

### B.C.A. SPECIFIC PROGRAMME OUTCOME

Programme	Specific Programme Outcome
B.C.A.	<p>1 focuses on preparing student for roles pertaining to computer applications and IT industry.</p> <p>2 start from the Basics and in every year learns each and everything about computers.</p> <p>3 Students will able to understand, analyze and develop computer Programmes in the areas related to algorithm, system software, web design and networking for efficient design of computer Based system.</p> <p>4 Student will able to know various issues, latest trends in technology development and thereby innovate new ideas and solutions to existing problems.</p> <p>5 Apply the knowledge of mathematics, science, engineering fundamentals to the solution of complex engineering problems.</p> <p>6 Learn Programmemeing language such as C, V.B., Java, C++, HTML, SQL, etc...</p> <p>7 Information about various computer applications and latest development in IT and communication system is also provided</p> <p>8 Gives overview of the topics in IT like networking, computer graphics, web development, trouble shooting, and hardware and software skills.</p> <p>9 Bachelor in computer applications (B.C.A.) gives a number of opportunities to individuals</p> <p>10 A few of them being like software Programmer, system and network administrator, web designer faculty for computer science and computer applications</p>

## B.C.A. COURSE OUTCOME

Program me	Class	Paper Title	Compulsory /Optional	Points of Course outcome
<b>B.C.A.</b>	<b>B.C.A.- Part I</b>	<b>B.C.A.101</b> Theoretical Foundation of Computer Science <b>Part-I</b> Discrete Mathematics	Compulsory	These course is studied for learning the concept and notation from discrete mathematics are useful in studying and describing object and problem in branches of computer science such as algorithm, Programming languages cryptography, automated theorem proving and software development.
		<b>Part-II</b> Calculus & Statistical Analysis		These course is studied for learning the concept of calculus and statistical analysis at Basic level is used in integration over sections of a probability distribution . This helps in finding cumulative probability over those values for obtaining the area under curves.
		<b>Part-III</b> Introductory Electronics		These course is studied for Basic knowledge of Digital Electronics circuits, understanding various number system, understand analyzed and design of various combinational and sequential circuits, logic functions, truth table and Boolean algebra expression.
		<b>B.C.A.102</b> Fundamentals of IT & O.S.	Compulsory	These course is studied for learning the structure , components and functions of computer system and terms of Operating System like Windows, Linux, etc.
		<b>B.C.A.103</b> Programmemeing in ‘C’ language	Compulsory	These course is studied for learning to making flowchart and design an algorithm for given problem , develop logics and Programme, understand the Basic structure of C Programme.
		<b>B.C.A.104</b> Introduction to PC Software & Internet Application	Compulsory	These course is studied for developing skills for MS-Word, MS-Excel, MS-Access and MS-PowerPoint and uses internet.

		<b>B.C.A.105</b> A Programmemeing in Visual B.A.sic	Compulsory	These course is studied for learning the event driven Programmemeing, writing codes, syntax, finding errors and developing software for any system.
		<b>B</b> Practical Based on course 105A		These course is studied for learning the practical approach and develop Programme for Visual Basic language.
		<b>B.C.A.106</b> A English Communication Skills	Compulsory	These course is studied for improving reading skills, writing skills, listening skills and speaking skills.
		<b>B</b> Foundation Course		These course is studied for learning the aspects of Indian constitution , Indian Arts, Indian Literature, Vedic Literature and Freedom struggle in 1857 of the country.
		<b>B.C.A.107</b> Practical Based on course-103	Compulsory	These course is studied for learning the practical approach and develop Programme for C language.
		<b>B.C.A.108</b> Practical Based on course-104	Compulsory	This course is studied for learning the practical approach for MS-Office.

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B.C.A.	B.C.A.-Part II	<b>B.C.A.201</b> Theoretical Foundation of Computer Science <b>Part-I</b> Numerical Analysis	Compulsory	It is branch of mathematics that deals with development and use of numerical method for solving problem. It is use in computer science to create, analyze and implement algorithm. This course is studied for learning finite precision computation, solution of nonlinear equations in single variable, calculation and interpretation of errors in numerical method.
		<b>Part-II</b> Differentiation and Integration		These can help us solve many types of real world problems. The differentiation is used to determine Maximum and Minimum value of a particular function such as cost, profit-loss, etc. Whereas Integration is used to find area and volume of curve.
		<b>Part-III</b> Data Structure		This course is studied for learning the concept of data structure and its significance in Programmemeing. Its provide approach to design, use and implementation of abstract data types. Understand how to use data structure and various forms of its implementation for different application like C language++ language , etc.
		<b>B.C.A.202</b> DBMS(Oracle , SQL)	Compulsory	These course is studied for learning the concept of DBMS with respect to various model, function of DBMS , data requirement for complex dataB.A.se applications. Students learned creation of dataB.A.se, manipulation and queries of data in dataB.A.se and Skills to write SQL and PL/SQL Programmes.

		<b>B.C.A.203</b> Programmemeing in C++ & Visual C++	Compulsory	These course is studied for learning the use of Programmemeing concept - Object Oriented Programmemeing Approach and develop logic thinking, skills to write codes, finding and fixing errors.
		<b>B.C.A.204</b> Computer Networking & Internet Technology	Compulsory	These course is studied for learning use and services of network architecture, network type , topologies , OSI AND TCP/IP model, and different techniques of network security.
		<b>B.C.A.205</b> A Shell Programmemeing in Unix/Linux	Compulsory	These course is studied for learning various tools and techniques, syntax, codes, use of system administrator and end user in Linux environment.
		<b>B</b> Practical Based on course 205A		This course is studied for learning the practical approach and develop Programme in Unix/Linux.
		<b>B.C.A.206</b> A Principles of Management	Compulsory	These course is studied for learning the concept of planning and idea of management control .
		<b>B</b> Foundation Course		This course is studied for learning the aspects of Indian constitution, Indian society and political issues of the country.
		<b>B.C.A.207</b> Practical Based on course-202 & Mini Project (Visual Basic& Oracle / Access)	Compulsory	These courses are studied for learning the practical approach and develop Programme in DBMS and developing project for any system.
		<b>B.C.A.208</b> Practical Based on course-203	Compulsory	This course is studied for learning the practical approach and develops Programme C++ Language.

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B.C.A.	B.C.A.- Part III	<b>B.C.A.301</b> <b>Part-I</b> Calculus & Geometry	Compulsory	Calculus is mathematical study of continuous changes. How one variable changes with respect to other variable and its effect on other mathematical functions. Whereas geometry is the study of shape.
		<b>Part-II</b> Differential Equation & Fourier Series		Fourier theory was initially invented to solve certain differential equations. Fourier series are widely used for seeking solution to various Ordinary Differential Equation and Partial Differential Equation relates one or more functions and their derivatives.
		<b>Part-III</b> Computer System Architect		These course is studied for able to understand the functionality and implementation of computer system, familiar to various instruction codes and formats of different CPU's ,I/O's , memory originations, control unit and working of parallel processing and vector processing.
		<b>B.C.A.302</b> Java	Compulsory	These course is studied for learning fundamentals of Java application Programmes using OOPs Principles , creating packages and interfaces, implementing errors handling techniques using exception handling.
		<b>B.C.A.303</b> Operating System	Compulsory	These course is studied for detailed knowledge of integral software in computer system, CPU scheduling Algorithms, process of Memory management methods and allocation methods, system deadlocks.
		<b>B.C.A.304</b> Software Engineering	Compulsory	These course is studied for learning the concept of software engineering and its relevance, various models for developing a software product ,analyze existing system to gather requirements for proposed system, design and coding of software, testing of software.
		<b>B.C.A.305</b> A Multimedia Tools And Applications	Compulsory	This course is studied for learning Basics of graphics and animation and its applications.

		<b>B</b> Practical Based on course 305A		These course is studied for learning the practical approach and develop Programme .
		<b>B.C.A.306</b> A financial Management Accountancy	Compulsory	These course is studied for learning principle of financial accounting , cost accounting, corporate and management Accounting which help in creating finance related data.
		<b>B</b> Foundation Course		These courses is studied for improving reading skills, writing skills, listening skills and speaking skills.
		<b>B.C.A.307</b> Practical Based on course-302	Compulsory	This course is studied for learning the practical approach and develops Programmes in Java Language.
		<b>B.C.A.308</b> Project	Compulsory	These course is studied for skills to apply software development cycle to develop a software module for any system, and complete documentation.