

Course code	Course Name	L-T-P-Credits	Year of Introduction
BM234	COMPUTER PROGRAMMING LAB	0-0-3-1	2016
Prerequisite: Registered for BM206 Fundamentals of Computer programming			
<b>Course Objectives</b> <ol style="list-style-type: none"> <li>1. To familiarize students with basic hardware and software tools.</li> <li>2. To learn the implementation of control structures, Iterations and recursive and non-recursive functions.</li> <li>3. To learn the implementation of arrays and structures.</li> <li>4. To learn the implementation of classes.</li> <li>5. To implement operations of files.</li> </ol>			
<b>List of Exercises/ Experiments (Minimum of 10 mandatory)</b> <p>Programming exercises in C++ shall include programs using the following concepts. –</p> <ol style="list-style-type: none"> <li>1. Programs for decision making</li> <li>2. Programs for branching</li> <li>3. Programs for looping These include variables, expressions, conditional statements and multiple branching statements (if, if else, nested if, if else if ladder, switch.... case), iteration statements (while, do, while, for etc.).</li> <li>4. Functions &amp; Function calls These include parameters, arguments &amp; recursion.</li> <li>5. Array sorting &amp; searching</li> <li>6. Two dimensional arrays</li> <li>7. Simulation of String functions (strlen, strcpy, strcmp, strcat etc.)</li> <li>8. String searching</li> <li>9. Simple programs using structures</li> <li>10. Programs using classes – inheritance, overloading</li> <li>11. Programs for defining, opening/closing, operations (text files)</li> <li>12. Programs for defining, opening/closing, operations (binary files)</li> </ol>			
<b>Expected Outcome</b> <p>At the end of the course students shall be able to get practical exposure to a basic programming platform to design computer programs for problems using modular and interactive design approaches.</p>			
<b>Text Book:</b> <p>Programming with C++ - Schaum's outlines, John R Hubbard, McGraw-Hill.</p>			