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

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

UG LABS

Computer Center – 1

Computer Center – 2

Computer Center – 3

Programming for Problem Solving Lab

The Objective of this laboratory is to Formulate simple algorithms for arithmetic and logical operations using a programming language C, this lab also enables the students to test and execute the programs using various concepts like recursion, iteration, conditional branching, arrays, Pointers etc.,

Software/Tools used are: CFree,Turboc

DATA STRUCTURES LABORATORY

The main objective of this lab is to teach the students about various data structures and to algorithms for performing various operations on these data structures. This lab complements the data structures course. In this laboratory Students will gain practical knowledge by writing and executing programs in C using various data structures such as arrays, linked lists, stacks, queues, trees, graphs, hash tables and search trees.

Software/Tools used are:Turboc,DevC++

IT Workshop

This Lab will enable the students to learn How to repair the faults occurred in, Desktop, Laptop, Mobile phones and also able to work with the Internet , Spread sheet computations, and Presentation. Students Can Learn the usage of Productivity tools in crafting professional word documents, excel spread sheets and power point presentations using open office tools and LaTeX.

Software/Tools used are: Ms office, Latex

OBJECT ORIENTED PROGRAMMING LAB

In this Lab students will Analyze complex computational problems and Design solutions for real life computational problems, and can apply the theoretical knowledge for Solving complex problems using python and Java scripting constructs.

Software/Tools used are: Star UML

DATABASE MANAGEMENT SYSTEMS LAB

This lab is intended for students to Develop conceptual understanding of database management system. And understand how a real-world problem can be mapped to schemas to Solve different industry level problems.

Software/Tools used are: Oracle10g

OPERATING SYSTEMS LAB

This lab meant for students for developing synchronized programs using multithreading concepts and deadlocks, for analyzing and simulating CPU Scheduling Algorithms like FCFS, Round Robin, SJF, and Priority. Students will implement memory management schemes and page replacement schemes and Design file management techniques also**.**

Software/Tools used are: Turboc

SOFTWARE ENGINEERING AND OBJECT-ORIENTED ANALYSIS AND DESIGN LAB

In This lab Students will Find solutions to the problems using object-oriented approach and Can Represent using UML notation and interact with the customer to refine the UML diagram. Students also able to Develop a software project from requirements gathered to implementation and Fundamentals of modeling a software project**.**

Software/Tools used are: Star UML, Rational Rose

MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE LAB

This Laboratory is designed for students to gain wide exposure on the basic concepts in Artificial Intelligence, to apply various Heuristic search procedures to determine optimal solutions in real time applications. Students use PROLOG for developing AI applications. So it supports for Implementation procedures for the machine learning algorithms, for applying appropriate data sets to the Machine Learning algorithms and to analyses Machine Learning algorithms to solve real world problems.

Software/Tools used are: Python IDE, SWI Prolog

COMPUTER NETWORKS LAB

This lab will let students to Develop the programs related to Bit stuffing, character count,etc and enable to apply appropriate algorithm for the finding of shortest route. Also to Simulate the encryption and decryption concepts in network layer.

Software/Tools used are: Phython IDE,Java

CRYPTOGRAPHY AND NETWORK SECURITY LAB

In This Laboratory Student will Develop a java interface for encryption and decryption algorithms i.e., AES, MD5 and RSA algorithms. And able to analyses the real time problems using cryptography techniques. Students can also Design an Elgamal Public Key Crypto System for network security.

Software/Tools used are: Java

INTERNET AND WEB PROGRAMMING LAB

Students Use Javascript and XHTML to create web pages with advanced interactivity, Program basic functions in Javascript and XHTML and make use of javascript to create functional forms, control browser frames and windows, cascading style sheets to design web pages.

Software/Tools used are: Notepad++,Apache Tomcat,XAMP

ADVANCED PROGRAMMING LAB

This lab intended to students to formulate the algorithms for simple problems and Write iterative as well as recursive programs, develop programs with OOPS concepts and to solve complex problems using java. Able to develop skills to design and analyse simple linear and non-linear data structures

Software/Tools used are: Dev C++,TurboC