

Data Structures with C

Code: BCA 302

CREDITS: 4

Basic concepts of data representation: abstract and system defined types, primitive data structures

Linear data structures and their sequential representation: array, stack, queue, circular queue, dequeue and their operations and applications

Linear data structures and their linked representation: linear link lists, doubly linked lists, linked stack, linked queue and their operations and applications.

Non Linear Data Structures I: Binary trees, binary search trees, representations and operations, thread representations, sequential representations, graphs and their representation.

Searching Techniques- Linear, Binary, Interpolation

Sorting Techniques-Insertion Sort, Bubble, Selection, Quick

Non Linear Data Structures II : Hashing, Files

Programming with Data Structures in C