

Master of Computer Applications (MCA)

(As per Choice Based Credit and Grading System (CBCGS) with effect from the academic year 2016-17 for first year, 2017-18 for second year and from 2018-19 for Third year)

Syllabus

Semester –I		Semester –II		Examination Scheme		
Subject Code	Subject Name	Subject Code	Subject Name	Internal Assessment	University Paper	Total
MCA101	Object Oriented Programming	MCA201	Data Structure	20	80	100
MCA102	Software Engineering & Project Management	MCA202	Operating System	20	80	100
MCA103	Computer Organization & Architecture	MCA203	Computer Network	20	80	100
MCA104	IT in Management	MCA204	Financial Accounting & Management	20	80	100
MCA105	Statistics & Probability	MCA205	Decision Making & Mathematical Modeling	20	80	100
MCAL101	Lab I SEPM + OOP Lab	MCAL201	Lab I OS + CN Lab	–	–	100
MCAL102	Lab II Web Technologies & Mini Project Lab	MCAL202	Lab II DS & Web Application Development Using Open Source tools	–	–	100
TOTAL						700
Semester –III		Semester –IV		Examination Scheme		
Subject Code	Subject Name	Subject Code	Subject Name	Internal Assessment	University Paper	Total
MCA301	Database Management System	MCA401	Data Mining & Business Intelligence	20	80	100
MCA302	Java Programming	MCA402	Advanced Web Technology	20	80	100
MCA303	Information Security	MCA403	Computer Graphics	20	80	100
MCA304	Operation Research	MCA404	Elective I	20	80	100
MCA305	Software Testing & Quality Assurance	MCA405	Elective II	20	80	100
MCAL301	Lab I DBMS + ST	MCAL401	Lab-I AWT + Data Mining & Business Intelligence	–	–	100
MCAL302	Lab II Java + UML	MCAL402	Lab-II CG + IP	–	–	100
MCAPR301	Mini Project	MCAL403	Soft Skills Development	–	–	50
TOTAL						750

Semester –V		Examination Scheme		
Subject Code	Subject Name	Internal Assessment	University Paper	Total
MCA501	Wireless & Mobile Technology	20	80	100
MCA502	Advanced Distributed Computing	20	80	100
MCA503	User Experience Design	20	80	100
MCA504	Elective-I	20	80	100
MCA505	Elective – II	20	80	100
MCAL501	Lab I Mobile Application & User Experience Design	–	–	100
MCAL502	Lab II Open Source System for ADC Lab	–	–	100
MCAPR 501	Mini Project	–	–	50
Total				750
Semester –VI		Examination Scheme		
Subject Code	Subject Name	Internal Assessment	University Paper	Total
MCAPR601	Internship Project	50	100	150
MCAPR602	Seminar Research Paper	–	50	50
Total				200

SEM IV – Elective I	
Course Code	Course Name
MCA4041	Entrepreneurship Management
MCA4042	Business Infrastructure and Management
MCA4043	ERP
MCA4044	Ethics and CSR
SEM IV – Elective II	
Course Code	Course Name
MCA4051	Digital Forensics
MCA4052	Simulation and Modelling
MCA4053	Next Generation Networks
MCA4054	AI and Soft Computing

SEM V – Elective 1- Department Level Elective	
Course Code	Course Name
MCADLE5041	Big Data Analytics
MCADLE5042	Machine Learning
MCADLE5043	Internet of Things
MCADLE5044	Multimedia System Design
SEM V – Elective 2 - Institute Level Elective	
Course Code	Course Name
MCAILE5051	Intellectual property Rights and Patents
MCAILE5052	Research Methodology
MCAILE5053	Management Information System
MCAILE5054	Green Computing