**B.SC.INFORMATION TECHNOLOGY**

 **(IT)**

 **SEMESTER-1**

**CORE-1-** **PROGRAMMING IN C (23UITCC01)**

**COURSE OUTCOMES (COs):**

**CO1**: Outline the fundamental concepts of C programming languages, and its features

**CO2:** Demonstrate the programming methodology.

**CO3:** Identify suitable programming constructs for problem solving.

 **CO4:** Select the appropriate data representation, control structures, functions and concepts based on the problem requirement.

**CO5:** Evaluate the program performance by fixing the errors.

 **FUNDAMENTALS OF COMPUTERS (23UTF01)**

**COURSE OUTCOMES (COs):**

**CO1:** Outline the Computer fundamentals and various problem solving concepts in Computers

**CO2:** Describe the basic computer organization, software, computer languages, software development life cycle and the need of structured programming in solving a computer problem

**CO3:** Identify the types of computer languages, software, computer problems and examine how to set up expressions and equations to solve the problem.

**CO4:** Choose most appropriate programming languages, constructs and features to solve the problems in diversified domains.

**CO5:** Analyze the design of modules and functions in structuring the solution and various Organizing tools in problem solving.

 **CORE- INTRODUCTION TO LINEAR ALGEBRA (23UMAA01)**

**COURSE OUTCOMES (COs)**

On completion of this course, students will

CO1: Learn about the Computer fundamentals and the Problem solving and understand the basic

concepts of C and C++ programming.

CO2 :Demonstrate the various basic programming constructs like decision making statements.

Looping statements and functions.

CO3 :Analyze the object oriented concepts like overloading, inheritance ,polymorphism, Virtual

functions ,constructors and destructors.

CO4 :Comparethevariousfilestreamclasses;filetypes,usageoftemplatesand exception Handling

mechanisms, pros and cons of procedure oriented language with the concepts of programming

language.

CO5: Study about Numeric data and character-based data. Analyze about Arrays.

CO6: Develop programs in corporation the programming constructs of object oriented

Programming concepts.

  **SEMESTER-1I**

**CORE – III- JAVA PROGRAMMING (23UITCC02)**

**COURSE OUTCOMES (COs):**

**CO1:** Outline the basic terminologies of OOP, programming language techniques, JDBC and Internet programming concepts

 **CO2:** Solve problems using basic constructs, mechanisms, techniques and technologies of Java .

**CO3:** Analyse and explain the behavior of simple programs involving different techniques such as Inheritance, Packages, Interfaces,Exception Handling and Thread and technologies such as JDBC and Servlets

 **CO4:** Assess various problem-solving strategies involved in Java to develop a high-level application.

 **CO5:** Design GUI based JDBC applications and able to develop Servlets using suitable OOP concepts and techniques.

 **INTRODUCTION TO HTML**

**COURSE OUTCOMES (COs):**

**CO1:** Knows the basic concept in HTML• Concept of resources in HTML

**CO2:** Knows Design concept. Concept of Meta Data Understand the concept of save the files

 **CO3:** Understand the page formatting. Concept of list

 **CO4:** Creating Links. Know the concept of creating link to email address

 **CO5:** Concept of adding images Understand the table creation.

 **SEMESTER-1II**

**CORE – V- RELATIONAL DATABASE MANAGEMENT SYSTEM (23UITCC03)**

**COURSE OUTCOMES (COs):**

**CO1:** Outline the fundamental RDBMS concepts and PL/SQL

**CO2:** Apply database operations, mapping, normalization, SQL and PL/SQL

 **CO3:** Analyze the requirements to implement relational database concepts

**CO4** : Evaluate the database based on various models and normalization.

**CO5:** Design and construct normalized tables and manipulate it effectively using SQL and PL/SQL database objects

 **OFFICE AUTOMATION**

**COURSE OUTCOMES (COs):**

**CO1:**Possess the knowledge on the basics of computers and its components

**CO2:** Gain knowledge on Creating Documents, spreadsheet and presentation.

 **CO3:** Learn the concepts of Database and implement the Query in Database.

**CO4:** Demonstrate the understanding of different automation tools.

 **CO5:** Utilize the automation tools for documentation, calculation and presentation purpose

 **SEMESTER-1V**

 **CORE – VIII-.NET PROGRAMMING (23UITCC04)**

**COURSE OUTCOMES (COs):**

**CO1:** Outline the features of C# programming language and ASP.NET applications

 **CO2:** Demonstrate the salient properties of C# and ASP.NET applications

**CO3 :** Identify the various stages in developing a web forms

**CO4 :** Select the appropriate controls to create a web form.

**CO5 :** Recommend a data driven web application by connecting to the data sources.

 **PROBLEM SOLVING TECHNIQUES**

**COURSE OUTCOMES (COs)**

**CO1:** Understand the logic of problem and analyses implementation of algorithm and TopDown approach and concept of Recursion

 **CO2:** Able to understand the Sequence of Numbers and Series Fibonacci, Reversing ,Base Conversion.

 **CO3:** Able to do Algebraic operations

**CO4:** Coverage of Arrays and its Logics

**CO5:** Text Processing and Pattern Searching Approach

 **SEMESTER-V**

 **CORE – IX:-PYTHON PROGRAMMING (23UITCC05)**

**COURSE OUTCOMES (COs):**

**CO1:** Outline the basic concepts in python language.

 **CO2:** Interpret different looping and conditional statements in python language

**CO3** :Apply the various data types and identify the usage of control statements, loops, functions and Modules in python for processing the data

 **CO4:** Analyze and solve problems using basic constructs and techniques of python.

**CO5:** Assess the approaches used in the development of interactive application.

 **CORE – XI-OPERATING SYSTEMS (23UITCC06)**

**COURSE OUTCOMES (COs):**

**CO1:** Outline the fundamental concepts of an OS and their respective functionality

**CO2 :**Illustrate the importance of open source operating system commands

**CO3 :**Identify and stimulate management activities of operating system

**CO4:** Analyze the various services provided by the operating system.

**CO5** :Interpret different problems related to Process, Scheduling, Deadlock, memory and Files

 **SOFTWARE ENGINEERING**

**COURSE OUTCOMES (COs):**

**CO1:** Define the basic terminologies involved in the entire software developmental life cycle

**CO2:** Identify suitable models, techniques and tools for the development of a software product

**CO3:** Apply software engineering perspective through requirements analysis, software design and construction, verification, and validation to develop solutions to modern problems

 **CO4:** Compare and contrast different process, cost, quality models and testing techniques

**CO5:** Estimate the project cost using suitable cost estimation models, rate the software risks and evaluate management strategies for effective software development

 **SEMESTER-V1**

 **CORE – XIII-DATA MINING (23UITCC08)**

**COURSE OUTCOMES (COs):**

**CO1:** Outline the fundamentals and the principles of Data Mining

**CO2 :**Apply suitable different preprocessing for data mining

 **CO3:** Classify data-mining techniques based on the different applications

**CO4:** Analyze the various data mining algorithms with respect to functionality

 **CO5:** Recommend appropriate data models for data mining techniques to solve real world problems

 **CORE – XV: DATA COMMUNICATION AND NETWORKING (23UITCC07)**

**COURSE OUTCOMES (COs):**

**CO1:** Understand the fundamental concepts of computer networks and its application areas

 **CO2:** Identify and use various networking techniques and components to establish networking connection and transmission

 **CO3:** Analyze the services performed by different network layers and recent advancements in networking

**CO4:** Compare various networking models, layers, protocols and technologies.

**CO5:** Select the appropriate networking mechanisms to build a reliable network

  **MACHINE LEARNING**

**COURSE OUTCOMES (COs):**

**CO1:** Outline the importance of machine learning in terms of designing intelligent machines

 **CO2:** Identify suitable machine learning techniques for the real time applications

 **CO3:** Analyze the theoretical concepts and how they relate to the practical aspects of machine learning.

**CO4:** Assess the significance of principles, algorithms and applications of machine learning through a hands-on approach

**CO5:** Compare the machine learning techniques with respective functionality

 **QUANTITATIVE APTITUDE**

**COURSE OUTCOMES (COs)**

**CO1:** understand the concepts, application and the problems of numbers

**CO2:** To have basic knowledge and understanding about percentage, profit & loss related processings

 **CO3:** To understand the concepts of time and work

 **CO4:** Speaks about the concepts of probability, discount

**CO5:** Understanding the concept of problem solving involved in stocks & shares, graphs