

BBA (CA) 2024 Pattern as per NEP-2020

Program Outcome Statements (PO)

PO NO	STATEMENTS
PO - 01	Graduates will demonstrate a thorough understanding and ability to apply core concepts in programming languages, database management systems, and software development.
PO - 02	Graduates will be able to analyze business problems, develop efficient algorithms, and implement solutions using appropriate programming techniques.
PO - 03	Graduates will effectively combine principles of commerce with modern IT practices to enhance business processes and decision-making.
PO - 04	Graduates will have practical experience in handling projects related to web development, mobile applications, and digital marketing, with a capability to manage and execute projects efficiently.
PO - 05	Graduates will possess strong written and verbal communication skills, essential for professional business environments, including report writing, presentations, and interpersonal communication.
PO - 06	Graduates will understand and adhere to ethical practices in business and IT, with a keen awareness of environmental issues and gender sensitivity.
PO - 07	Graduates will have exposure to a range of subjects and elective courses, providing a broad perspective and the ability to approach problems from various disciplinary angles.
PO - 08	Graduates will be prepared for employment in IT, software development, data analysis, business management, and related fields, with the skills to thrive in a professional environment.
PO - 09	Graduates will be committed to lifelong learning, staying current with technological advancements and adapting to new tools and methodologies.
PO - 10	Graduates will have the ability to work effectively in teams, exhibiting leadership skills and contributing to collaborative projects.
PO - 11	Graduates will be adept at applying theoretical knowledge in practical settings, utilizing hands-on experience gained through lab work, projects, and internships.
PO - 12	Graduates will exhibit critical thinking skills and a creative approach to problem-solving, fostering innovation in their work.
PO - 13	Graduates will have a solid foundation in business operations, financial accounting, and management principles, enabling them to contribute to organizational success.

Program Specific Outcome Statements (PSO)

PSO NO	STATEMENTS
PSO - 01	Apply programming, database, and software development skills to design and implement effective IT solutions for business challenges.
PSO - 02	Integrate business management principles with modern computer applications to optimize business processes and decision-making.
PSO - 03	Demonstrate practical competence in web and mobile development, digital marketing, and project management through real-world applications and teamwork.

Course Outcomes (CO)

Semester	Course Code	Type of Course	Course Title
I	BBACA101T	Major Mandatory	Problem Solving Using C
Course Outcome			
CO1	Define algorithms and explain their characteristics		
CO2	Formulate algorithm and draw flow chart to solve a given problem		
CO3	Explain use of appropriate data types, control statements		
CO4	Demonstrate ability to use top-down program design		

Semester	Course Code	Type of Course	Course Title
I	BBACA102T	Major Mandatory	Database Management System
Course Outcome			
CO1	To understand the basic concepts and the applications of database systems.		
CO2	To formulate Queries using SQL and Relational Formal Query Languages		

Semester	Course Code	Type of Course	Course Title
I	OE-103-MTS	Open Elective	Business Mathematics – I
Course Outcome			
CO1	understand the Concepts of Ratio, Proportion, Percentage and Partnership.		
CO2	apply the mathematical concepts to solve real-world financial problems.		
CO3	understand the equated monthly instalments (EMI) for loans and mortgages.		
CO4	apply the simple and compound interest for various financial instruments.		
CO5	analyse models related to Finance and can solve them.		
CO6	remember the computation of Dividend and Return on Investment in shares.		

Semester	Course Code	Type of Course	Course Title
I	OE-103-STS	Open Elective	Business Statistics – I
CO1	understand basic concepts in statistics		
CO2	collect, present, analyse and interpret the data and graphs		
CO3	deal data in business problems		
CO4	evaluate feasibility business problems using statistical techniques		
CO5	prepare business report using various statistical techniques		

Semester	Course Code	Type of Course	Course Title
I	BBACA101VSC	Vocational Skill Development Course (VSC)	Office Automation tools
Course Outcome			
CO1	The students will be able to apply various Office Automation Tools - MSWord, MS Excel & MS PowerPoint		
CO2	Use of modern office equipment in business		

Semester	Course Code	Type of Course	Course Title
I	BBACA101SEC	Skill Enhancement Course (SEC)	Programming Principles and Algorithm
Course Outcome			
CO1	To understand how to use programming in day-to-day Applications		
CO2	To apply skills of algorithm and flowchart to solve the businesses problem		

Semester No.	Course Code	Type of Course	Course Title
I	BBA101AEC	Ability Enhancement Course (AEC)	Business Communication Skills-I
CO1	To understand the concept, process, and importance of communication		
CO2	To apply gain knowledge of media of communication in businesses		
CO3	To develop skills of effective communication - both written and oral		

Semester	Subject Code	Type of Course	Course Title
I	BBA101VEC	Value Education Course (VEC)	Environmental Awareness
CO1	To understand Environmental pollution.		
CO2	To apply and promote green practices at home and at work		

Semester	Course Code	Type of Course	Course Title
II	BBACA201T	Major Mandatory	Advance C Programming
Course Outcome			
CO1	write C programs using pointers, structures and unions		
CO2	create Pre-processor directives.		
CO3	perform strings using library functions		
CO4	write C programs using pointers, structures and unions		

Semester	Course Code	Type of Course	Course Title
II	BBACA202T	Major Mandatory	Relational Database Management System
Course Outcome			
CO1	understand the concept of Relational Database Management System.		
CO2	develop PL/SQL programs, functions, procedures, triggers, cursors, packages etc.		
CO3	understand Transaction management and concurrency control.		

Semester	Course Code	Type of Course	Course Title
II	BBACA201MI	Minor	Principle and Practices of Management
Course Outcome			
CO1	use of available resources so as to achieve productive results at minimum cost and maximum profits		
CO2	use effectively all the concepts in business		
CO3	effective administration by channelizing resources (human and material)		
CO4	manage crucial situations		

Semester	Course Code	Type of Course	Course Title
II	OE-101-CA	Open Elective	Introduction to Data Science
Course Outcome			
CO1	define Data Science Tasks and Models and Lifecycle		
CO2	apply Prep-processing and visualization Techniques		

Semester	Course Code	Type of Course	Course Title
II	BBA201VSCP	VSC	Computerized Accounting using Tally Prime
Course Outcome			
CO1	Create Ledgers in Tally Prime		
CO2	Pass the transaction Entries of Payment, Receipt, Contra, Sales, Purchase		
CO3	Pass the entries with automatic calculation of GST.		
CO4	Maintain Accounts only and Accounts with Inventory		

Semester	Course Code	Type of Course	Course Title
II	BBACA201VSC	VSC	Web Technology
Course Outcome			
CO1	get acquainted with website designing.		
CO2	develop static web site using HTML and CSS.		

Semester No.	Course Code	Type of Course	Course Title
II	BBACA201SEC	SEC	E-Commerce
CO1	develop knowledge on various types of E-commerce business.		
CO2	develop knowledge on various modes of online transaction for crating convenience in day-to-day financial transactions and promoting cashless economy.		
CO3	Understand the various forms of ecommerce		

Semester No.	Course Code	Type of Course	Course Title
II	BBA201AEC	AEC	Business Communication Skills-II
CO1	Improve oral communication and presentation skills.		
CO2	Understand and deal with different types of interviews.		
CO3	Students can learn how to identify their strengths and weaknesses, and how to focus on improving those areas.		

Semester No.	Course Code	Type of Course	Course Title
II	BBA201VEC	VEC	Democracy Awareness and Gender Sensitisation
CO1	Students will understand the fundamentals of democracy, including equality, justice and human rights and will be able to challenge negative attitudes and stereotypes about all genders (various gender identities identified in contemporary society).		
CO2	Students will develop empathy and understanding democratic values and can develop a sense of responsible citizenship and healthy relations.		
CO3	Students will develop critical thinking and analytical skills, fostering them to evaluate democratic issues and can create increased readiness for diversity and inclusion.		
CO4	Students will be inspired to become active citizens, by engaging in democratic processes.		

Semester No.	Course Code	Type of Course	Course Title
II	BBA201CC	Co-Curricular (CC)	Physical Education - II
CO1			

BBA (CA) 2019 CBCS Pattern

Program Outcomes (PO)

PO NO	STATEMENTS
PO - 01	Develop industry-ready human resources.
PO - 02	To bring the spirit of entrepreneurship.
PO - 03	To impart practical skills among students
PO - 04	Acquire practical skills and hands-on experience on emerging technologies like Java, Web designing, Android, Python, IOT, PHP and Data Science.
PO - 05	Acquiring knowledge in basic management skills and business applications.
PO - 06	Develop sound academic base for an advanced career in Computer Applications

Program Specific Outcomes (PSO)

PSO NO	STATEMENTS
PSO - 01	Ability to correlate theory and practical knowledge in applications.
PSO - 02	Become employable in various public and private sectors.
PSO - 03	Blend analytical, logical, and managerial skills with technical aspects to resolve real- world

Course Outcomes (CO)

Semester-III

Semester No.	Course Code	Course Title
III	(CA 301)	Digital Marketing
CO1	Familiarity with working of E-Commerce and understand B-B, C-B, C-C relationship.	
CO2	Able to understand the basics of SEO (Search Engine Optimization) and better understanding between Digital and Real Marketing.	
CO3	Understanding of Digital Marketing types and gaining practical knowledge of its usage through the Internet, Social Media and Mobile, Email.	
CO4	Designing effective content for digital marketing using various Digital Marketing tools.	
CO5	Developing an effective marketing strategy using CRM.	

Semester No.	Course Code	Course Title
III	(CA 302)	Data Structure
CO1	Able to understand the concepts of ADTS.	
CO2	Develop skills in the implementation and application of different types of data structures.	
CO3	To understand basic algorithms related to sorting, searching and hashing.	
CO4	To understand the concept of different memory allocation techniques.	
CO5	Apply algorithm and data structure in various real-life software problems.	

Semester No.	Course Code	Course Title
III	(CA 303)	Software Engineering
CO1	understand concepts of Systems and their types.	
CO2	Able to understand software engineering concepts and their applications.	
CO3	Develop the ability to gain knowledge of the SDLC process.	
CO4	Ability to understand the concept of Re-Engineering and Reverse Engineering. Knowledge of different types of software development models such as waterfall, spiral, and prototyping.	
CO5	Understand the concept of testing and its types.	

Semester No.	Course Code	Course Title
III	(CA 304)	PHP
CO1	Ability to develop interactive data-driven dynamic websites.	
CO2	Understand how server-side programming works on the web.	
CO3	To understand Session and Cookie concept.	
CO4	To implement database connectivity.	

Semester No.	Course Code	Course Title
III	(CA 305)	Big Data
CO1	Able to understand the basic techniques such as R programming that form the foundations of Big Data.	
CO2	Ability to acquire knowledge in specialized aspects of big data including big data applications and big data analytics.	
CO3	To understand the building blocks of Big Data and specialized aspects of big data with the help of different big data applications.	
CO4	Explore the area of specialization in Data Science and be able to represent the analytical aspects of Big Data.	
CO5	Able to summarize data using exploratory data analysis and visualization using graphs.	

Semester-IV

Semester No.	Course Code	Course Title
IV	(CA-401)	Networking
CO1	Obtain knowledge about Computer Network concepts.	
CO2	Gain Knowledge about working of networking models, addresses, transmission media and Connectivity devices.	
CO3	To acquire information about network security and cryptography.	

Semester No.	Course Code	Course Title
IV	(CA 402)	Object-Oriented Concepts through CPP
CO1	Acquire an understanding of basic object-oriented concepts and the issues involved in effective class design.	
CO2	Develop programming skills using C++ features.	
CO3	Able to use various object-oriented concepts used to solve real-life problems.	
CO4	Implement different concepts of file handling and exception handling.	

Semester No.	Course Code	Course Title
IV	(CA 403)	Operating System
CO1	Understand fundamental operating system abstraction such as process, semaphore, threads etc.	
CO2	To know the services provided by Operating System.	
CO3	Analyze process scheduling, CPU Scheduling, and memory management algorithms.	
CO4	To understand design issues related to file management and various related algorithms.	

Semester No.	Course Code	Course Title
IV	(CA 404)	Advance PHP
CO1	To know & understand concepts of internet programming.	
CO2	Understand how server-side programming works on the web.	
CO3	Able to understand how to use PHP Frameworks like (Joomla Drupal)	

Semester No.	Course Code	Course Title
IV	(CA 407)	J query
CO1	To get hands-on experience on JavaScript and jQuery.	
CO2	Gain knowledge on how to work with binding events in JavaScript.	
CO3	To learn how to download the jQuery library refer to the Html page.	
CO4	To learn selecting, traversing the Html elements by name, attribute name, id, or by content.	
CO5	To learn how to provide effects to the elements or sections in the Html page.	
CO6	To learn manipulating elements by adding CSS classes dynamically.	

Semester-V

Semester No.	Course Code	Course Title
IV	(CA-501)	Cyber Security
CO1	Have a good understanding of Cyber Security and the Tools.	
CO2	To acquire basic information on Cyber Security and Cybercrime.	
CO3	Have a good understanding of Cyber laws.	
CO4	To develop Cyber forensics awareness.	
CO5	Identify attacks, security policies and credit card frauds in the mobile and Wireless Computing Era.	

Semester No.	Course Code	Course Title
IV	(CA-502)	Object Oriented Software Engineering
CO1	Students will be able to give Design Specifications for Project.	
CO2	Students will acquire Knowledge in Basic Modeling.	
CO3	Students will acquire Project Management Skills.	

Semester No.	Course Code	Course Title
IV	(CA-503)	Core Java
CO1	Able to solve real world problems using OOP techniques.	
CO2	Able to understand the use of abstract classes.	
CO3	Able to solve problems using java collection framework and I/o classes.	
CO4	Able to develop multithreaded applications with synchronization.	
CO5	Able to develop applets for web applications.	
CO6	Able to design GUI based applications	

Semester No.	Course Code	Course Title
IV	(CA-504)	Python
CO1	Define and demonstrate the use of built-in data structures “lists” and “dictionary”.	
CO2	Design and implement a program to solve a real world problem.	
CO3	Design and implement GUI application and how to handle exceptions and files.	

Semester No.	Course Code	Course Title
IV	(CA-505)	(DSE) Project
CO1	Undertake problem identification, formulation and solution.	
CO2	Understand project characteristics and various stages of project development.	
CO3	Design solutions to complex problems.	
CO4	Gain a sound technical knowledge of selected project development platforms.	
CO5	Develop and enhance coding skills	

Semester No.	Course Code	Course Title
IV	(CA-506)	Computer Laboratories Based on (503 and 504) (2 credits each)
CO1	Define and demonstrate the use of GUI Programming concepts.	
CO2	Design and implement a program to solve a real-world problem.	
CO3	Design and implement classes and methods.	
CO4	Implementation of exception handling using packages.	
CO5	Define and demonstrate web-based applet applications.	

Semester No.	Course Code	Course Title
IV	(CA-507)	Internet of Things (IOT)
CO1	To explain key technologies, smart objects, IOT Architecture, and security in the Internet of Things.	
CO2	To illustrate the role of IOT protocols for efficient network communication.	
CO3	To understand IOT platforms such as Arduino Uno.	

Semester -VI

Semester No.	Course Code	Course Title
IV	(CA-601)	Recent Trends in IT
CO1	Able to understand basic concepts of AI.	
CO2	To apply basic, intermediate and advanced techniques to mine the data.	
CO3	To provide an overview of the concept of Spark programming.	

Semester No.	Course Code	Course Title
IV	(CA-602)	Software Testing
CO1	Acquire knowledge of testing tools.	
CO2	Understand the basic concepts of SQA.	
CO3	Able to design and implement the basic Test Cases.	

Semester No.	Course Code	Course Title
IV	(CA-603)	Advanced Java
CO1	Able to understand the concepts of JDBC Programming, Multithreading and Socket Programming.	
CO2	Ability to understand the concepts of spring and Hibernate, JSP and JDBC.	
CO3	Develop applications in spring and hibernate.	
CO4	Design website by using JDBC and JSP.	
CO5	Develop different types of Servlet applications.	
CO6	Develop different types of distributed applications.	

Semester No.	Course Code	Course Title
IV	(CA-604)	Dot Net Framework
CO1	Understand the features of Dot Net Framework, VB, C#, and ASP.	
CO2	Design and develop window-based and web-based .NET applications.	
CO3	Design and develop a Website.	
CO4	Design and Implement database connectivity using ADO.NET for VB, C#, and ASP.	

Semester No.	Course Code	Course Title
IV	(CA-605)	(DSE) Project
CO1	Acquire Project development and management skills.	
CO2	Able to implement design and coding techniques.	
CO3	Students will be able to apply test cases and testing techniques in the project.	

Semester No.	Course Code	Course Title
IV	(CA-606)	Computer Laboratory Based on 603 and 604 (2 credits each) Course
CO1	Ability to develop different types of chatting applications by using Socket programming. Able to develop and design different types of websites.	
CO2	Able to develop the project by using spring and Hibernate.	
CO3	To Understand Applications of widgets and components.	

Semester No.	Course Code	Course Title
IV	(CA-607)	Soft Skill
CO1	Understand the significance and essence of a wide range of soft skills.	
CO2	Learn how to apply soft skills in the social and professional areas.	
CO3	Learn how to implement soft skills to improve interpersonal relationships.	
CO4	Learn how to employ soft skills to enhance employability and ensure workplace and career success.	