# **BCA**

# PROGRAM OUTCOMES

# BCA (Bachelors of Computer Application)

# Program Outcomes:

BCA program has been designed to prepare graduates for attaining the following specific outcomes:-

- Ability to apply knowledge of mathematics, computer science and management in practice.
- Ability to enhance not only comprehensive understanding of theory but its application too in diverse field.
- The program prepares the young professionals for a range of computer applications, computer organization, techniques of computer networking, Software Engineering, Web development, Database management and handling Operating Systems.
- Ability to design a computing system to meet desired needs within realistic constraints such as safety, security and applicability.
- In order to enhance the programming skills of students, the program includes the concept of project development in the final semester of the course.

# **Course Outcomes:**

Course code: (BCA0101)

(BCA0201)

(BCA0301)

(BCA0602)

# Course title: Mathematics I (BCA0101)

Mathematics II

Mathematics III

Numerical Methods

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course Outcome:

Students will understand the foundation of mathematics and will perform basic computation in higher mathematics. They will be able to develop problem solving skills.

Course code: (BCA0505)

Course title: Computer Oriented Statistical Methods

Theory/Lab: Theory and Lab

L.T.P.C.: 4.0.3.7

Course Outcome:

The content of mathematics will help the students become mathematical problem solvers, will also help them in reasoning mathematically, making mathematical connections and using mathematical representation to model and interpret practical situations.

Course code: (BCA0104)

(BCA0304)

(BCA0405)

(BCA0503)

Course title: Computer Languages:

C Programming

Object Oriented Programming with C++

Programming in Visual Basic

ASP.Net Technologies

Theory/Lab: Theory and Lab

L.T.P.C.: 4.0.3.7

## Course Outcome:

Programming languages will acquaint the students with computing knowledge and analyze the problems, identify and define the computing requirements to find its proper solution.

These languages will also help the students to design, implement and evaluate a computer based system. Knowledge of various languages will help students develop good system software.

Course code: (BCA0102)

(BCA0201)

Course Title: Applied English

**Communicative English** 

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

These English language courses will help students to acquire the primary language skills such as listening, speaking, reading and writing and their use within academic, professional and day-to-day life context.

Course code: (BCA0103)

**Course title:** Computer Fundamentals

Theory/Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

The subject pertains to provide students the basic knowledge of computer system. It aims to impart the knowledge of working and functions of the computer and its peripheral devices.

Course code: (BCA0105)

**Course Title:** Office Automation Tools

Theory/Lab: Theory and Lab

L.T.P.C.: 4.0.3.7

#### Course outcomes:

This subject will help the students have the working knowledge of MS Word, MS Excel and MS PowerPoint.

MS Word: It will help the students develop and edit the documents such as letters, reports, etc.

MS Excel: Students will be able to work with formulae and functions with this application software.

MS PowerPoint: It will enable the learners to create dynamic slide presentations. These presentations can incorporate animation, videos, images and much more.

Course code: (BCA0203)

**Course Title:** Digital Electronics

Theory/Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

Students will learn how to apply principles of number system, binary codes and Boolean algebra to minimize logic expression. They can acquire knowledge about various logic gates. With the help of this course they will be able to design various encoders, decoders and counters using multiplexers and flip- flops.

Course code: (BCA0204)

Course Title: Data Structure

Theory/ Lab: Theory and Lab

L.T.P.C.: 4.0.3.7

#### Course outcome:

This course will help the students understand the concept of dynamic memory management, data types and algorithms. Students will have the knowledge of basic data structure such as arrays, linked lists, stacks, queues and hash functions.

In addition to this students can apply algorithm for solving problems like searching, sorting, insertion and deletion of data.

Course code: (BCA0205)

Course Title: DBMS

Theory/ Lab: Theory and Lab

L.T.P.C.:

#### Course outcome:

DBMS helps students to transform an information model into a relational database schema and to use a DDL to implement the schema.

MS Access and SQL provide an interface to create, secure, postulate, maintain and query a database.

Course code: (BCA0302)

Course Title: Business Practices & Management

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

The students will learn the basic objectives of business keeping in view its prevailing environment and its need for survival and growth.

Objectives such as economic, social, human or individual, organic, micro level, national level or global will be clear with the knowledge of this subject.

Course code: (BCA0303)

Course Title: Computer Organization

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

The computer organization is concerned with imparting the students the knowledge of the structure and behavior of digital computers. The course will help to understand the overall basic computer hardware structure, including the peripheral devices.

Course code: (BCA0305)

Course Title: Desktop Publishing & Designing

Theory/ Lab: Theory and Lab

L.T.P.C.: 4.0.3.7

#### Course outcome:

Students will understand the importance of pre planning a document and basic desktop publishing terminology. This course will make students understand the color wheel, shapes, text wrap, watermarks, etc.

Students will create, format, illustrate, design, edit/revise and print publications.

Course code: (BCA0401)

Course Title: Personnel Management

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

The course will help in developing students cognition regarding creating and maintaining a harmonious working environment.

It will provide the knowledge of planning, organizing, compensation, integration and maintenance of people for the purpose of contributing to organizational, individual and societal goals. Course code: (BCA0402)

Course Title: Accountancy

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

Accounting as a subject will help students to demonstrate knowledge of various accounting issues related to financial accounting within a global and ethical framework.

Students will the knowledge of financial statements in accordance with generally accepted accounting principles through analysis and synthesis of information.

Course code: (BCA0403)

Course Title: System Analysis and Design

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

The course will help the students to determine the specific needs of the system, evaluate various tools and techniques to design software.

It will help the learners understand how an orderly grouping of independent components when linked together according to a plan, achieve a specific goal.

Course code: (BCA0404)

Course Title: Internet Technology and Web Page Designing

Theory/ Lab: Theory and Lab

<u>L.T.P.C</u>.: 4.0.3.7

#### Course outcome:

Learners will have the basic knowledge of various internet technologies as today internet has become unavoidable in our daily life. The course includes topics such as World Wide Web, its working and how we access information over the internet within few clicks.

Web page designing will help the students in building presentable and effective web pages for their software application. The subject will give them detail knowledge of creating dynamic websites.

Course code: (BCA0501)

Course Title: Operating System

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

The course will provide the knowledge of how an operating system acts as an interface between hardware and the student, making it easier for user to access and use other resources.

It will help them grow intellectually as the will learn that OS is the program that after being initially loaded into the computer by boot program, manages all other application programs in a computer. Students will learn about program development and execution, access to input output devices, system access, error detection and responses.

Course code: (BCA0502)

Course Title: eCommerce

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

With the help of this course students will be able to understand the basic concepts and technologies used in the field of electronic commerce.

Students will have the knowledge of different types of commerce.

It will make the students be aware of the ethical, social and security issues of information system and how much acceptance it has got in Indian society.

Course code: (BCA0503)

Course Title: MIS

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

With the help of this course students will be able to understand the basic concepts and technologies used in the field of management information system.

Students will learn about the procedure of planning and regulating the operations of an organization, what is information, how by using the information and proper planning a system to solve a common purpose is formed.

Course code: (BCA0601)

Course Title: Computer Network

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

The knowledge of this course will help the students learn about different types of networks, resource sharing over the computer network.

The course will provide the knowledge of network architecture, TCP/IP OSI reference models.

It will help students understand network security and define various protocols such as FTP, HTTP and DNS.

Course code: (BCA0603)

**Course Title**: Multimedia Technology

Theory/ Lab: Theory

L.T.P.C.: 4.0.0.4

#### Course outcome:

This course will acquaint the students with the knowledge of basic multimedia technologies prevalent now days. It will enhance their knowledge about various theories, methods, tools, technologies and application of the multimedia system.

Students will learn about real time systems, distributed systems, multimedia software and system integration.

Course code: (BCA0604)

**Course Title**: Computer Graphics

Theory/ Lab: Theory and Lab

L.T.P.C.: 4.0.3.7

#### Course outcome:

The course introduces the basic concept of computer graphics.

Using colors in different places and for different objects is also one of the goals of the course.

The students will learn how to rescale, transmit, shear and rotate different graphical objects.

Course code: (BCA0605)

Course Title: Software Engineering

Theory/ Lab: Theory

## L.T.P.C.: 4.0.0.4

## Course outcome:

This course will help the students to have the knowledge of how to apply the software engineering lifecycle in planning, analysis, design, construction and deployment.

Students will be able to know how to develop the code from the design and effectively apply relevant standards and perform testing and quality management and practice.