

## Master of Computer Application (Integrated) (MCA-Integrated)

Code	Course Name	Course Outcome
CA 1.1	COMPUTER ESSENTIALS	<ul style="list-style-type: none"> <li>To understand basics of computer System.</li> <li>To Understand Data Representation and Basic of Algorithm.</li> <li>To understand concept and functioning of Operating System</li> <li>To acquire knowledge of Software &amp; Computer Viruses.</li> <li>To understand Fundamental of Internet &amp; Advanced Application of Computer System in Real Life.</li> </ul>
CA 1.2	Professional Communication	<ul style="list-style-type: none"> <li>To demonstrates his verbal and non-verbal communication ability</li> <li>To demonstrate his/her ability to write error free while making an optimum use of correct Business Vocabulary &amp; Grammar.</li> <li>To distinguish among various levels of organizational communication and communication barriers while developing an understanding of Communication as a process in an organization.</li> <li>To draft effective business correspondence with brevity and clarity.</li> <li>To stimulate their Critical thinking by designing and developing clean and lucid writing skills.</li> </ul>
CA 1.3	Mathematical Foundations in Computer Science-I	<ul style="list-style-type: none"> <li>Apply mathematical logic to solve problems</li> <li>Understand sets; apply operations on sets and algebraic structures.</li> <li>Model and solve real world problems using graphs and trees.</li> <li>Use mathematical concepts such as relations and functions.</li> <li>Analyze and understand the mathematical operations on vectors.</li> </ul>
CA 1.4	C Programming	<ul style="list-style-type: none"> <li>Gain basic knowledge of C language.</li> <li>Develop logics which will help them to create programs, applications in C programming.</li> <li>Learn the decision making ability to construct the C Programs.</li> <li>Apply user defined functions for solving the problem.</li> <li>Understand the use of structure and union to solve the complex problem.</li> <li>Analyze problems in different applications and develop logic to implement their solutions</li> </ul>
CA 1.5	Lab on Professional Communication	<ul style="list-style-type: none"> <li>To demonstrates his verbal and non-verbal communication ability</li> <li>To demonstrate his/her ability to write error free while making an optimum use of correct Business Vocabulary &amp; Grammar.</li> <li>To distinguish among various levels of organizational communication and communication barriers while developing an understanding of Communication as a process in an organization.</li> <li>To draft effective business correspondence with brevity and clarity. CO5: To stimulate their Critical thinking by designing and developing clean and lucid writing skills.</li> </ul>
CA 1.6	Lab on Problem Solving and Algorithmic Thinking-I	<ul style="list-style-type: none"> <li>Apply and practice logical ability to solve the problems on matrices.</li> <li>Apply and practice different operations on sets.</li> <li>Demonstrate the use of Strings and string handling functions.</li> <li>Demonstrate the use of graphs and trees.</li> </ul>

CA 1.7	Lab on C programming	<ul style="list-style-type: none"> <li>• Learn Simple C Program.</li> <li>• Read, understand and trace the execution of programs written in C language</li> <li>• Use the decision making ability for writing a C code for a given Problem.</li> <li>• Develop details understanding of pointers, functions, string functions, arrays, structure, union and file handling.</li> <li>• Learn to develop complex C Programs.</li> </ul>
CA 2.1	Computer Organization & Architecture	<ul style="list-style-type: none"> <li>• Describe the fundamental organization of a computer system.</li> <li>• Understand the basics of instructions sets and their impact on processor design.</li> <li>• Perform computer arithmetic operations and control unit operations.</li> <li>• Understanding of the addressing modes, instruction formats and program control statements.</li> <li>• Measure the performance of CPU, memory and I/O operations.</li> </ul>
CA 2.2	Web Designing	<ul style="list-style-type: none"> <li>• Design the web Pages using HTML / HTML 5 Tags.</li> <li>• Use Hyperlink, Tables in web page.</li> <li>• Use CSS to apply effect to webpage text / Controls.</li> </ul>
CA 2.3	Mathematical Foundations in Computer Science-II	<ul style="list-style-type: none"> <li>• Solve applications involving permutations and combinations.</li> <li>• Analyze statistical data using measures of central tendency, dispersion and location.</li> <li>• Organize, manage and present data using statistics.</li> <li>• Develop and apply problem-solving techniques needed to accurately calculate probabilities</li> <li>• Provide the students with a fundamental understanding of probabilistic methods</li> </ul>
CA 2.4	C++ Programming	<ul style="list-style-type: none"> <li>• Understand the difference between the top-down and bottom-up approach</li> <li>• Describe the object-oriented programming approach in connection with C++</li> <li>• Apply the concepts of object-oriented programming</li> <li>• Illustrate the process of data file manipulations using C++</li> <li>• Apply virtual and pure virtual function &amp; complex programming situations.</li> </ul>
CA 2.5	Lab on Essentials of Web Designing	<ul style="list-style-type: none"> <li>• Design the web Pages using HTML / HTML 5 Tags.</li> <li>• Use Hyperlink, Tables in web page.</li> <li>• Use CSS to apply effect to webpage text / Controls.</li> </ul>
CA 2.6	Lab on Problem Solving and Algorithmic Thinking-II	<ul style="list-style-type: none"> <li>• Apply and demonstrate the concept of Permutation and Combination.</li> <li>• Apply and demonstrate the measure of Central Tendency</li> <li>• Apply and demonstrate the concepts of probability</li> </ul>
CA 2.7	Lab on C++ Programming	<ul style="list-style-type: none"> <li>• To describe the advantages of a high level language like C++, the programming process, and the compilation process.</li> <li>• To describe and use software tools in the programming process.</li> <li>• To apply good programming principles to the design and implementation of C++ programs.</li> <li>• To design, implement, debug and test programs using the fundamental elements of C++.</li> <li>• To demonstrate an understanding of primitive data types, values, operators and expressions in C++.</li> </ul>