

Dronacharya Group Of Institutions

Department: Computer Science & Information Technology

Academic Year -2023-24

Course Outcomes

B.TECH.3RDSEM

DATA STRUCTURE

(BCS301)

| Course Outcome (CO) | Details of Course Outcomes | Bloom's Knowledge Level (KL) |
|---------------------|---|--------------------------------|
| (CO1) | Describe how arrays, linked lists, stacks, queues, trees, and graphs are represented in memory, used by The algorithms and their common applications. | K ₁ ,K ₂ |
| (CO2) | Discuss the computational efficiency of the sorting and Searching algorithms. | K ₂ |
| (CO3) | Implementation of Trees and Graphs and perform various operations on these data structure | K ₃ |
| (CO4) | Understanding the concept of recursion, application of recursion and its implementation and removal of Recursion. | K ₄ |
| (CO5) | Identify the alternative implementations of data structures with respect to its performance to solve a real world problem | K ₅ ,K ₆ |

COMPUTER ORGANIZATION AND ARCHITECTURE

(BCS302)

| Course Outcome (CO) | Details of Course Outcomes | Bloom's Knowledge Level (KL) |
|---------------------|--|---------------------------------|
| (CO1) | Study of the basic structure and operation of a digital Computer system. | K ₁ ,K ₂ |
| (CO2) | Analysis of the design of arithmetic & logic unit and understanding of the fixed point and floating-point Arithmetic operations. | K ₂ , K ₄ |
| (CO3) | Implementation of control unit techniques and the concept of Pipelining | K ₃ |
| (CO4) | Understanding the hierarchical memory system, cache memories and virtual memory | K ₂ |
| (CO5) | Understanding the different ways of communicating with I/O devices and standard I/O interfaces | K ₂ , K ₄ |

DISCRETE STRUCTURES & THEORY OF LOGIC (BCS303)

| Course Outcome (CO) | Details of Course Outcomes | Bloom's Knowledge Level (KL) |
|----------------------------|---|-------------------------------------|
| (CO1) | Acquire Knowledge of sets and relations for solving the problems of POSET and lattices. | K3,K4 |
| (CO2) | Apply fundamental concepts of functions and Boolean algebra for solving the problems of logical abilities. | K1, K2 |
| (CO3) | Employ the rules of propositions and predicate logic to solve the complex and logical problems | K3 |
| (CO4) | Explore the concepts of group theory and their applications for solving the advance technological problems. | K1,K4 |
| (CO5) | Illustrate the principles and concepts of graph theory for solving problems related to computer science. | K2, K6 |

Data Structure Lab (BCS351)

| Course Outcome (CO) | Details of Course Outcomes | Bloom's Knowledge Level (KL) |
|----------------------------|---|-------------------------------------|
| (CO1) | Implement various operations on Array and Linked List | K5 |
| (CO2) | Implement the concept of Stack and Queue using array and Linked List. | K4 |
| (CO3) | Implement the concept of Tree Data Structure using Array and Linked List. | K4 |
| (CO4) | Implement various application of Graph data Structure | K4 |
| (CO5) | Implement various searching and Sorting Techniques. | K3 |

Computer Organization and Architecture Lab (BCS352)

| Course Outcome (CO) | Details of Course Outcomes | Bloom's Knowledge Level (KL) |
|---------------------|--|------------------------------|
| (CO1) | Design the control unit of a computer using either hardwiring or Microprogramming based on its register transfer language description. | K2 |
| (CO2) | Design 8bits I/O, ALU and Adder & Subtractor. | K5 |
| (CO3) | Analyze the concept of control unit And Multiplexer/ Decoder | K4 |
| (CO4) | Analyze the concept of binary to gray code converter & gray to Binary code converter. | K3 |
| (CO5) | Apply algorithm using simulators | K3 |

CYBER SECURITY (BCC301)

| Course Outcome (CO) | Details of Course Outcomes | Bloom's Knowledge Level (KL) |
|---------------------|--|---------------------------------|
| (CO1) | Understand the basic concepts of cyber security and cybercrimes. | K1,K2 |
| (CO2) | Understand the security policies and cyber laws. | K ₁ , K ₂ |
| (CO3) | Understand the tools and methods used in cyber crime | K ₂ |
| (CO4) | Understand the concepts of cyber forensics | K ₁ ,K ₂ |
| (CO5) | Understand the cyber security policies and cyber laws | K ₂ |

Web Designing Workshop (BCS353)

| Course Outcome (CO) | Details of Course Outcomes | Bloom's Knowledge Level (KL) |
|---------------------|---|------------------------------|
| (CO1) | Understand principle of Web page design and about types of websites | K3, K4 |
| (CO2) | Visualize and Recognize the basic concept of HTML and application in web designing. | K1, K2 |
| (CO3) | Recognize and apply the elements of Creating Style Sheet (CSS). K2 | K2, K4 |
| (CO4) | Understand the basic concept of Java Script and its application. | K2, K3 |
| (CO5) | Introduce basics concept of Web Hosting and apply | K2, K3 |

| | | |
|--|--------------------|--|
| | the concept of SEO | |
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Mini Project (BCC 351)

| Course Outcome (CO) | Details of Course Outcomes | Bloom's Knowledge Level (KL) |
|---------------------|--|------------------------------|
| (CO1) | Discover potential research areas in the field of IT | K2 |
| (CO2) | Compare and contrast the several existing solutions for research challenge | K5 |
| (CO3) | Demonstrate an ability to work in Teams and manage the conduct of the research study | K4 |
| (CO4) | Formulate and propose a plan for creating a solution for the research plan identified. | K5 |
| (CO5) | To report and present the findings of the study conducted in the preferred domain | K5 |

Universal Human Values and Professional Ethics (BVE301)

| Course Outcome (CO) | Details of Course Outcomes | Bloom's Knowledge Level (KL) |
|---------------------|---|------------------------------|
| (CO1) | Understand the significance of value inputs in a classroom, distinguish between values and skills, understand the need, basic guidelines, content and process of value education, explore the meaning of happiness and prosperity and do a correct appraisal of the current scenario in the society | K1, K2 |
| (CO2) | Distinguish between the Self and the Body, understand the meaning of Harmony in the Self the Co-existence of Self and Body. | K1, K2 |
| (CO3) | Understand the value of harmonious relationship based on trust, respect and other naturally acceptable feelings in human relationships and explore their role in ensuring a harmonious society. | K2, K4 |
| (CO4) | Understand the harmony in nature and existence, and work out their mutually fulfilling participation in the nature. | K2, K4 |
| (CO5) | Distinguish between ethical and unethical practices, and start working out the strategy to actualize a harmonious Environment wherever they work. | K2, K3 |

Mathematics –IV (PDE, Probability and Statistics) (BAS303)

| Course Outcome (CO) | Details of Course Outcomes | Bloom's Knowledge Level (KL) |
|----------------------------|--|-------------------------------------|
| (CO1) | The idea of partial differentiation and types of partial differential equations | K1 |
| (CO2) | The idea of classification of second partial differential equations, wave , heat equation and transmission lines | K2 |
| (CO3) | The basic ideas of statistics including measures of central tendency, correlation, regression and their properties. | K3 |
| (CO4) | The idea s of probability and random variables and various discrete and continuous probability distributions and their properties. | K4 |
| (CO5) | The statistical methods of studying data samples, hypothesis testing and statistical quality control, control charts and their properties. | K6 |