



III Year-II Semester		L	T	P	C
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<b>DATASTRUCTURES THROUGH C LAB (R1632028)</b>					

**Prerequisite Course:**

Data structures

**Course Description and Objectives:**

1. To develop skills to design and analyze simple linear and non linear data structures
2. To Strengthen the ability to identify and apply the suitable data structure for the given real world problem
3. To Gain knowledge in practical applications of data structures

**CourseOutcomes:**

Upon completion of the course, the student will be able to achieve the following outcomes.

Cos	CourseOutcomes	POs
1	Be able to design and analyze the time and space efficiency of the data structure	4
2	Be capable to identity the appropriate data structure for given problem	5
3	Have practical knowledge on the application of data structures	4

**Syllabus:**

**Any 10 of the Following Experiments are to be conducted**

1. Implementation of Singly linked list.
2. Implementation of Doubly linked list.
3. Implementation of Multi stack in a Single Array.
4. Implementation of Circular Queue
5. Implementation of Binary Search trees.
6. Implementation of Hash table.
7. Implementation of Heaps.
8. Implementation of Breadth First Search Techniques.
9. Implementation of Depth First Search Techniques.
10. Implementation of Prim's Algorithm.
11. Implementation of Dijkstra's Algorithm.
12. Implementation of Kruskal's Algorithm
13. Implementation of MergeSort
14. Implementation of Quick Sort
15. Implementation of Data Searching using divides and conquers technique