Dronacharya Group Of Institutions

**Department: Computer Science and Engineering** 

Academic Year -2023-24

**Course Outcomes** 

B.TECH.4<sup>th</sup> SEM

### Operating system (BVE401)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Understand the structure and functions of OS	K1, K2
(CO2)	Learn about Processes, Threads and Scheduling algorithms.	K1, K2
(CO3)	Understand the principles of concurrency and Deadlocks	К2
(CO4)	Learn various memory management scheme	K2
(CO5)	Study I/O management and File systems.	K2,K4

### Theory of Automata and Formal Languages (BCS402)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Analyse and design finite automata, pushdown automata, Turing machines, formal languages, and grammars	K4, K6
(CO2)	Analyse and design, Turing machines, formal languages, and grammars	K4, K6
(CO3)	Demonstrate the understanding of key notions, such as algorithm, computability, decidability, and complexity through problem solving	K1, K5
(CO4)	Prove the basic results of the Theory of Computation.	K2, K3
(CO5)	State and explain the relevance of the Church-Turing thesis.	K1, K5

### **Object Oriented Programming with Java** (BCS403)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Develop the object-oriented programming concepts using Java	K3, K4
(CO2)	Implement exception handling, file handling, and multi-threading in Java	K2, K4
(CO3)	Apply new java features to build java programs.	К3
(CO4)	Analyse java programs with Collection Framework	K4
(CO5)	Test web and RESTful Web Services with Spring Boot using Spring Framework concepts	К5

#### **Operating System Lab** (BCS451)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Implement the basic command of OS and will execute the various system calls.	К5
(CO2)	Implement the process synchronization problem using semaphore.	K4
(CO3)	Implement CPU scheduling algorithm for process scheduling and deadlock management techniques	K4
(CO4)	Implement memory management techniques.	K4
(CO5)	Implement file storage allocation Techniques.	К3

#### PYTHON PROGRAMMING (BCC402)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Interpret the fundamental Python syntax and semantics and be fluent in the use of Python control flow statements.	K1,K2
(CO2)	Express proficiency in the handling of strings and functions	K1,K2
(CO3)	Determine the methods to create and manipulate Python programs by utilizing the data structures like lists, dictionaries, tuples and sets.	К3
(CO4)	Identify the commonly used operations involving file systems and regular expressions.	K1,K2
(CO5)	Articulate the Object-Oriented Programming concepts such as encapsulation, inheritance and polymorphism	K2,K3

# DIGITAL ELECTRONICS (Open Elective) (BOE410)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Apply concepts of Digital Binary System and implementation of Gates.	К3
(CO2)	Analyze and design of Combinational logic circuits.	K4
(CO3)	Analyze and design of Sequential logic circuits with their applications.	K4
(CO4)	Implement the Design procedure of Synchronous & Asynchronous Sequential Circuits.	<b>K</b> <sub>3</sub>
(CO5)	Apply the concept of Digital Logic Families with circuit implementation.	K <sub>3</sub>

## **Technical Communication** (BAS401)

Course Outcome (CO)	Details of Course Outcomes	Bloom's Knowledge Level (KL)
(CO1)	Students will be able to Understand the nature and	K4
	objective of Technical Communication relevant for the work place as Engineers.	
(CO2)	Develop an understanding of key concepts of writing, designing and speaking.	К3
(CO3)	To Utilize the technical writing skills for the purposes of Technical Communication and its exposure in various dimensions	К3
(CO4)	Build Up interpersonal communication traits that will make the transition from institution to workplace smoother and help them to excel in their jobs.	K5
(CO5)	To APPLY technical communication to build their personal brand and handle crisis communication.	K5