



## **SYLLABUS FOR MCA (Bangalore University)**

### **Semester I**

- Mathematical Foundation of Computer Science
- Probability and Statistics
- Computer Programming and Problem Solving
- Practical for I. MCA.3
- Computer Organisation and Assembly
- Language Programming
- Practical for I. MCA.4
- Accounting and Financial Management
- Institutional Course
- Applied Algebra/Linear Algebra

### **Semester II**

- Combinatorics and Graph Theory
- Business Data Processing
- Practical For II. MCA.2
- Data & File Structures
- Practical For II. MCA.3
- Computer Based Numerical & Statistical Techniques
- Practical For II. MCA.4
- Organisational Structure & Personnel Management

### **Semester III**

- System Software & Computer Programming
- Practical For III. MCA. 1
- Data Base Management System
- Practical For III. MCA.2
- System Analysis And Design Techniques
- Computer Based Optimization Techniques
- Practical For III. MCA.4
- Institutional Course Automata Theory

### **Semester IV**

- Operating Systems
- Practical For IV. MCA. I
- Information System Design and Implementation
- Practical For IV. MCA.2
- Computer Assisted Management

- Elective-I
- Analysis & Design of Algorithms
- Elective-II
- Computer Architecture
- Practical For IV. MCA.5

### **Semester V**

- Interactive Computer Graphics
- Practical For V. MCA.1
- Simulation & Modeling
- Practical For V. MCA.2
- Distributed Computing Networks
- Applications
- Practical For V. MCA.3
- Elective-III
- Artificial Intelligence
- Elective-IV
- Software Engineering

### **Semester VI**

- Seminar
- Project