

# MCA SYLLABUS

| SEMESTER – 1 <sup>ST</sup>   | SEMESTER – 2 <sup>ND</sup>  |
|--|---|
| <p>Object Oriented Programming Through Java</p> <p>Operating Systems</p> <p>Database Management Systems</p> <p>Computer Architecture</p> <p>Web Application Development</p> <p>Discrete Mathematics</p> <p>Java Lab</p> <p>DBMS Lab</p> <p>Web Application Development Lab</p> | <p>Programming in Python</p> <p>Advanced Java Programming</p> <p>Data Communication and Computer Networks</p> <p>Algorithms and Data Structures</p> <p>Software Engineering</p> <p>Data Warehousing &amp; Data Mining</p> <p>Python Lab</p> <p>Advanced Java Lab</p> <p>Data Structures Lab</p> |

| SEMESTER – 3 <sup>RD</sup>  | SEMESTER – 4 <sup>TH</sup>   |
|---|--|
| <p>Cloud Computing</p> <p>.NET Frame Work and ASP. NET</p> <p>Mobile Application Development</p> <p>Artificial Intelligence</p> <p>Elective-1 (Any One)</p> <ul style="list-style-type: none"> <li>i. Big Data Analytics</li> <li>ii. E- Commerce</li> <li>iii. Computer Graphics</li> <li>iv. Computer Oriented Numerical Methods</li> </ul> <p>Elective-2(Any One)</p> <ul style="list-style-type: none"> <li>i. Theory of Computation</li> <li>ii. Soft Computing</li> <li>iii. Computer Based Optimization Techniques</li> <li>iv. Cryptography &amp; Network Security</li> </ul> <p>.NET Lab</p> <p>Mobile Application Development Lab</p> <p>Communication and Soft Skill Lab</p> | <p>Analysis and Design of Algorithms</p> <p>Elective-3(Any One)</p> <ul style="list-style-type: none"> <li>i. Data Science with R</li> <li>ii. Machine Learning</li> <li>iii. Digital Marketing</li> <li>iv. Open Source Operating System</li> </ul> <p>ADA Lab</p> <p>Elective-4(Any One)</p> <ul style="list-style-type: none"> <li>i. Data Science with R Lab</li> <li>ii. machine Learning Lab</li> <li>iii. Digital Marketing Lab</li> <li>iv. Open Source Operating System Lab</li> </ul> <p>Industrial Project : Minimum Two Months in an Organization Approved by the Director/Head of The Center/Department</p> |