

**MCA (Master of Computer Application)
(Effective from session 2013-14)**

Year- I Semester-I

S.NO.	COURSE CODE	SUBJECT
1.	NAS - 104 -	Professional Communication
2.	NMCA- 112 -	Accounting and Financial Management
3.	NMCA- 113 -	Computer Concepts and Programming In C
4.	NMCA- 114 -	Discrete Mathematics
5.	NMCA- 115 -	Digital logic design
	PRACTICALS	
6.	NMCA- 151 -	Programming Lab
7.	NAS - 154 -	Professional Communication Lab
8.	NGP - 101 -	General Proficiency

Year- I Semester -II

S.NO.	COURSE CODE	SUBJECT
1.	NAS - 205 -	Environment and Ecology
2.	NMCA- 212 -	Computer Based Numerical & Statistical Technique
3.	NMCA- 213 -	Data Structure Using 'C'
4.	NMCA- 214 -	Introduction to Automata Theory and Languages
5.	NMCA- 215 -	Computer Organization
	PRACTICALS	
6.	NMCA- 251 -	Data Structure Lab
7.	NMCA- 252 -	Computer Based Numerical & Statistical Technique Lab
8.	NGP - 201 -	General Proficiency

Year- II Semester- III

S.NO.	COURSE CODE	SUBJECT
1.	NMCA- 311 -	Operating Systems
2.	NMCA- 312 -	Design & Analysis Of Algorithm
3.	NMCA- 313 -	Database Management System
4.	NMCA- 314 -	Internet & Java Programming
5.	NMCA- 315 -	Computer Based Optimization Techniques
6.	AUC001/AUC002	HVPE/Information security and cyber Law
	PRACTICALS	
7.	NMCA- 351 -	DBMS Lab
8.	NMCA- 352 -	Java Programming Lab
9.	NGP - 301 -	General Proficiency

Year- II Semester- IV

S.NO.	COURSE CODE	SUBJECT
1.	NMCA- 411 -	Management Information System
2.	NMCA- 412 -	Web Technology
3.		Elective I
4.	NMCA- 413 -	Artificial Intelligence
5.	NMCA- 414 -	Mobile Computing
6.	AUC001/AUC002	HVPE/Information security and cyber Law
	PRACTICALS	
7.	NMCA- 451 -	Web Technology Lab
8.	NMCA- 452 -	Java Programming Lab
9.	NGP - 401 -	General Proficiency

**MCA (Master of Computer Application)
(Effective from session 2013-14)**

Year- III Semester- V		
S.NO.	COURSE CODE	SUBJECT
1.	NMCA- 511 -	Dot Net Framework & C#
2.		MCA Elective II
3.	NMCA-512-	Software Engineering
4.		MCA Elective III
5.		MCA Elective IV
	PRACTICALS	
6.	NMCA- 551 -	Dot Net Lab
7.	NMCA- 552 -	Project Based on Software Engineering
8.	NGP - 501 -	General Proficiency

Year- III Semester-VI		
S.NO.	COURSE CODE	SUBJECT
1.	NMCA- 611 -	Colloquium
2.	NMCA- 612 -	Project

List of Electives for MCA

MCA –Elective I

S.NO.	COURSE CODE	SUBJECT
1.	NMCA011	Compiler Design
2.	NMCA012	Client Server Computing
3.	NMCA013	Data Warehousing & Mining
4.	NMCA014	Advance Computer Architecture
5.	NMCA015	Distributed System

MCA –Elective II

S.NO.	COURSE CODE	SUBJECT
1.	NMCA021	Computer Networks
2.	NMCA022	Network Security & Cryptography
3.	NMCA023	Neural Networks
4.	NMCA024	Pattern Recognition
5.	NMCA025	Cloud Computing

**MCA (Master of Computer Application)
(Effective from session 2013-14)**

MCA –Elective III

S.NO.	COURSE CODE	SUBJECT
1.	NMCA031	Image Processing
2.	NMCA032	Simulation & Modeling
3.	NMCA033	Software Project Management
4.	NMCA034	Real Time Systems

MCA –Elective IV

S.NO.	COURSE CODE	SUBJECT
1.	NMCA041	Advance Database Management Systems
2.	NMCA042	Information Storage & Management
3.	NMCA043	Software Testing
4.	NMCA044	Big Data