

DEPARTMENT OF ELECTRONICS AND COMPUTER ENGINEERING

Academic Year -2023-24

Course Outcomes

B.TECH.4th SEM

**Operating System
(BCS401)**

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the structure and functions of OS
(CO2)	Learn about Processes, Threads and Scheduling algorithms.
(CO3)	Understand the principles of concurrency and Deadlocks
(CO4)	Learn various memory management scheme
(CO5)	Study I/O management and File systems.

Analog Circuits (BEC402)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the fundamental concepts of analog circuits, including diodes, transistors, and operational amplifiers.
(CO2)	Apply circuit analysis techniques to design and evaluate amplifier and oscillator circuits.
(CO3)	Analyze the frequency response and performance characteristics of different analog electronic circuits.
(CO4)	Evaluate the stability, efficiency, and power management in analog circuit design.
(CO5)	Implement various analog circuit applications such as signal conditioning, filters, and voltage regulators.

Signal System (BEC403)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the fundamental concepts of signals, systems, and their classifications.
(CO2)	Apply mathematical tools such as Fourier Series, Fourier Transform, and Laplace Transform for signal analysis.
(CO3)	Analyze the behavior of linear time-invariant (LTI) systems using convolution and system properties.
(CO4)	Evaluate the frequency and time-domain characteristics of signals and systems.
(CO5)	Implement signal processing techniques for applications in communication and control systems.

Operating System Lab (BCS451)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the fundamental concepts of operating systems, including process management, memory management, and file systems.
(CO2)	Apply system calls and shell scripting to perform basic OS operations.
(CO3)	Analyze various process scheduling algorithms and inter-process communication mechanisms.
(CO4)	Evaluate memory management techniques such as paging, segmentation, and virtual memory.
(CO5)	Implement process synchronization techniques using semaphores and monitors.

Analog Circuits Lab (BEC452)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the working principles of diodes, transistors, and operational amplifiers in analog circuits.
(CO2)	Apply circuit analysis techniques to design and implement amplifier and oscillator circuits.
(CO3)	Analyze the frequency response and performance characteristics of analog electronic circuits.
(CO4)	Evaluate the efficiency, stability, and practical limitations of various analog circuits.
(CO5)	Implement and test analog circuit applications such as rectifiers, filters, voltage regulators, and signal amplifiers.

Signal System Lab (BEC453)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the fundamental concepts of signals and systems, including their classifications and properties.
(CO2)	Apply mathematical tools such as Fourier Transform and Laplace Transform for signal analysis.
(CO3)	Analyze the behavior of linear time-invariant (LTI) systems using convolution and system response.
(CO4)	Evaluate the frequency and time-domain characteristics of signals using simulation tools.
(CO5)	Implement signal processing techniques for applications in communication and control systems.

Python Programming (BCC402)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the fundamental concepts of Python programming, including data types, control structures, and functions.
(CO2)	Apply object-oriented programming principles such as classes, inheritance, and polymorphism in Python.
(CO3)	Analyze various data structures like lists, tuples, dictionaries, and sets for efficient problem-solving.
(CO4)	Evaluate file handling, exception handling, and module usage to enhance program functionality.
(CO5)	Implement real-world applications using Python libraries for data analysis, web development, and automation.

Technical Communication (BAS401)

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the fundamental principles of technical communication, including effective writing, speaking, and listening skills.
(CO2)	Apply appropriate communication techniques for writing technical reports, proposals, emails, and research papers.
(CO3)	Analyze various modes of professional communication, including presentations, meetings, and interviews.
(CO4)	Evaluate the role of verbal and non-verbal communication in professional and technical settings.
(CO5)	Develop well-structured technical documents and deliver impactful presentations using modern communication tools.

DATA ANALYTICS(BCS052)

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

CLOUD COMPUTING (BCAM051)

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