F93 (5th Semester)

Course Outcomes:

After undergoing this course:

CO1: The student will become well –versed with the behavioral skills. They will also understand the role of body language and non-verbal communication during the interview process.

SOFTWARE ENGINEERING (6th Semester)

Course Code: BCSE1-626

Course Outcomes:

After undergoing this course student will be able:

CO1: To study how software engineering principles, evolve and to analyze the various software models that can be followed to develop a software.

CO2: To understand the software analysis and design step of software development.

CO3: To study coding, testing and reliability of a software.

CO4: To highlight the various management activities and related terms of a software.

COMPILER DESIGN (6th Semester)

Course Code: BCSE1-627

Course Outcomes:

After undergoing this course student will be able:

CO1: To introduce the major concept areas of language translation and compiler design.

CO2: To develop an awareness of the function and complexity of compilers.

CO3: To provide practical, hands on experience in compiler design

CO4: To identify the similarities and differences among various parsing techniques and grammar transformation techniques.

MOBILE APP DEVELOPMENT (6th Semester)

Course Code: BCSE1-659

Course Outcomes:

After undergoing this course student will be able to learn:

CO1: The Architecture of various Mobile Application Platform.

CO2: Work on Android using various forms and menus.

CO3: And publish your developed Mobile Application.

CO4: Use SQLite for connection to database type facilities.

DISTRIBUTED COMPUTING (6th Semester)

Course Code: BCSE1-660

Course Outcomes:

After undergoing this course student will be able:

- CO1: To understand the basic concepts of distributed computing.
- CO2: To have a deep understanding of remote method invocation.
- CO3: To understand the peer to peer services and file systems.
- CO4: To understand the concept of synchronization and replication.

MULTIMEDIA & VIRTUAL REALITY (6th Semester)

Course Code: BCSE1-661

Course Outcomes:

After undergoing this course student will be:

- CO1: Able to learn about different types of media, its applications, uses and Knowledge of authoring system.
- CO2: Able to learn different compression techniques.
- CO3: Able to acquire adequate knowledge of multimedia information management.
- CO4: Able to acquire adequate knowledge of Virtual reality system.

WEB TECHNOLOGIES (6th Semester)

Course Code: BCSE1-662

Course Outcomes:

After undergoing this course student will be able:

- CO1: To understand the tools and description of java scripts
- CO2: To XML and the study of Java beans and introduction to EJB'S
- CO3: To understand Java servlet HTTP package and security issues.
- CO4: To understand JSP Application Development and database programming using JDBC.

CRYPTOGRAPHY & NETWORK SECURITY (6th Semester)

Course Code: BCSE1-663

Course Outcomes:

After undergoing this course student will be able:

- CO1: To understand security trends.
- CO2: To implement various cryptographic algorithms.
- CO3: To explain the hash function.
- CO4: To understand the network security and system level security used.

DATA MINING AND WARE HOUSING (6th Semester)

Course Code: BCSE1-664

Course Outcomes:

After undergoing this course student will be able:

- CO1: To introduce the basic concepts of Data Warehouse and Data Mining techniques.
- CO2: To process raw data to make it suitable for various data mining algorithms.
- CO3: To discover interesting patterns, analyze supervised and unsupervised models and estimate the accuracy of the algorithms
- CO4: To apply the techniques of clustering, classification, association finding, feature selection and visualization to real world data.

SOFTWARE ENGINEERING LAB. (6th Semester)

Course Code: BCSE1-628

Course Outcomes:

After undergoing this course student will be able to:

- CO1: Learn and use software to draft a project plan or track the progress a project.
- CO2: Prepare requirement specifications document by collecting requirements from customer.
- CO3: Create and specify a software design based on the requirement specification that the software can be implemented based on the design.
- CO4: Learn and use any design tool.
- CO5: Prepare various documents like software configuration management and risk management related document.
- CO6: Make a testing plan for the software and perform testing on software and websites through various testing techniques.

WEB ENGINEERING LAB. (6th Semester)

Course Code: BCSE1-629

Course Outcomes:

After undergoing this course student will be able to:

CO1: Recognize and Understand java and server-side scripting languages to develop web applications.

CO2: Construct a server-side java application called JSP to catch form data sent from client and store it on database.

CO3: Understand integrated development environment to create, debug and run multi-tier and enterprise-level applications.

CO4: Describe tag structure, process and call custom tag on JSP pages.

CO5: Distinguish between static and dynamic websites with good aesthetic sense of designing and usage of latest technical tools.

CO6: Develop console based, GUI based and web-based applications.

SOFT SKILLS-IV (6th Semester)

Course Code: BHUM0-F94

Course Outcomes:

After undergoing this course student will be able to:

CO1: Demonstrate soft skills required for business situations.

CO2: Analyze the value of soft skills for career enhancement.

CO3: Apply soft skills to workplace environment.

CO4: Confidently participate in GD and interview process.

DATABASE MANAGEMENT SYSTEMS-II (7th Semester)

Course Code: BCSE1-730

Course Outcomes:

After undergoing this course student will be able:

CO1: To understand database system concept and architecture and implement PL/SQL

CO2: To understand query processing and transaction control

CO3: To understand object oriented, relational, distributed databases.

CO4: To understand backup and recovery concepts.

OBJECT ORIENTED ANALYSIS AND DESIGN USING UML (7th Semester)

Course Code: BCSE1-731

Course Outcomes:

After undergoing this course student will be able to:

CO1: Understand the history and goals of UML.

CO2: Use of functional, non-functional requirements along with Use Case Modelling.

CO3: Acquire the adequate knowledge of Modelling Classes and Dependencies.

CO4: Acquire ability to know interfaces, components and Sequence Diagrams.

LINUX & UNIX SYSTEMS (7th Semester)

Course Code: BCSE1-765

Course Outcomes:

After undergoing this course student will be able to:

CO1: Understand the basic set of commands and utilities in Linux/UNIX systems.

CO2: Learn the important Linux/UNIX library functions and system calls.

CO3: Install and use different services in UNIX/LINUX like operating systems.

CO4: Obtain a foundation for different applications in Unix/Linux type of operating system.

ARTIFICIAL INTELLIGENCE (7th Semester)

Course Code: BCSE1-766

Course Outcomes:

After undergoing this course student will be able to:

CO1: Understand the concept of Artificial intelligence, problem solving and various types of search strategies.

CO2: Understand the concept of Knowledge base, knowledge representation, AI languages & tools and various planning techniques.

CO3: Identify uncertainty and understand fuzzy logic concept to handle uncertainty.

CO4: Understand the COURSE of AI agents and various COURSE methods it also includes neural network and includes the communication of AI agents and natural language processing.

SOFTWARE TESTING & QUALITY ASSURANCE (7th Semester)

Course Code: BCSE1-767

Course Outcomes:

After undergoing this course student will be able:

- CO1: To understand the basics of software quality and learn various metrics of software quality.
- CO2: To describe different approaches to testing software applications.
- CO3: To introduce concepts behind designing of test cases
- CO4: To learn the procedure of debugging a given software

Microcontroller (7th Semester)

Course Code: BELE0-F99

Course Outcomes:

After undergoing this course student will be able to:

- CO1: Describe the architecture and operation of 8051 microcontroller.
- CO2: Acquire the knowledge of basic concepts of program development tools.
- CO3: Implement various operations in 8051 using assembly language programming.
- CO4: Design interface of 8051 with peripheral devices.
- CO5: Analyze the data transfer through serial port.
- CO6: Designing real world applications using 8051 microcontrollers.

DATABASE MANAGEMENT –II LAB. (7th Semester)

Course Code BCSE1-733

Course Outcomes:

After undergoing this course student will be able to:

- CO1: Acquire the knowledge of Master transaction processing, concurrency control and crash recovery
- CO2: Acquire the knowledge of Master query processing and optimization
- CO3: Acquire the knowledge Master advanced indexing and data organization for DBMS
- CO4: Competent with similarity-based querying

CLOUD COMPUTING & BIG DATA (8th Semester)

Course Code: BCSE1-836

Course Outcomes:

After undergoing this course student will be able to:

CO1: Obtain the ability to learn basics of Big data, Hadoop and Map Reduce

CO2: Learn the basics of Hive, HQL, HBase schema design, PIG and NoSQL.

CO3: Understand various basic concepts related to cloud computing technologies, architecture and concept of different cloud models: IaaS, PaaS, SaaS. Cloud virtualization, cloud storage, data management and data visualization.

CO4: Understand different cloud programming platforms & tools and familiar with application development and deployment using cloud platforms.

SCRIPTING LANGUAGES (8th Semester)

Course Code: BCSE1-868

Course Outcomes:

After undergoing this course student will be able to:

CO1: Attain the ability to understand the different scripting languages.

CO2: Understand the basic and advanced concepts of Perl programming.

CO3: Understand of python especially the object-oriented concepts.

CO4: Working knowledge of Python UI and its connectivity to database.

SOFTWARE PROJECT MANAGEMENT (8th Semester)

Course Code: BCSE1-869

Course Outcomes:

After undergoing this course student will be able to:

CO1: Apply the basics of Software Project Management in order to manage and deliver qualified product and plan the activities within time schedules with CPM and PERT Analysis.

CO2: Manage the quality of product and managing the risk involved

CO3: Manage team and measuring and tracking the planning

CO4: Understand the configuration management and project monitoring and control

WIRELESS SENSOR NETWORKS (8th Semester)

Course Code: BCSE1-870

Course Outcomes:

After undergoing this course student will be able to:

CO1: Explain about basic concepts of wireless sensor networks. Also acquire knowledge about architecture of sensor networks.

CO2: Acquire knowledge about MAC Protocols for Wireless Sensor Networks, and various routing protocols for networking sensors.

CO3: Explain about Topology Control, Clustering, Time Synchronization, Localization and Positioning, Sensor Tasking and Control.

CO4: Acquire knowledge about Security challenges.

CLOUD COMPUTING & BIGDATA LAB. (8th Semester)

Course Code: BCSE1-837

Course Outcomes:

After undergoing this course student will be able to:

CO1: Teach both the fundamental concepts of how Cloud systems works, as well as Cloud technologies such as Amazon AWS, Microsoft Azure, and Open Stack.

CO2: Present the student with new execution environments required to manage the computing resources and simplify the development and integration of the different types of applications and services

CO3: Collaborate in the design, implementation and presentation of a cloud computing environment that is required for a class project.