

**Program : BBA (Computer Application)**  
**Department of Computer Applications**

**Program Outcomes (PO)**

- PO1: Apply knowledge of computing fundamentals, mathematics and domain knowledge appropriate for the conceptualization of computing models. (Computational Knowledge).
- PO2: Identify, analyze, formulate, Design and develop the real world requirements by critical thinking for complex problems in IT enabled services. (Critical Thinking & problem solving approach)
- PO3: Recognize the need and adopt appropriate tools and techniques for modern computing practices. (Usage of modern tools)
- PO4: Make use of ethical practices and cyber regulations in the computing field for managing software projects in diverse environments. (Ethics & Management)
- PO5: Understand the societal, environmental and moral values and its impact with respect to computing, communication, literary and professional practice.(social responsibility)
- PO6: Communicate effectively with society at large, such as, being able to comprehend and write effective reports, design documentation and make effective presentations.(communication & team work)
- PO7: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change (Life long learning)

**PEO – Program Educational Objectives:**

1. To produce skill oriented human resource.
2. To impart practical skills among students.
3. To make industry ready resource.
4. To bring the spirit of entrepreneurship.

## Course Outcome

**Class:FYBBA(CA)**

**Semester - I**

**COURSE: BUSINESS COMMUNICATION SKILLS**

**BBA(CA) 101 CC: 3**

### Course Objectives:

- 1 To understand what is the role of communication in personal and business world
2. To understand system and communication and their utility
3. To develop proficiency in how to write business letters and other communications.

At the end of the course following outcome is expected:

	<b>COURSE UNIT DESCRIPTION</b>	<b>OUTCOME</b>
CO1	Concept of Communication	Apply communication theories. Show an understanding of opportunities in the field of communication.
CO2	Methods and types of Communication	Demonstrate critical and innovative thinking. Display competence in oral, written, and visual communication
CO3	Business Correspondence	Use current technology related to the communication field. Demonstrate positive group communication exchanges

### Course : Principles of Management

**BBA(CA) (102) CC : 3**

Course Objectives :

- 1.To understand basic concept regarding organisation business administration
- 2.To examine how various management principles.
- 3.To develop managerial skills among the students.

At the end of the course following outcome is expected :

	Course unit Description	Outcome
CO1	Nature of management	To learn basic aspects of management thinking Develop ability of managerial thinking & cultivate business acumen
CO2	Evolution of management thought	To understand different approaches of management scientist to management thought & philosophy To help to understand various approaches of management thinking

CO3	Major managerial functions	To understand different functions of management & their roles. Develop ability to organise various programs & events.
CO4	Recent trends in management	To understand the themes in modern management & changes in the business To learn about new systems of management.

**Course : C Programming**  
**BBA(CA) 103 CC : 3**

**Course Objectives :**

1. To Understand algorithmic thinking and apply it to creating C programs.
2. To Write user defined function for effective programming.
3. To Understand and manipulate arrays.
4. To Understand the concepts of passing arrays to functions and pointers.
5. To Write C program for simple real time applications using structures and files.

Ability to handle possible errors during program execution.

	Course unit Description	Outcome
CO1	Introduction	Explore algorithmic and flowchart approaches to problem solving.
CO2	Managing I/O Operations	To Familiar with Fundamentals( character set ,Input Output etc.)
CO3	Decision Making and looping	Developing Conditional and Iterative statement
CO4	Programs through conditional and looping statements	Practice on Program to develop logical thinking.
CO5	Arrays and Strings	Ability to work with Advance concept.(arrays,Strings).
CO6	Functions	Understanding a concept of functional(modular concept).
CO7	Introduction to pointer	Ability to work with Pointer in c.
CO8	Structures	To learn User define datatype (structure,union)

**Course : DBMS (DATABASE MANAGEMENT SYSTEMS)**

**BBA(CA) (104) CC:3**

**Course Objectives :**

1. This course provides an introduction to the relational model. We will cover basic relational database design, conceptual data modeling practices, some relational database management system , operation and fundamental Structured Query Language (SQL)
2. Enables students to understand relational database concepts and Normalization concepts in database system.
3. Enables student to write SQL Simple Queries and Nested Queries that use DDL and DML command.

	Course unit Description	Outcome
CO1	File Structure and Organization	To understand the file structure and its organization.
CO2	Database Management System	Students get the knowledge of Relational Database concepts which is the basic requirements of every organization.
CO3	Relational Model	Give a description of the Database Management structure.
CO4	SQL (Structured Query Language)	Students are able to Compare relational model with the Structured Query Language (SQL)
CO5	Relational Database Design	Students are able to Normalize the complex data into simple tables.

**Course:Statistics****BBA(CA) (105) CC :3****Course Objectives:**

1. To understand role and importance of statistics in various business situations
2. To develop skills related with basic statistical technique
3. Develop right understanding regarding regression, correlation and data interpretation

	Course unit Description	Outcome
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CO1	Concept of statistics.	To Explains the history, definition and scope of Statistics and Differentiates population and sample.
CO2	Measures of central tendency and dispersion	To Recognizes central tendency and various measures of central tendency To learn how to Explains and evaluates various measures of central tendency.
CO3	Measures of Dispersion :	To Recognizes the importance of measuring dispersion and Explains and evaluates the measures of dispersion.

**Course : Principles of Programming and Algorithm  
BBA(CA) 107 CC :2 Add on**

- 1 .Ability to use modular programming approach in diversified problem domains.
- 2 .Ability to apply programming logic to solve real world problems.
3. Ability to decide effectiveness of computer based solutions.

	Course unit Description	Outcome
CO1	Algorithms	To understand importance of algorithm, program development cycle, how programs are been developed sequentially with help of algorithm.
CO2	Flowchart	To learn designing of algorithm and flow of programs with the help of flowchart
CO3	Function	To understand the use of function, library function and recursion with its syntax
CO4	Array	To understand definition, characteristics and types of array .

## SEM II

**Course:** Organisational Behaviour & Human Resource Management

**BBA(CA) (201) CC :3**

**Course Objective:**

1. To understand basic concept of HRM & OB
2. To make aware students about traditional & modern methods of procurement & development in organization.
3. To know the measure trends in HRM and OB

Course Outcomes(CO)/Learning Outcomes On successful completion of this course, the student/learner will be able to

	Course and Description	Course outcome
CO 1	Introduction to OB	To understand the basic concept of OB and to will also acquaint about major trends in OB
CO 2	Introduction to HRM	To get basic knowledge of HRM practices carried out in today's scenario.
CO 3	Procurement	To know the process of recruitment and selection of employees in an organization.
CO 4	Training & Development	To know the training and development methods and evaluation of employees skills in organization.

**Course: Financial Accounting**

**BBA(CA) (202) CC :3**

Objectives

1. To develop right understanding regarding role and importance of monetary and financial transactions in business
2. To cultivate right approach towards classifications of different transactions and their implications
3. To develop proficiency preparation of basic financial as to how to write basis accounting statement - Trading and P&L.

	Course Unit Description	Outcome
CO1	Financial Accounting- definition and Scope, objectives, Accounting concepts, principles and conventions	To understand role and importance of accounting in Business and how accounting concept can be implemented in business
CO2	Voucher system; Accounting Process,	To understand how to record different financial

	Journals, Ledger, Cash Book , subsidiary books ,Trial Balance preparation of Final Accounts of Sole Proprietorship(Trading and Profit & Loss Account and Balance Sheet	transactions and their financial implications
CO3	Meaning, importance and preparation of Bank Reconciliation Statement	To understand the kind of accounting relationship between customer and bank.
CO4	Computerized Accounting- Role of computers and Financial application, Accounting Software packages	To understand growing importance of software and to know how to use software and to write books of accounts Ability to use software like tally for writing of accounts

**Course Name: Business Mathematics**  
**BBA (CA) 203 CC: 3**

**Objective :**

1. To develop appropriate understanding as how to use mathematic like computation interest, profit, percentage etc.
2. To develop appropriate model for estimation of profit. Applying ratio to interpreted and evaluate financial data collection of 5 years reports of varies companies for analysis. .

**Course Outcome-**

Course Outcomes(CO)/Learning Outcomes On successful completion of this course, the student/learner will be able to

	<b>Course Unit Description</b>	<b>Course Outcome</b>
CO 1	Ratio, Proportional and Percentage	To learn how to apply the various concepts in business situation.
CO 2	Profit and loss	To understand how to examine concept of discounts in different business solutions
CO 3	Interest and Annuity Shares and Mutual Fund	To learn how to Work with simple and compound interest, annuities, invoice preparation, trade discounts,

		taxes,
CO 4	Matrix and Determinant	To understand how to Perform the matrix operations of addition, multiplication and transposition and express a system of simultaneous linear equations in matrix form 2.determine whether or not a given matrix is invertible and if it is, find its inverse .
CO 5	Linear programming Problem	To learn how to Develop linear programming (LP) models.
CO 6	Transportation Problem	To Understand the mathematical tools that are needed to solve optimization problems. Use mathematical software to solve the proposed models.

**Course : RDBMS (RELATIONAL DATABASE MANAGEMENT SYSTEMS)**

**BBA (CA) (204)**

Course Objectives :

1. This course provides an introduction to the relational model. We will cover basic relational database design, conceptual data modeling practices, some relational database management system , operation and fundamental Structured Query Language (SQL)
2. Enables students to understand relational database concepts and Normalization concepts in database system.
3. Enables student to write SQL Simple Queries and Nested Queries that use DDL and DML command.

At the end of the course following outcome is expected :

	Course unit Description	Outcome
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CO1	Introduction To RDBMS	Understanding of various RDBMS products, Use of relational database
CO2	PL-SQL	To understand various data types , operators , functions and control statements To understand concept of compact program writing by making use of functions and procedure
CO3	Transaction Management	To brief about the Database Management structure. To Understanding use of transaction and effect on database
CO4	Concurrency Control & Recovery System	To understand concept of shared and exclusive lock  To learn how to prevent deadlock situation

**Course: Web Technology(HTML- JS-CSS)  
BBA (CA ) (205) CC :3**

**Course Objectives:**

1. To know & understand concepts of internet programming.
2. To understand how to develop web based applications using JavaScript.

At the end of the course following outcome is expected:

	Course unit Description	Outcome
CO1	1. Introduction	Learn client and server, HTTP, FTP, IP protocols, WWW, Response and Request mechanism.
CO2	Web Design	Details how to design a website its look and feel, its planning etc.
CO3	HTML	All html tags and how to create webpage using html.
CO4	Style Sheets	CSS in detail with its implementation for

		creating website.
CO5	JavaScript	Understand how to develop web based applications.

**Course: Advance C**

**BBA (CA) 207 CC:2 Add on**

Course Objectives :

- 1 To understand pointer
2. To understand file handling system

At the end of the course following outcome is expected :

	Course unit Description	Outcome
CO1	Pointer	To Design and develop pointer program
CO2	File handling	To Understand the concept of File Handling
CO3	Graphics	To Design and develop graphics program

**Class: SY BBA (CA)**

**Semester III**

**Course: Relational Database Management System  
BBA (CA ) 201**

**Course Objectives :**

1. Enables students to understand relational database concepts and transaction management concepts in database system.
2. Enables student to write PL/SQL programs that use: procedure, function, package, cursor and trigger.

At the end of the course following outcome is expected:

	Course unit Description	Outcome
CO1	Introduction to RDBMS	To Understand RDBMS produt,relationaldatabase,knowledge of front end and back end
CO2	PL/SQL	To Understanding the programming aspects, writing of triggers,procedure ,function and package program
CO3	Transaction management	To Understanding use of transactiob and effect on database and understanding various states
CO4	Concurrency Control	To understand concept of shared and

		exclusive lock , Understand what deadlock is and how it can occur when giving mutually exclusive access to multiple resources
CO5	Recovery System	To learn concepts related to hardware failures, Data recovery with different techniques and Data recovery with different techniques

## **Course : Data Structure using ‘C’ BBA(CA) 202**

Course Objectives:

1. To understand different methods of organising large amounts of data
2. To efficiently implement different data structure
3. To efficiently implement solution for different problems
4. To get more knowledge on C programming language

At the end of the course following outcome is expected :

	Course unit Description	Outcome
CO1	Basic Concept and Introduction to Data Structure	To understand need and types of data structure. Ability to analyze algorithms and a algorithm correctness.
CO2	Searching and Sorting Techniques	To understand and implement different searching and sorting techniques
CO3	Linked List	To efficiently implement the linked list data structures and solution for specific problems.
CO4	Stack and Queue	To efficiently implement the stack and queue data structures and solution for specific problems.
CO5	Trees	To efficiently implement the tree data structures and solution for specific problems.
CO6	Graph	To efficiently implement the graph data structures and solution for specific problems.

**Course: Operating Systems  
BBA (CA) 303**

Course Objectives:

1. To know system programming.

2.To know services provided by operating system

At the end of the course following outcome is expected

	Course unit Description	Outcome
CO1	Introduction to OS System Structure	To explain the fundamental components of a computer operating system.
CO2	Process Management Process Scheduling Process Synchronization	To Define, restate, discuss, and explain the policies for scheduling,  To Understand the process management policies and scheduling of processes by CPU.
CO3	Multithreaded Programming	To Define thread and to learn how to Analyze and design the applications to run in parallel either using process or thread models of different OS.
CO4	Deadlocks	To Define, restate, discuss, and explain the concept of deadlocks in real life.  To Understand the Mutual exclusion, Deadlock detection and agreement protocols of Distributed operating system
CO5	Memory Management	To Define, restate, discuss, and explain the policies for memory management,  To Describe and analyze the memory management and its allocation policies.
CO6	File System	To Define, restate, discuss, and explain the policies for file systems.
CO7	I/O System	To Define, restate, discuss, and explain the policies for file systems.

**Course: Business Mathematics**  
**BBA (CA) 304**

**Objective :**

1. To develop appropriate understanding as how to use mathematic like computation interest, profit, percentage etc.
2. To develop appropriate model for estimation of profit. Applying ratio to interpreted and evaluate financial data collection of 5 years reports of varies companies for analysis. .
3. To cultivate right understanding regaining numerical aptitude.

	Course Unit Description	Outcome
CO 1	Ratio, Proportional and Percentage	Ability to apply the various concepts in business situation.
CO 2	Profit and loss	Ability to examine concept of discounts in different business solutions
CO 3	Interest and Annuity	To Work with simple and compound interest, annuities, invoice preparation, trade discounts, taxes.
CO 4	Matrix and Determinant	To Perform the matrix operations of addition, multiplication and transposition and express a system of simultaneous linear equations in matrix form
CO 5	Linear programming Problem	To Develop linear programming (LP) models.
CO 6	Transportation Problem	To Understand the mathematical tools that are needed to solve optimization problems. Use mathematical software to solve the proposed models.

**Course : Software Engineering**  
**BBA (CA) (305)**

**Course Objectives :**

1. This course enables students to understand system concepts and its application in Software development.
2. To understand entire Software Development Life Cycle.
3. To study various models used for SDLC.

At the end of the course following outcome is expected

	Course unit Description	Outcome
CO1	Introduction to System Concepts	To learn about basic concepts of systems, Characteristics of system and it's types.
CO2	Requirement Analysis	To learn about system analysis, Feasibility study and it's type and Fact finding techniques.
CO3	Introduction to Software Engineering	To understand definition of software engineering and It's goals. To learn about how to measure quality of software.
CO4	Software Development Methodologies	To understand the strength and weakness of models.
CO5	Analysis and Design Tools	To understand designing of system using various types of diagrams. To learn about ER diagram, DFD, Decision table and tree, Data dictionary.
CO6	Structured System Design	To learn about module concepts, coupling and cohesion To understand how to construct structure chart.
CO7	Software Testing	To learn characteristics of testing . To learn about types of testing and its use.

**Semester : IV**

**Course: Object Oriented Programming Using C++  
BBA (CA) (401)**

Course Objectives :

1. To Acquire an understanding of basic object-oriented concepts and the issues involved ineffective class design.
2. To understand the concept of data abstraction and encapsulation.
3. To Enables student to write C++ programs that use: object-oriented concepts such as information hiding, constructors, destructors, inheritance.

At the end of the course following outcome is expected:

	Course unit Description	Outcome
CO1	Introduction to C++	To understand the features of C++ and object oriented programming language.
CO2	Tokens, Expressions and Control structures	To Understanding the basic concepts.
CO3	Functions in C++	To Implement and built modules in C++.
CO4	Classes and Objects	To Understand how to build object-oriented software using C++.
CO5	Inheritance and Polymorphism. (object oriented concepts)	To Understand how to apply the major object-oriented concepts like inheritance, polymorphism.
CO6	Managing console I/O operations , Working with Files and Templates(Advantage of c++)	To Understand advanced features of C++ specifically stream I/O and templates.

**Course : Visual Basic  
BBA (CA) (402)**

Course Objectives :

- 1 To learn properties and events methods and properties and how to handle events of various controls.
2. To understand the use of active control and how to design VB application.
3. To learn connectivity between VB and database.

At the end of the course following outcome is expected :

	Course unit Description	Outcome
CO1	Getting started with VB	To learn about basic concepts of visual basic and application area of VB.
CO2	Constant, variable, operators, control structure, looping and array	To learn programming skill. To learn basic syntax of VB.
CO3	Working with controls	To understand various control, properties and events. To develop application using controls.
CO4	With withActiveX control and Menus	To understand the use of active control To learn how to create menus and submenus
CO5	Working with database	To learn connectivity between VB and database. To understand report generation using Data

	Environment.
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**Course : Computer Networking  
BBA(CA) 403**

Course Objectives :

- 1) To prepare students with basic networking concepts: data communication, protocol and standards, various topologies and applications of network.
2. To know about computer network.
3. To understand different topologies used in networking
4. To learn different types of network.
5. To understanding the use of connecting device used in network.
6. Learn how computer network hardware and software operate
7. Investigate the fundamental issues driving network design
8. Learn about dominant network technologies.

At the end of the course following outcome is expected

	Course unit Description	Outcome
CO1	Basics of Computer Networks	To know about Network Administrator in any organization.
CO2	Network Models	To learn how noise, attenuation, and distortion affect signal traveling through a transmission medium; discuss the factors affecting data rate as well as the theoretical limits on data rate over a noiseless and a noisy channel. To Identify the different types of network topologies and protocols
CO3	Transmission Media	To Understand the concept of reliable and unreliable transfer protocol of data and how protocol based on socket programming.
CO4	Wired and Wireless LANs	To Understand connecting LAN's, backbone networks, and virtual LAN's.
CO5	Network Connectivity Devices	To learn with the basic protocols of computer networks, and how they can be used to assist in network design and implementation.
CO6	Internet Basics	To learn basics of internet.

**Course :Enterprise Resource Planning and Management  
BBA (CA) (404)**



**Course Objectives:**

1. To know what is ERP.
2. To learn about different ERP technologies.

At the end of the course following outcome is expected :

	Course unit Description	Outcome
CO1	ERP :An overview	To introduce ERP.
CO2	Enterprise Modelling and Integration for ERP	To understand Business Model and Architecture about ERP systems.
CO3	ERP and Related Technologies	To Know about Technologies related ERP for Ex- CRM,BPR etc.
CO4	ERP Implementation	To know implementation of ERP And the Obstacles in that.
CO5	Technologies In ERP system	To learn about EDI and IDoc application .
CO6	The ERP Domain	To know about SAP and Other ERP domain Tool.
CO7	ERP present and Future	To know Current Working ERP system and future Requirements of ERP system

**COURSE: HUMAN RESOURCE MANAGEMENT  
BBA (CA) (405)**

**Course Objectives:**

1. To enable the students to understand the HR Management and system at various levels in general and in certain specific industries or organizations.
2. To help the students focus on and analyse the issues and strategies required to select and develop manpower resources
3. To develop relevant skills necessary for application in HR related issues
4. To Enable the students to integrate the understanding of various HR concepts along with the domain concept in order to take correct business decisions

At the end of the course following outcome is expected:

	COURSE UNIT DESCRIPTION	OUTCOME
CO1	Introduction To HRM	To develop the understanding of the concept of human resource management and to understand its

		relevance in organizations.
CO2	Performance Appraisal, Training and development	To develop necessary skill set for application of various HR issues. To analyse the strategic issues and strategies required to select and develop manpower resources.
CO3	Wages and Salary Administration	To Apply the factors determining pay rates Ability to implement Employee benefits and Welfare measures
CO4	Grievance and discipline	To learn how to implement practices related employee separation
CO5	The E-HR	To Evaluate the functions, methods and ways of e-HRM .

**Class:TY BBA (CA)**

**SEM :V**

**Course: Java Programming  
BBA (CA) (501)**

**Course Objectives:-**

1. To learn the basic concept of JavaProgramming.
2. To understand how to use programming in day to dayapplications.

At the end of the course following outcome is expected:

	Course unit Description	Outcome
CO1	Introduction to Java	To understand the basic fundamentals and important terminologies of java.
CO2	Classes and Objects	To understand how to create classes and objects and new functionalities like Interface,Packages etc.
CO3	Collection	Get detailed knowledge of collection, map, Iterator etc.
CO4	File and Exception Handling	Understand exception and file handling in detailed
CO5	Applet, AWT and Swing Programming	To understand how to create small internet applications using applet and know how to

	create GUI in java using AWT and Swing.
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**Course : Web Technology  
BBA (CA) (502)**

**Course Objectives:**

1. To know & understand concepts of internet programming.
2. To understand how to develop web based applications using PHP.

At the end of the course following outcome is expected:

	Course unit Description	Outcome
CO1	Web Essentials	To understand how things work in the Web world from the technology point of view as well as to give the basic overview of the different technologies. To introduce about Clients- Servers and Communication & Internet-Basic , Internet Protocols
CO2	Markup languages	To Understand how to develop static web based applications. To know about different HTML tags & CSS style sheet.
CO3	Javascript	To Introduce client scripting language which is used for creating web page along with HTML and validating data accepted in HTML pages.
CO4	Introduction of PHP basics	To Understand server side scripting language that is embedded in HTML.
CO5	Functions & string in PHP	To Explaining different functions & string built in functions in php.
CO6	Arrays in PHP	To Explaining different types & built in functions of arrays in php.

**Course: VB.Net  
BBA (CA) (503)**

**Course Objectives:-**

1. It introduces visual programming and event driven programming practically
2. To know Architecture of ADO.Net
3. Helps student to understand object oriented programming in VB.NET
4. To enhance applications development skills of the students

At the end of the course following outcome is expected:

	Course unit Description	Outcome
CO1	Introduction to .Net Framework	To introduce .Net framework.
CO2	Introduction to VB.Net	To understand how to use various controls, methods and event of those controls.
CO3	Object Oriented Programming in VB .Net	To understand how to create class and object and know to know about object oriented programming language.
CO4	Architecture Of ADO.Net	To know Architecture of ADO.Net
CO5	Crystal Report	To understand how to reports.

**Course :Object Oriented Software Engineering  
BBA (CA) (504)**

**Course Objectives :**

- 1 .To understand the concept of system design using UML.
- 2 . To understand system development through object oriented technique.

At the end of the course following outcome is expected :

	Course unit Description	Outcome
CO1	Object Oriented Concepts , Modeling and UML	Students should be aware about the OO concepts and Overview of UML.
CO2	Basic and Advanced Structural Modeling	Students should be aware about the Structural diagrams of UML.
CO3	Basic behavioral and Architectural Modeling	Students Should be able to Know Behavioral diagram of UML.
CO4	Object Oriented Analysis	Students should be able to know Iterative type of SDLC .
CO5	Object Oriented Design	Student should be able to know various type of Designing Methods.

**SEM VI**

**Course: Advanced Web Technology  
BBA (CA) (601)**

**Course Objectives:**

1. To know & understand concepts of internet programming.
2. To understand the concepts of XML and AJAX.

At the end of the course following outcome is expected:

	Course unit Description	Outcome
CO1	Introduction to Object Oriented Programming in PHP	To Explain class, object, inheritance & interface concepts in php.
CO2	Web Techniques	To introduce about Clients- Servers and Communication & Web server and Web browser
CO3	Databases	To learn PHP and MYSQL database connectivity
CO4	XML	To Learn styling, formatting and various XML parsers used for websites.
CO5	Web services	To Explain concept of Web service.
CO6	Ajax	To understand Design of dynamic and interactive web sites  3)Students learn various recent web technologies viz. PHP, XML, AJAX etc used for client side and server side scripting

**Course : Advanced Java  
BBA (CA) 602**

Course Objectives :

- 1 To know the concepts of java programming.
2. To understand how to use programming in day to day application.
3. To develop programming logic.

At the end of the course following outcome is expected :

	Course unit Description	Outcome
CO1	JDBC	To understand database connectivity with MS access and SQL server.
CO2	Networking	To understand client server technology.
CO3	JSP	To understand creation of dynamic web pages.
CO4	Servlet	To understand creation of dynamic web pages through server.
CO5	Multithreading	To understand concepts of thread and develop application using multithreading.
CO6	Java Beans	To introduce Java beans and Beans development Kit.
CO7	RMI	To introduce RMI, Stubs and Skeleton

**Course : Recent Trends in IT  
BBA (CA) 603**

**Course Objectives :**

1. To introduce upcoming trends in Information technology.
2. To study Eco friendly software development.

At the end of the course following outcome is expected

	Course unit Description	Outcome
CO1	Software Process And Project Metrics, Analysis Concepts And Principles	To study Eco friendly software development.
CO2	Distributed Databases	Main objective is to understand the principles and foundations of distributed databases.
CO3	Data Warehouse	To learn architecture of Data Warehouse
CO4	Network Security	To understand data security and its importance
CO5	Computing and Informatics	To learn concept of cloud computing.

**Course: Software Testing  
BBA (CA) (604)**

**Course Objectives:-**

1. To know the concept of software testing.
2. To understand how to test bugs in software.
3. To develop programming logic.

At the end of the course following outcome is expected

	Course unit Description	Outcome
CO1	Software Testing	Fundamentals of testing
CO2	Approaches to Testing – I	Types of testing in details
CO3	Testing for Specialized Environments	Able to test on GUI's and all real time systems
CO4	Software Testing Strategies &Software metrics	Types of testing in details