

# BACHELOR OF COMPUTER APPLICATION (B. C. A)

## Courses and Course Outcome

<b>SEMESTER 1</b>		
Course Code	Course Name	Course Outcome
BCA1B01	Computer Fundamentals and HTML	<ul style="list-style-type: none"><li>• To equip the students with fundamentals of Computer</li><li>• To learn the basics of Computer organization</li><li>• To equip the students to write algorithm and draw flow chart for solving simple problems</li><li>• To learn the basics of Internet and webpage design</li></ul>
BCA1C01	Mathematical Foundation for Computer Applications	<ul style="list-style-type: none"><li>• To learn the basic principles of linear algebra and vectors.</li><li>• To learn the basic principles of differential and integral Calculus.</li><li>• To learn mathematical modelling using ordinary and partial equations.</li></ul>
BCA1C02	Discrete Mathematics	<ul style="list-style-type: none"><li>• To learn mathematical logic and Boolean algebra.</li></ul>
<b>SEMESTER II</b>		
BCA2B02	Problem Solving Using C	<ul style="list-style-type: none"><li>• To equip the students with fundamental principles of Problem-Solving aspects.</li><li>• To learn the concept of programming</li><li>• To study C language</li><li>• To equip the students to write programs for solving simple computing problems</li></ul>
BCA2B03	Programming Laboratory I: HTML and Programming in C	<ul style="list-style-type: none"><li>• To make the students learn web designing</li><li>• To make the students learn programming environments.</li><li>• To practice procedural programming concepts.</li><li>• To make the students equipped to solve mathematical or scientific problems using C</li></ul>
BCA2C03	Financial and Management Accounting	<ul style="list-style-type: none"><li>• To get a general introduction on accounting and its general applications.</li><li>• To get an understanding on various tools for financial statement analysis.</li><li>• To get an understanding on accounting procedures up to the preparation of various financial statements.</li><li>• To get a general understanding of the important tools for managerial decision making.</li></ul>

BCA2C04	Operations Research	<ul style="list-style-type: none"> <li>• To get a general introduction in solving linear programming problems.</li> <li>• To get a general understanding of network analysis technique.</li> <li>• To get a general understanding of different mathematical models.</li> </ul>
<b>SEMESTER III</b>		
XXXXA11	Python Programming	<ul style="list-style-type: none"> <li>• Understand various statements, data types and functions in Python</li> <li>• Develop programs in Python programming language</li> <li>• Understand the basics of Object-oriented programming using Python</li> </ul>
XXXXA12	Sensors and Transducers	<ul style="list-style-type: none"> <li>• Explain resistance, inductance and capacitance transducers.</li> <li>• Perceive the concepts of temperature and pressure transducers.</li> <li>• Perceive the concepts level transducers such as and flow transducers</li> <li>• Explain Electromagnetic transducers and radiation sensors</li> <li>• Explain force and torque transducers and sound transducers</li> </ul>
BCA3B04	Data Structures Using C	<ul style="list-style-type: none"> <li>• To understand the concept of data structures</li> <li>• the students aware of various data structures</li> <li>• the students implement fundamental data structures</li> </ul>
BCA3C05	Computer Oriented Numerical & Statistical Methods	<ul style="list-style-type: none"> <li>• To learn the floating-point arithmetic</li> <li>• Learning to solve linear equations.</li> <li>• To learn numerical differentiation and integration.</li> <li>• To learn the basics of statistics and probability theory</li> </ul>
BCA3C06	Theory of Computation	<ul style="list-style-type: none"> <li>• To get a general introduction to the theory of Computer Science</li> <li>• To get a general understanding on different languages, grammar and automata</li> </ul>
<b>SEMESTER IV</b>		
XXXXA14	Microprocessors Architecture and Programming	<ul style="list-style-type: none"> <li>• To understand internals of Microprocessor.</li> <li>• To learn architecture of 8085 Microprocessor</li> <li>• To learn instruction set of 8085 Microprocessor</li> <li>• To learn how to program a Microprocessor</li> </ul>
BCA4B05	Database Management System and RDBMS	<ul style="list-style-type: none"> <li>• To learn the basic principles of database and database design</li> <li>• To learn the basics of RDBMS</li> <li>• To learn the concepts of database manipulation SQL</li> <li>• To study PL/SQL language</li> </ul>

BCA4B06	Programming Laboratory II: Data Structures and RDBMS	<ul style="list-style-type: none"> <li>• To make the students equipped to solve mathematical or scientific problems using C</li> <li>• To learn how to implement various data structures.</li> <li>• To provide opportunity to students to use data structures to solve real life problems.</li> </ul>
BCA4C07	E-Commerce	<ul style="list-style-type: none"> <li>• To get a general introduction of the Electronic Commerce framework.</li> <li>• To get a general understanding on the various electronic payment system.</li> <li>• To get a general understanding on the Internal information systems.</li> <li>• To get a general understanding on the new age information.</li> </ul>
BCA4C08	Computer Graphics	<ul style="list-style-type: none"> <li>• To learn the basics of Computer Graphics</li> </ul>
XXXXA13	Data Communication and Optical Fibres	<ul style="list-style-type: none"> <li>• To expose the students to the basics of network communication and signal propagation through optical fibres.</li> </ul>
<b>SEMESTER V</b>		
BCA5B07	Computer Organization and Architecture	<ul style="list-style-type: none"> <li>• To learn logic gates, combinational circuits and sequential circuits</li> <li>• To learn basics of computer organization and architecture</li> </ul>
BCA5B08	Java Programming	<ul style="list-style-type: none"> <li>• To review on concept of OOP.</li> <li>• To learn Java Programming Environments.</li> <li>• To practice programming in Java.</li> <li>• To learn GUI Application development in JAVA.</li> </ul>
BCA5D04	Introduction to Data Analysis using Spread sheet	<ul style="list-style-type: none"> <li>• To introduce the importance of software tools.</li> <li>• To learn the Analysis using Spread sheets.</li> </ul>
BCA5D03 -	Introduction to Problem Solving and C Programming	<ul style="list-style-type: none"> <li>• To introduce fundamental principles of problem-solving aspects.</li> <li>• To learn the concept of programming.</li> <li>• To learn C language</li> </ul>
BCA5D02	Web Designing	<ul style="list-style-type: none"> <li>• To learn Web designing</li> </ul>
BCA5D01	Introduction to Computers and Office Automation	<ul style="list-style-type: none"> <li>• To learn Office Automation</li> </ul>
BCA5B10	Principles of Software Engineering	<ul style="list-style-type: none"> <li>• To learn engineering practices in Software development.</li> <li>• To learn various software development methodologies and practices.</li> </ul>

		<ul style="list-style-type: none"> <li>To learn and study various Evaluation methods in Software Development.</li> </ul>
BCA5B09	Web Programming using PHP	<ul style="list-style-type: none"> <li>Too familiar with the concept HTML, CSS, JavaScript, Server-Side Scripting</li> <li>To learn PHP Programming Environments.</li> <li>To practice programming in PHP.</li> <li>To learn Application development in PH. With Database and AJAX</li> </ul>
<b>SEMESTER VI</b>		
BCA6B11	Android Programming	<ul style="list-style-type: none"> <li>To have a review on concept of Android programming.</li> <li>To learn Android Programming Environments.</li> <li>To practice programming in Android.</li> <li>To learn GUI Application development in Android platform with XML</li> </ul>
BCA6B12	Operating Systems	<ul style="list-style-type: none"> <li>To learn objectives &amp; functions of Operating Systems.</li> <li>To understand processes and its life cycle.</li> <li>To learn and understand various Memory and Scheduling Algorithms.</li> <li>To have an overall idea about the latest developments in Operating Systems</li> </ul>
BCA6B13-	Computer Networks	<ul style="list-style-type: none"> <li>To learn about transmissions in Computer Networks.</li> <li>To learn various Protocols used in Communication.</li> <li>To have a general idea on Network Administration</li> </ul>
BCA6B16A	-System Software	<ul style="list-style-type: none"> <li>To build fundamental knowledge in system software.</li> <li>To learn functions of various system software.</li> <li>To learn specifically learn compilation process of a program.</li> </ul>
BCA6B15	Programming Laboratory IV: Lab Exam of Android and Linux Shell Programming	<ul style="list-style-type: none"> <li>To practice Android programming.</li> <li>To practice user interface applications.</li> <li>To develop mobile application.</li> <li>To practice shell programming</li> </ul>
BCA6B14	Programming Laboratory III: Lab Exam of Vth Semester Java and PHP Programming	<ul style="list-style-type: none"> <li>To practice Java programming.</li> <li>To practice client side and server-side scripting.</li> <li>To practice PHP Programming.</li> <li>To practice developing dynamic websites.</li> <li>To practice how to interact with databases through PHP</li> </ul>

