

MCA, Syllabus

MCA			Year-I, Semester-I
S.No.	Course Code	Subject	
1	MCA-1.1	Mathematical Foundation of Computer Science	
2	MCA-1.2	Accounting and Financial Management	
3	MCA-1.3	Computer Organization	
4	MCA-1.4	Computer and 'C' Programming	
5	MCA-1.5	Paradigms of Programming	
6	MCA-1.6	UNIX & Shell Programming	
PRACTICALS			
7	MCA-171	Programming Lab	
8	MCA-172	Organization Lab	
9	MCA-173	Unix/Linux & Shell Programming Lab	
10	GP-101	General Proficiency	
MCA			Year-I, Semester-II
S.No.	Course Code	Subject	
1	MCA-2.1	Organizational Structure and Personnel Management	
2	MCA-2.2	Data and File Structure Using 'C'	
3	MCA-2.3	Object Oriented Systems in C++	
4	MCA-2.4	Computer Based Numerical & Statistical Techniques	
5	MCA-2.5	Combinatorics & Graph Theory	
6	MCA-2.6	Computer Architecture & Microprocessor	
PRACTICALS			
7	MCA-2.7	Data Structure Lab	
8	MCA-2.8	C++ Lab	
9	MCA-2.9	Microprocessor Lab	
10	GP-2	General proficiency	
MCA			Year-II, Semester-III
S.No.	Course Code	Subject	
1	MCA-3.1	Computer Networks	
2	MCA-3.2	Design & Analysis of Algorithm	
3	MCA-3.3	Operating System	
4	MCA-3.4	Data Base Management System	
5	MCA-3.5	Internet & JAVA Programming	
6	MCA-3.6	System Programming	
PRACTICALS			
7	MCA-3.7	DBMS Lab	
8	MCA-3.8	JAVA Lab	
9	MCA-3.9	DAA Lab	
10	GP-3	General Proficiency	

MCA			Year-II, Semester-IV
S.No.	Course Code	Subject	
1	MCA-4.1	Visual Basic	
2	MCA-4.2	Modeling and Simulation	
3	MCA-4.3	Software Engineering	
4	Elective-I (any one of the following) *MCA 4.4/(1)/(2)/(3)/(4)/(5)		
5	MCA-4.5	Foundation of E-Commerce	
6	MCA-4.6	Computer Graphics & Animation	
PRACTICALS			
7	MCA-4.7	Software Engineering Lab	
8	MCA-4.8	Computer Graphics Lab	
9	MCA-4.9	Visual Basic Lab	
10	GP-4	General Proficiency	
MCA			Year-III, Semester-V
S.No.	Course Code	Subject	
1	MCA-5.1	WEB Technology	
2	Elective-II (any one of the following) *MCA-5.2/(7)/(8)/(9)/(10)/(11)		
3	MCA-5.3	Net Frame Work & C#	
4	MCA-5.4	ERP System	
5	Elective-III (any one of the following) *MCA-5.5/(12)/(13)/(14)/(15)/(16)		
6	MCA-5.6	Management Information System	
PRACTICALS			
7	MCA-5.7	WEB Technology Lab	
8	MCA-5.8	Net Frame Work & C# Lab	
9	MCA-5.9	Colloquium	
10	GP-501	General Proficiency	
MCA			Year-III, Semester-VI
S.No.	Course Code	Subject	
1	MCA-6.1	Industrial Project	

ELECTIVE SUBJECT

Elective-I (Any one of the following)

- MCA 4.4 (1) Compiler Design
- MCA 4.4 (2) Cryptography & Network Security
- MCA 4.4 (3) Data Compression
- MCA 4.4 (4) Client Server Computing
- MCA 4.4 (5) Data mining & Data Warehousing
- MCA 4.4 (6) Parallel Processing

Elective-II (Any one of the following)

- MCA 5.2 (1) Multimedia System
- MCA 5.2 (2) Distributed Data base System
- MCA 5.2 (3) Object Database
- MCA 5.2 (4) Advanced Concepts in Database System
- MCA 5.2 (5) Artificial Intelligence

Elective-III (Any one of the following)

- MCA 5.5 (1) Advanced Computer Networks
- MCA 5.5 (2) Real Time Systems
- MCA 5.5 (3) Principles of User Interface Design
- MCA 5.5 (4) Mobile Computing
- MCA 5.5 (5) Neural Networks
- MCA 5.5 (6) Digital Image Processing