



● 'A' Grade College by DHE, Govt. of NCT DELHI ● Approved by BCI & NCTE ● Recognised under 2(f) of UGC Act of 1956

## Course Outcomes of BCA

### BCA Semester I

#### BCA 101- Mathematics-I

- To impart the required knowledge of Mathematics and statistics for managerial activities among students.
- To inculcate in students the fundamental mathematical background in computer science.
- To gain knowledge about Sets, Relations Functions, Matrices, Mathematical logic, and Group theory.
- Understand the basic concepts of Sets, Relations Functions, Matrices, Mathematical logic, and Group theory.
- Develop analytical ability to solve real-world problems using these methodologies.

#### BCA 103- Technical Communication

- Develop the student's ability to use English language accurately and effectively by enhancing their communication skills.
- Mastering the art of a professional business presentation.
- Distinguish different communication process and its practical application
- More effective written communication

#### BCA 105- Introduction to Programming Lang. C

- Analyze a given problem and develop an algorithm to solve the problem.
- Use the 'C' language constructs in the right way.
- Design, develop and test programs written in 'C'.
- Design programs involving decision structures, loops and functions.
- Understand the dynamics of memory by the use of pointers and Structures

#### BBA 107- Introduction to Computers IT

- Familiar with parts of computer.
- Understand the input and output devices.
- Basic ideas of storage devices, computer Networks and Operating System

### **BCA 109- Physics**

- To get the knowledge about the basic laws of nature such as motion, work, power and energy.
- To study the electrostatics, semiconductors and devices.

## **BCA Semester II**

### **BCA 102- Mathematics-II**

- To understand the basics concepts of Discrete Mathematical Structures.
- To get the Knowledge about sets, relations and functions.
- To study the basics of lattices and graphs.
- To get familiar with propositional logic.

### **BCA 104 - Principles of Management**

- To Provide Fundamental knowledge and exposure to Theories and Concept in the Field of Management.
- To develop the knowledge of business and management principles.
- To learn decision thinking and problem skills.
- To teach a sense of responsibility and a capacity for business management.
- To Explain the financial concepts used in making business decision.

### **BCA 106- Digital Electronics**

- To introduce the fundamentals of computers
- To introduce basic postulates of Boolean algebra and shows the correlation between Boolean expressions
- To outline the formal procedures for the analysis and design of combinational circuits and sequential circuits
- To introduce the concept of computer memories

### **BCA 108- Data Structure Using C**

- To be able to practically implement the data structures like stack, queue, array etc.
- To understand and implement different searching and sorting.
- Understand the need for Data Structures when building Applications.
- Able to walk through insert and delete for different data techniques.
- Improve programming skills.

### **BCA 110- Database Management System**

- Understand the use of structured query language and its syntax, transactions, database recovery and techniques for query optimization.
- Acquire a good understanding of database systems concepts and to be in a position to use and design databases for different applications.
- Gain a good understanding of the architecture and functioning of database management systems as well as associated tools and techniques, principles of data modeling

## **BCA Semester III**

### **BCA 201- Mathematics-III**

- To Understand the use of the basic data structures along with their applications.
- To get the knowledge about the important mathematical concepts their application.
- Evaluate the probabilities and conditional probabilities.
- Construct point estimators using the method of maximum likelihood

### **BCA 203- Computer Architecture**

- To enable the students to learn the basic functions, principles and concepts of Computer Architecture.
- To learn the fundamental aspects of Computer Architecture and design.
- To focus on processor design, control unit design techniques.
- Understood Computer Architecture.
- Understood processor design, control unit design

### **BCA 205- Front End Design Tool VB.Net**

- To understand Object Oriented and Object based programming paradigm in event based programming environment.
- To get the Knowledge about different Object Oriented Features.
- To understand disconnected architecture of .Net.

### **BCA 207- Principles of Accounting**

- To understand the basics of accounting and its application in general business environment.
- To get the Knowledge about the important concepts and characteristics of accounting.
- To study the application of accounting in the general business environment.

### **BCA 209- Object Oriented Programming using C++**

- Understand fundamental constructs of OOP.
- Get the knowledge of different forms of OOP Implementation.
- To demonstrate the differences between traditional imperative design and object- oriented design.
- To understand the role of inheritance, polymorphism, dynamic binding and generic structures in building reusable code.

## **BCA Semester IV**

### **BCA 202- Mathematics-IV**

- To understand the basics concepts of probability and numerical analysis.
- To get the Knowledge about mathematical probability.
- To get familiar with various numerical techniques.

### **BCA 204- Web Technologies**

- Understand, analyze and create web pages using HTML, DHTML and Cascading Styles Sheets.
- Understand, analyze and build dynamic web pages using JavaScript and VB Script (client side programming).
- Understand, analyze and build interactive web applications.
- Understand, analyze and create XML documents and XML Schema.

### **BCA 206- Java Programming**

- Understand the principles and practice of object oriented analysis and design in the construction of robust, maintainable programs which satisfy their requirements;
- Implement, compile, test and run Java programs comprising more than one class, to address a particular software problem.
- Understand the concept of package, interface, multithreading and File handling in java.

### **BCA 208- Software Engineering**

- Select and implement different software development process models.
- Define the basic concepts and importance of Software project management concepts like cost estimation, scheduling and reviewing the progress.
- Apply different testing and debugging techniques and analyzing their effectiveness.
- Extract and analyze software requirements specifications for different projects.

### **BCA 210- Computer Networks**

- Explain the role of protocols in networking and to analyze the services and features of the various layers in the protocol stack.
- Understand design issues in Network Security and to understand security threats, security services and mechanisms to counter.
- Familiar with basic devices like repeaters, bridges, gateways and quality of service

## **BCA Semester V**

### **BCA 301- Operating System**

- Learn different types of operating systems along with concept of file systems and CPU scheduling algorithms used in operating system.
- Provide students knowledge of memory management and deadlock handling algorithms.
- Implement various algorithms required for management, scheduling, allocation and communication used in Operating System

### **BCA 303- Computer Graphics**

- Provide comprehensive introduction about computer graphics system.
- Design algorithms to generate the basic primitives.
- Familiar with techniques of clipping, three dimensional graphics and three dimensional transformations.
- Familiar with animations

### **BCA 305- E-Commerce**

- To prepare students to acquire the knowledge of recent trends in e-commerce.
- Students are prepared for website management which can be helpful in industry.
- To understand the nature and current trends of e-Commerce;
- Understand the importance of advertising and marketing in the field of e-commerce.

### **BCA 313- Web Based Programming**

- To highlight the features of different technologies involved in Web Development.
- Students should be able to design and implement a basic website.
- Students should be able to develop simple back-end database to support a website.
- Students should be able to recognize and evaluate website organizational structure and design elements.

## **BCA Semester VI**

### **BCA 302- Data warehouse and data mining**

- Understand the basic about data mining, classification and major issues.
- Learn about Data Warehouse and OLAP technology.
- Learn about cluster Analysis and major clustering methods

### **BCA 304- Mobile Computing**

- To provide basic knowledge on Wireless Communications, Mobile Internet and Mobile Content Services.
- To build working knowledge on various telephone and satellite networks.
- To build practical knowledge on WML and WML Script.
- To learn the basics of Wireless voice and data communications technologies.

### **BCA 306- Linux Environment**

- To know the basic concepts of Linux Operating System.
- Familiar with Linux commands.
- Familiar with system administration.
- Understand various types of servers

### **BCA 312- Artificial Intelligence**

- To understand the concept of Artificial Intelligence.
- Knowledge Representation.
- Logic, NLP and Learning.