

# *MSIT First Year Syllabus*

## *Mini Semester II:*

### **Data Structures**

*Course ID* : IT1242

*Duration* : 4 Weeks

*Credits* : 4

#### ***DESCRIPTION:***

The Data Structures course will help the students gain a solid understanding of fundamental Design, Analysis, and implementation of basic data structures. It covers basic concepts in the specification and analysis of programs and also the Principles for a good program design. This course will lead the learner to develop a practical Mini Google Search Engine where all the data structures will get implemented.

#### ***Syllabus:***

Techniques that are covered and explored indepth include queues, linked lists, trees, hashing, dictionary data structures, priority queues and heaps, sorting, finite state models and other related topics.

#### ***Project :***

**Mini Google Search Engine**