

CURRICULUM

Coding Structure: T: Theory; P: Practicals S: Seminar D: Dissertation V: VivaVoce

*Example: MCA101T : MCA (Course) 101 (Paper Code)
T(Theory Paper)*

SEMESTER I

Course No	Subject
MCA 101T	DISCRETE MATHEMATICS AND STATISTICS
MCA 102T	FUNDAMENTALS OF DATA STRUCTURES
MCA 103T	PARADIGMS OF PROGRAMMING LANGUAGES
MCA 104T	DIGITAL SYSTEMS & COMPUTER ARCHITECTURE
MCA 105T	PROBLEM SOLVING AND PROGRAMMING IN C
MCA 106 P	C PRACTICALS
MCA 107 P	DATA STRUCTURES THROUGH C - PRACTICALS
MCA 108 T	ENGLISH FOR PROFESSIONAL COMMUNICATION

SEMESTER II

Course No	Subject
MCA 201T	OPTIMIZATION TECHNIQUES & NUMERICAL METHODS
MCA 202T	OPERATING SYSTEMS
MCA 203T	DATABASE MANAGEMENT SYSTEMS
MCA 204T	DATA COMMUNICATIONS & NETWORKS
MCA 205T	WEB TECHNOLOGIES
MCA 206 P	DBMS PRACTICALS
MCA 207 P	WEB TECHNOLOGIES PRACTICALS

SEMESTER III

Course No	Subject
MCA 301T	PRINCIPLES OF MANAGEMENT & ACCOUNTING
MCA 302T	ANALYSIS & DESIGN OF ALGORITHMS
MCA 303T	OBJECT ORIENTED PROGRAMMING THROUGH JAVA
MCA 304T	SOFTWARE ENGINEERING & PROJECT MANAGEMENT
MCA 305T	OBJECT ORIENTED ANALYSIS & DESIGN
MCA 306 P	PHP PROGRAMMING PRACTICALS
MCA 307 P	OOPS THROUGH JAVA PRACTICALS

SEMESTER IV

Course No	Subject
MCA 401T	SYSTEM SOFTWARE
MCA 402T	DATA MINING
MCA 403T	TCP/IP PROTOCOLS
MCA 404T	LINUX OS AND SHELL PROGRAMMING
MCA 405E	ELECTIVE I
MCA 406 P	LINUX OS & SHELL PROGRAMMING PRACTICALS
MCA 407 D	MINI PROJECT – APPLICATION DEVELOPMENT

SEMESTER V

Course No	Subject
MCA 501T	USER INTERFACE DESIGN
MCA 502T	KNOWLEDGE MANAGEMENT AND BUSINESS INTELLIGENCE
MCA 503T	ENTERPRISE RESOURCE PLANNING
MCA 504T	ADVANCED JAVA PROGRAMMING
MCA 505E	ELECTIVE II
MCA 506 P	ADVANCED JAVA PROGRAMMING PRACTICALS
MCA 507 P	PYTHON PROGRAMMING PRACTICALS
MCA 508 S	MAIN SEMINAR

MCA 405E ELECTIVE I

LIST OF ELECTIVES FOR SEMESTER 4

- 1. E41 – MICROPROCESSORS AND EMBEDDED SYSTEMS**
- 2. E42 – BIG DATA ANALYTICS**
- 3. E43 – CLOUD AND GRID COMPUTING**
- 4. E44 – SOCIAL NETWORK ANALYSIS**
- 5. E45 – CRYPTOGRAPHY AND COMPUTER SECURITY**
- 6. E46 – SOFT COMPUTING**

MCA 505E ELECTIVE II

LIST OF ELECTIVES FOR SEMESTER 5

- 1. E51 – ADHOC AND SENSOR NETWORKS**
- 2. E52 – MULTIMEDIA SYSTEMS**
- 3. E53 – INFORMATION SECURITY AND E-COMMERCE**
- 4. E54 – DIGITAL IMAGE PROCESSING**
- 5. E55 – DISTRIBUTED COMPUTING**
- 6. E56 – COMPUTER GRAPHICS WITH OPENGL**

Every Student is supposed to take one elective paper in Semester 4 as part of the MCA course. Examinations will be conducted for the selected paper by the University with both internal and external components like other core papers.

SEMESTER VI

MCA 601D- MAIN PROJECT