

# **ECSE414L – ADVANCED DATA STRUCTURES AND ALGORITHMS**

## **Course Type-Core L-T-P Format 6-0-12 Credits-5**

Solving 183 Leetcode Medium Level Questions and 12 GFG Medium Level Questions. Solving questions using tools of Leetcode and GFC Easy Level Questions.

### **COURSE-SPECIFIC LEARNING OUTCOMES**

CO1: It will prepare you for Placement Interviews fully with coding rounds.

CO2: It will help you do Hard Questions.

### **LECTURES /THEORY**

Module-1 (W1, W2, W3, W4) Tree Data Structures and Algorithms

Module-2 (W5, W8, W9, W10, W11, W12) Heap Data Structures and Algorithms

Module-3 (W17, W18, W19, W20) Graph Data Structures and Algorithms

Module-4 (W21, W22, W23, W24) Tries Data Structures and Algorithms

### **STUDIO WORK / LABORATORY EXPERIMENTS.**

Module-1 (W1, W2, W3, W4) Tree Data Structures and Algorithms(33)

Module-2 (W5, W8, W9, W10, W11, W12) Heap Data Structures and Algorithms(12)

Module-3 (W17, W18, W19, W20) Graph Data Structures and Algorithms(24)

Module-4 (W21, W22, W23, W24) Tries Data Structures and Algorithms(9)

### **EXAMINATIONS**

Mid-Term and Syllabus (W6, W7) Module-1, Module-2.

End-Term and Syllabus (W13, W14, W15, W16) Complete Syllabus.