

## Integrated Programme in Management TERM III

## TITLE OF THE COURSE: INTRODUCTON TO DATA STRUCTURE CREDITS: 2

## **COURSE DESCRIPTION**

A data structure specifies arrangement of data in the memory of computer. Examples of some of important data structures include arrays, stacks, queues, linked lists, trees and hash tables. Study of these data structures include creation of the data structure, defining ways for insertion of a new data item, searching of a specific data item and manipulation of the data contained in these data structures.

## **COURSE OBJECTIVES**

- ightarrow To learn basics of data structure and its need
- → To introduce various types of data structures such as stack, queue, linked list, tree, hash table etc.
- $\rightarrow$  To learn choosing of an appropriate data structure and algorithm design method for a specified application.
- → To be familiar with sorting algorithms such as bubble sort, insertion sort, selection sort, quick sort, merge sort, heap sort etc.

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