

## Course Outcomes (COs) B.Sc.(Program) Computer Science Semester

<b>B.Sc Computer Science, Semester I</b> PROGRAMMING METHODOLOGIES	
CO1	Understanding language evolution and difference between high level and assemble language.
CO2	Acquiring in depth knowledge of programming construction tools
CO3	Understanding C Character Set, Keyword, Constants and Variables, Data types, Type Casting, operators and expressions in C.
CO4	Understanding various conditional and looping statements in C.
<b>B.Sc Computer Science, Semester II</b> DATA STRUCTURE	
CO1	Understand basic concept, fundamentals and operations of data structure.
CO2	Understand the concept of recursion with its properties and its applications
CO3	Understand the concept of linked list with its representation, types and operations.
CO4	Understand the concept of trees and graphs
<b>B.Sc Computer Science, Semester III</b> Basics of Operating Systems	
CO1	Understanding purpose, function and role and types of operating system
CO2	Understanding of operating system components and concept of process and job control.
CO3	Grasping knowledge of Linux operating system.
CO4	Understanding of of shell scripts pipe and filters, permission modes
<b>B.Sc Computer Science, Semester III</b> Core Java	
CO1	Understanding of basics of Java language and its programming concepts.
CO2	Understanding concept of classes and object concept in java , java language features and packages in java
CO3	Acquiring in-depth knowledge of exception handling and multi-threading in java.
CO4	Acquire in-depth knowledge of AWT and Applets in java

<b>B.Sc Computer Science, Semester IV</b> <b>Basics of Database Management System</b>	
CO1	Acquire in-depth knowledge of RDBMS concept, oracle, SQL tools and commands.
CO2	Understanding of various SQL languages
CO3	Understand SQL functions and database objects
CO4	Understand basic elements of PL/SQL programming
<b>B.Sc Computer Science, Semester IV</b> <b>Web Programming with PHP</b>	
CO1	Utilizing the basic concept of statements and arrays
CO2	Implement functions and browser handling power of PHP
CO3	Imparting Database applications, File handling, Cookies in the webpage.
CO4	Design and Implement Interactive Web Site using Forms, OOPS and AJAX
<b>B.Sc Computer Science, Semester V</b> <b>Basics of Software Engineering</b>	
CO1	How to apply the software engineering lifecycle by demonstrating competence in communication, planning, analysis, design, construction, and deployment
CO2	An ability to work in one or more significant application domains
CO3	Work as an individual and as part of a multidisciplinary team to develop and deliver quality software
CO4	Demonstrate an ability to use the techniques and tools necessary for engineering practice.
<b>B.Sc Computer Science, Semester V</b> <b>Basics of Computer Networks</b>	
CO1	Understanding of concept of data transmission, data encoding, signals, data link controls and multiplexing.
CO2	Acquiring in depth knowledge of communication network, LAN, MAN and various network topologies.
CO3	Understand various communication protocols and concept of internetworking
CO4	Acquire knowledge of cloud computing basics

<b>B.Sc Computer Science, Semester V</b> <b>MATLAB Programming</b>	
CO1	Familiar to all the features of MATLAB software and easily handle the software
CO2	New teaching model which include theory & practical running simultaneously is introduced to our students.
CO3	Students learned graphic features of MATLAB and they are able to use this feature effectively in the various applications
CO4	Students are able to work as a 'MATLAB programmer' in the industry because of the hands on practical sessions.
<b>B.Sc Computer Science, Semester V</b> <b>Programming in Python</b>	
CO1	Become technology-oriented with the knowledge and ability to develop creative solutions, and better understand the effects of future developments of computer systems and technology on people and society as a whole.
CO2	Acquire some development experience within a specific field of Computer Science, through project work.
CO3	Gain ability to apply knowledge of Computer Science to the real-world issues
CO4	Get familiar with current research trends in various fields of Computer Science.
<b>B.Sc Computer Science, Semester VI</b> <b>Basics of Artificial Intelligence</b>	
CO1	Learn the basics of learning problems with hypothesis and version spaces
CO2	Understand the informed and uninformed problem types and apply search strategies to solve them.
CO3	Design and evaluate intelligent expert models for perception and prediction from intelligent environment.
CO4	Formulate valid solutions for problems involving uncertain inputs or outcomes by using decision making techniques
<b>B.Sc Computer Science, Semester VI</b> <b>Basics of Computer Graphics</b>	
CO1	Understand the basics of computer graphics, different graphics systems and applications of computer graphics.
CO2	Discuss various algorithms for scan conversion and filling of basic objects and their comparative analysis
CO3	Use of geometric transformations on graphics objects and their application in composite form.
CO4	Extract scene with different clipping methods and its transformation to graphics display device.

## **B.Sc Computer Science, Semester VI**

### **Basics of Cloud Computing**

CO1	To provide students with the fundamentals and essentials of Cloud Computing.
CO2	To provide students a sound foundation of the Cloud Computing so that they are able to start using and adopting Cloud Computing services and tools in their real life scenarios.
CO3	To enable students exploring some important cloud computing driven commercial systems and applications.
CO4	o expose the students to frontier areas of Cloud Computing and information systems, while providing sufficient foundations to enable further study and research.