

## **Topic – Priority Queues and Trees**

**Relevant Course:** Data Structures

**Relevant Department:** Computer Engineering

**Relevant Semester:**3

### **Topic Outline:-**

Quick review of abstract data types (ADTs), implementation of the tree ADT using arrays or lists, traversal of trees, complexity analysis

Priority Queues and Heaps: applications of heaps, binomial heaps, fibonacci heaps, pairing heaps.

Binary search trees (BST): applications of BST, AVL Trees, Red-Black trees, Splay trees.