

**SCHOOL OF ENGINEERING AND TECHNOLOGY  
SRI PADMAVATHI MAHILA VISVAVISYALAYAM  
(WOMENS UNIVERSITY), TIRUPATI**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**PG Labs**



**ADVANCED DATA STRUCTURES LAB**

This Lab is intended for students to Identify and implement the appropriate data structure for a given problem and to demonstrate collision resolution techniques like linear probing, quadratic probing and double hashing/rehashing. They can perform Stack operations to convert infix expression into post fix expression and evaluate the post fix expression. Able to differentiate graph traversal techniques Like Depth First Search, Breadth First Search, classify shortest path to other vertices using various algorithms.

Software/Tools used are: Java

### **WIRELESS AND MOBILE NETWORKS LAB**

In this Laboratory students get familiar with the various network simulators like ns2 and QualNet, will Learn to model and simulate various network topologies. Able to Evaluate MAC and network protocols using network simulation software tools, develop new MAC and network protocols and simulate them in the network simulators.

Software/Tools used are: CFree, Turboc

### **ADVANCED ALGORITHMS LAB**

This Laboratory will let the students to Design and analyze programming problem statements. To choose appropriate data structures and algorithms, Understand the ADT/libraries and use it to design algorithms for a specific problem and to realize the necessary mathematical abstraction to solve problems, also demonstrate various advanced algorithms concepts

Software/Tools used are: java

### **SOFT COMPUTING LAB**

Students Understand the difference between learning and programming and explore practical applications of Neural Networks (NN) and analyse and appreciate the applications which can use fuzzy logic. Can also comprehend the basics of genetic algorithm, use of GA operators and its applications. This lab also let the student to understand the basics of genetic algorithm, use of GA operators and its applications.

Software/Tools used are: Turboc