

Bachelor in Computer Application(BCA)

About the Department

The Department of Computer Application strives to provide an intellectual environment that fosters the search for new knowledge in highly dynamic computing world through its quality education.

- The Department was established in the year 2009.
- In BCA there were 50 seats ,25 subsidized and 25 non-subsidized.

Mission

The Department focus is on comprehensive, interdisciplinary teaching in computer application , so as to enable learning and applying new innovations as the field evolves. The objective of the course is to develop skilled manpower in the various areas of software industry and information Technology.

Program Outcomes :- BCA

PO1. Focus on preparing student for roles pertaining to computer applications and IT industry.

PO2. Start from basics and in every semester learns and everything about computers.

PO3. Learn programming languages such as C,C++,SQL,HTML,VB etc .

PO4. Gives overview of the topics in IT like networking , computer graphics, web development ,trouble shooting and hardware and software skills .

PO5 To train future industry professionals.

PO6 To impart comprehensive knowledge with equal emphasis on theory and practicals.

PO7. The program enhances analytical , managerial and communication skill besides inculcating the virtues of self- study. The Curriculum has been designed to cater to the ever changing demands of information technology along with necessary inputs from the industry.

PO8. To develop abilities for data analysis and interpretation using ICT.

PO9. To develop the foundation for higher studies in the field of Computer Application.

PO10. The BCA course aims at inculcating essential skills as demanded by the global software industry through interactive learning process. This also includes team-building skills, audio-visual presentation and personality programs.

Course Outcomes of Bachelor in Computer Application (BCA)(Session 2023-24)

Code	Course Name	Course Objective
BCA0101	Mathematics –I	Familiar with Determinants and Matrices. Formulate limit ,Continuity and differentiability. Apply knowledge of mathematics , science and engineering. Demonstrate a working knowledge Definite and Indefinite Integrals . Reason mathematically about basis discrete structure such as numbers, sets ,used in computer science.
BCA0102	Applied English	To develop the student’s ability to use English language accurately and effectively in day to day life by enhancing their ability of correspondence and improving their writing fliar. The course focuses upon day today usage of English as a medium of communication.
BCA0103	Computer Fundamental	Familiar with part of computer Understand the input and output devices. Basic ideas of storage devices , computer Networks and Operating System
BCA0104	C Programming	Analyze a given problem and develop an algorithm to solve the problem. Improve upon a solution to a problem. Use ‘C’ language constructs in the right way. Design , develop and test programs written in ‘C’. Use different data types in a computer program. Use different data types in computer program. Design programs involving decision structures, loops and functions. Understand the dynamic of memory by the use of pointer and structure.
BCA0105	Office Automation	To prepare student in understanding ICT basics and to make aware of Office automation using MS-Office.
BCA0104(P)	C Programming Lab-I	To Train students with basic concepts of Programming using C.
BCA0105(P)	Office Automation Tools Lab –II	Practical knowledge of MS-Office tools i.e. MS-Word, MS-Excel, MS-Power Point

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BCA0201	Mathematics –II	Mastering in basic set theory Familiar with prepositional calculus.
BCA0202	Communicative English	The course has been developed and planned to enhanced the communication skilled of student it comprises of topics that are relevant to understand the proper speech-sound system of English(Phonetics) and its correct usage at different points of time such as GD'S , Presentation, Meeting ,Seminars etc.
BCA0203	Digital Electronics	Perform conversions among different number system, became familiar with basic logic gates and understand Boolean algebra and simplify simple Boolean Functions by using basic Boolean properties & design of combinational circuits such as MUX, DEMUX, Encoder etc Understanding the design of sequential Circuits such as Flip-Flop ,Registers and Counters.
BCA0204	Data Structure	To access how the choices of data structure & algorithm methods impact the performance of program. To solve problems based upon different data structure & also write programs. Choose an appropriate data structure for particular problem.
BCA0205	Data Base Management System	Give an introduction about DBMS, data Models, a schema , E-R diagram , relational data base and Benefits of database. Students are able to design a good database using normalization, decomposition and functional dependency. Understand the basic concepts of PL/SQL programming , cursors, triggers etc. Learn about indexes, sequences , data integrity, creating and maintaining tables ad user privileges.
BCA0204(P)	Data Structure Lab-III	Know about the basis concepts of functions, array and linked list. Understand how several fundamental algorithms work particularly those concerned with Stack , queues , trees and various sorting algorithms
BCA0205(P)	Data Base Management System Lab-IV	To practically train students in using databases with MS-Access

Code	Course Name	Course Objective
BCA0301	Mathematics –III	Knowing about complex numbers ,their representation in a plane, De-Moivre’s Theorem and roots of complex numbers.
BCA0302	Business Practices and Management	To familiarize the students with the basic Business Management concepts and process.
BCA0303	Computer Organization	Able to find the various instruction type and addressing modes used for programming . Able to know various functionalities and organization of processor units and their types. Knowing computer arithmetic algorithm in signed magnitude data with hardware implementation an hardware algorithm.
BCA0304	Object Oriented Programming in C++	To train students in programming using object Oriented Programming with C++.
BCA0305	Desktop Publishing and Designing	Understand the concept of pagemaker, photoshop various types of printing.
BCA0304(P)	Object Oriented Programming with C++ Lab-V	To practically train students in developing programming and logical skills using C++ programming language.
BCA0305(P)	Desktop Publishing and Designing Lb-VI	Understanding the various techniques and steps used for editing the photo and designing logo, prospectus etc,

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BCA0401	Personal Management	Personnel management is defined as an administrative specialization that focuses on hiring and developing employees to become more valuable to the company. It is sometimes considered to be a sub-category of human resources that only focuses on administration.
BCA0402	Accounting	To understand Accounting Standards. To understand the formation of Public Limited Company having Share Capital. To develop various types of Financial Statements.
BCA0403	System Analysis and Design	Understand System Development Life Cycle. Develop system proposal. Apply different application development methodologies like OOAD. Evaluate software quality and productivity.

BCA0404	Internet Technology & Web Page Design	Students will be able to write well formed /valid XML document. Knowledge about creating tables , images adding graphics , frames ,HTML, CSS etc. To prepare students in web designing using various web tools.
BCA0405	Programming in Visual Basic	Know the working environment of visual basic using control structure. Understanding the module, components and menu editor and its concept in a simple manner. Analyze a controls such as text box, rich text box and etc. write coding easily.
BCA0404(P)	Internet Technology & Web Page Design Lab-VII	To understand HTML language and prepare offline website . To make student familiar with internet and HTML Script and CSS.
BCA0405(P)	Programming In Visual Basic Lab-VIII	To understand VB and try to create a small project using VB .

Code	Course Name	Course Objective
BCA0501	Operating System	Learn different types of operating system alongwith concept of file system and CPU Scheduling algorithms used Provide students knowledge of memory management and deadlock handling algorithms. Implement various algorithms required for management ,scheduling ,allocation and communication used in Operating System.
BCA0502	e-commerce	Understand the concept of E-commerce and Business Strategy in Electronic age and different models of E-commerce. Determine the protection methods from public policy issues.
BCA0503	Management Information System	Students would be able to understand the usage of MIS in organization and the constituents of the MIS. The students learns the functions and issues at each stages of system development. This course provide understanding about emerging MIS technologies like ERP,CRM, SCM and trend in enterprise application.

BCA0504	ASP.Net technologies	To impart the knowledge of web development in students in by using ASP.net. To prepare students to acquire knowledge of creating interactive websites using ASP.Net.
BCA0505	Computer Oriented Statistical Methods	Knowing about different types of distributions Estimate different distribution Learn about how to conduct hypothesis Testing Learn about Sampling methods. Evaluate expectation and conditional expectation of random variables.
BCA0504(P)	ASP.Net technologies Lab-IX	To Practically train students in developing web pages using ASP.Net. Design Web Application
BCA0505(P)	Computer Oriented Statistical Methods Lab-X	

Code	Course Name	Course Objective
BCA0601	Computer Networks	Recognize the different internetworking devices and their functions. Explain the role of protocol in networking. Analyse the services and features of the various layers of data network.
BCA0602	Numerical Methods	To develop the mathematical skills of the students in the areas of numerical methods. To teach theory and applications of numerical methods in a large number of statistical problems . To lay foundation of computational mathematics for post graduate courses specialized studies and research.
BCA0603	Multimedia Technology	To identify the range of concepts , techniques and tools for creating and editing the interactive multimedia application. To understand the characteristics of different media, representation of different multimedia data and its formats . To be able to design and develop multimedia systems according to the requirements of multimedia applications.

BCA0604	Computer Graphics	<p>Students will create interactive graphics application using C++ using one or more graphics.</p> <p>Students will demonstrate an understanding of contemporary graphics hardware.</p> <p>Students will write program functions to implement graphics primitives.</p>
BCA0605	Software Engineering	<p>Understand the importance of the stages in the software life cycle .</p> <p>Understand the various process models.</p> <p>Be able to design software by applying the software engineering principles.</p>
BCA0604(P)	Computer Graphics Lab-XI	<p>Understand the basis concept of Computer Graphics.</p> <p>Applying clipping and filling techniques for modifying an object.</p> <p>Understand the practical implementation of Modelling</p>
BCA0605(P)	Major Project	