## Program Outcome(PO)

After completing the three year degree program ,students will be able to Attain employability skills to serve Software, IT industry and government sector and can also open their own venture in the area of hardware, software and networking.

# **Program Specific Outcome(PSO)**

After Completing Bachelor of Computer Applications, the student will be able to demonstrate the deep and analytical understanding of PSO the course. It will prepare students to provide professional solutions to real time problems and attain skills to work with the latest technologies and programming languages.

#### **Course Outcomes**

## I Year-Semester-I

**Course: BCA-111 Computer and Programming Fundamentals** 

CO-111 Understand the complete fundamental of Computer System

**Course: BCA-112 Windows and PC Software** 

CO- Includes Windows and its Features including Windows Accessories 112 and complete knowledge of Ms- Office.

Course: BCA-113 Mathematical Foundation-I

 $\frac{\text{CO-}}{113}$  Applications of Sets and differential equations.

Course: BCA-114 Logical Organisation of Computer-I

**CO- Understand Number System, Logic Gates and various** 

114 Combinational circuits

Course: BCA-115 English

CO- Improve LSRW-listening, speaking, reading and writing skills and

115 the related sub-Skills.

**Course: BCA-116 Programming in C** 

CO- Knowledge of Operators, Data types, Array, Functions and can

116 develop programs in C language.

I Year- Semester-II

**Course: BCA-121 Advance Programming in C** 

- CO- Understand memory management using pointers and Design
- programs using the concept of dynamic memory allocation using pointer and pointer o pointer

Course: BCA- 122 Logical Organization of Computer-II

- CO- Understand and Apply Flip-Flops. Also design Sequential Circuits,
- 122 registers, counters

Course: BCA- 123 Mathematical Foundation-II

- CO- Understand Equivalence and implications, Laws of logic,
- Mathematical system, Proposition over a universe, Mathematical induction, Quantifiers

**Course: BCA- 124 Office Automation Tools** 

 $rac{ ext{CO-}}{124}$  Design and edit publication in Page maker

Course: BCA- 125 Structured System Analysis & Design

- CO- Demonstrate knowledge on the different phases of Systems
- Development Life Cycle(SDLC) and Demonstrate the use of systems design techniques ,methodologies, and tools.

**Course: BCA-126 Personality Development** 

Develop and understand sense of Body language use and misuse, Art  $\operatorname{CO-}$  of good

126

**Conversation, Art of Intelligent Listening.** 

#### II Year- Semester-III

Course: BCA- 231 Object Oriented Programming using C++

- CO- Develop simple applications using class, objects, constructors and
- applications using Concepts of Polymorphism, Function

Overloading, Inline Functions.

Course: BCA- 232 Data Structure

- CO- Applying String operations ,Pattern matching algorithms and
- implementing algorithms using various data structures like Arrays, stacks, queues, Deques, Priority Queues, linked list, trees ,graphs.

**Course: BCA-233 Computer Architecture** 

CO-233 Understand and apply Arithmetic Micro operations, Logic Micro operations, Shift

## Microoperations, Arithmetic Logic Shift Unit.

**Course: BCA-234 Software Engineering** 

Understand and apply Structured Analysis and Tools: Data Flow Diagram, Data Dictionary, Decision table, Decision tress, Structured

English, Entity-Relationship

diagrams, Cohesion and Coupling. Gantt chart, PERT Chart.

**Course: BCA-235 Fundamentals of Database System** 

CO- Understand and explain data, Database System Architecture, Data

235 Independence.

**Course: BCA-236 Computer Oriented Numerical Method** 

Understand and perform Computer Arithmetic: Floating-point representation of numbers, arithmetic operations with normalized

CO- floating-point numbers and the consequences, significant

236 figures.Error in number representation-in herenterror,truncation,absolute,relative, percentage and round-off error and apply Iterative Methods.

#### II Year- Semester-IV

Course: BCA- 241 Advance Data Structure

CO-Warshall's algorithm for shortest path, Dijkstra algorithm for

shortest Path.

Course: BCA- 242 Advance Programming Using C++

CO- Develop applications using inheritance, templates and exception

242 handling.

Course: BCA- 243 E-commerce

CO- Understand concepts of b2b,b2c,c2c ,b2g,g2h,g2c and Electronic

243 payment systems.

**Course: BCA- 244 Relational Database Management System** 

CO- Understand and describe Functional Dependencies and

244 Normalization and Understand SQL, PL/SQL.

**Course: BCA- 245 Computer Oriented Statistical Methods** 

**CO- Understand and demonstrate Central Tendency, Dispersion,** 

245 Correlation and Regression.

**Course: BCA- 246 Management Information System** 

CO- Understand Information system, its types, Simon's model of Decision making and pitfalls in MIS development.

### III Year- Semester-V

**Course: BCA- 351 Web Designing Fundamental** 

 $\frac{\text{CO-}}{351}$  Understand various HTML tags, tables, Frames and Forms.

Course: BCA- 352 Operating System-I

CO- Define, restate, discuss, and explain the policies for scheduling, 352 deadlocks.

**Course: BCA – 353 <u>Artificial Intelligence</u>** 

Understand the fundamentals of knowledge representation(logic-

- CO- based, frame-based, semantic nets), inference and the reproving and
- 353 Ability to apply Knowledge Representation, reasoning, and machine learning techniques to store all-world problems.

**Course: BCA – 354 Computer Networks** 

Describe how computer networks are organized with the concept to CO- lavered

354

Approach and Explain various transmission media.

**Course : BCA – 355 Programming using Visual Basic** 

- CO- Distinguish and compose events and methods, Students code visual
- 355 programs by using Visual Basic work environment.

**Course : BCA – 356 Multimedia Tools** 

CO- Use and apply tools for image processing, video, sound and animation and Explain different audio and video compression techniques.

### III Year- Semester-VI

**Course : BCA – 361 Web Designing using Advance Tool** 

- CO- Use advanced topics in HTML5, CSS3, JavaScript, DHTML and
- 361 Working with Macro media flash player and other interactivity tools.

Course: BCA – 362 Operating System-II

Study different disk scheduling algorithms and Identify and use

- CO- UNIX/Linux utilities to create and manage simple file processing
- 362 operations, organize directory structures with appropriate security, develop shell script stoppers for more complex tasks..

**Course : BCA – 363 Computer Graphics** 

Provide an understanding of mapping from a world coordinates to CO- device

363

Coordinates, clipping, and projections.

**Course : BCA – 364 Internet Technologies** 

Predict and explain how different networking technologies at the  $\ensuremath{\mathsf{CO}}\xspace$  same or

364

Different layers interact and affect each other in a large-scale system.

Course: BCA – 365 Advance Programming with Visual Basic

CO- Working with Menus, Accessing Databases (Data Controls, Data-

365 Bound Controls, DAO, RDO, ADO).

Course: BCA-366 Programming in Core Java

Write Java application programs using OOP principles and proper program

 $^{\text{CO-}}_{366}$  Structuring and to implement error handling techniques using exception

Handling.