

SCHEME AND SYLLABUS

Master of Computer Application (MCA)

2 Year (4 Semester) course

Bridge Course

THEORY										
S.No.	Course		Contact hrs./week			Marks				Cr
	Code	Title	L	T	P	Exam Hrs.	IA	ETE	Total	
1	MCA-BC-110	Computer Fundamentals and Programming in C	3	0	0	3	30	70	100	2
Sub Total			3	0	0		30	70	100	2
PRACTICAL & SESSIONAL										
2	MCA-BC-111P	C Programming Lab	0	0	4	3	30	70	100	2
Sub Total			0	0	4		30	70	100	2
TOTAL OF Bridge Course			3	0	4		60	140	200	4

- For Bridge course students are required to score at least the minimum marks i.e. 40% marks both in theory and practical separately. These marks however will not be added to the final score of semester /program.
- For Bridge course, only cleared or not cleared will be mentioned in the mark sheet. No separate certificate will be issued.
- Total Duration of Completion of MCA Program will be **Four** Semester with maximum attempt of Four more semester and same applies for the Bridge course
- No Grace marks for the bridge course
Grace marks for MCA program subjects will be given as per university examination system likewise other PG program/s

MCA First Year: I-Semester

THEORY										
S.No.	Course		Contact hrs./week			Marks				Cr
	Code	Title								
			L	T	P	Exam Hrs.	IA	ETE	Total	
1	MCA-121	Data Structures using C++	3	0	0	3	30	70	100	3
2	MCA-122	Database Management Systems	3	0	0	3	30	70	100	3
3	MCA-123	Web Development	3	0	0	3	30	70	100	3
4	MCA-124	Computer Networks	3	0	0	3	30	70	100	3
5	MCA-125	Mathematical Foundations of Computer Science	3	0	0	3	30	70	100	3
6	MCA-126	Software Project Management	3	0	0	3	30	70	100	3
Sub Total			18	0	0		180	420	600	18
PRACTICAL & SESSIONAL										
7	MCA-127P	Data Structures Lab using C++	0	0	4	3	30	70	100	3
8	MCA-128P	DBMS Lab	0	0	4	3	30	70	100	3
9	MCA-129P	Web Development Lab	0	0	4	3	30	70	100	3
Sub Total			0	0	12		90	210	300	9
TOTAL CREDITS FOR I SEMESTER			18	0	12		270	630	900	27

MCA First Year: II-Semester

THEORY										
S.No.	Course		Contact hrs./week			Marks				Cr
	Code	Title								
			L	T	P	Exam Hrs.	IA	ETE	Total	
1	MCA-221	Python Programming	3	0	0	3	30	70	100	3
2	MCA-222	Operating Systems	3	0	0	3	30	70	100	3
3	MCA-223	Object Oriented Programming Using Java	3	0	0	3	30	70	100	3
4	MCA-224	Full Stack Development	3	0	0	3	30	70	100	3
5	MCA-225	Cloud Computing	3	0	0	3	30	70	100	3
6	MCA-226	Cyber Security and Digital Forensics	3	0	0	3	30	70	100	3
Sub Total			18	0	0		180	420	600	18
PRACTICAL & SESSIONAL										
7	MCA-227P	Python Programming Lab	0	0	4	3	30	70	100	3
8	MCA-228P	Object Oriented Programming Lab Using Java	0	0	4	3	30	70	100	3
9	MCA-229P	Full Stack Development Lab	0	0	4	3	30	70	100	3
Sub Total			0	0	12		90	210	300	9
TOTAL CREDITS FOR II SEMESTER			18	0	12		270	630	900	27

MCA Second Year: III-Semester

THEORY										
S.No.	Course		Contact hrs./week			Marks				Cr
	Code	Title								
			L	T	P	Exam Hrs.	IA	ETE	Total	
1	MCA-321	Mobile Application Development	3	0	0	3	30	70	100	3
2	MCA-322	Computer Graphics	3	0	0	3	30	70	100	3
3	MCA-323	Data Science	3	0	0	3	30	70	100	3
4	MCA-324	Elective-I	3	0	0	3	30	70	100	3
5	MCA-325	Elective-II	3	0	0	3	30	70	100	3
Sub Total			15	0	0		150	350	500	15
PRACTICAL & SESSIONAL										
6	MCA-326P	Mobile Application Development Lab	0	0	4	3	30	70	100	3
7	MCA-327P	Computer Graphics	0	0	4	3	30	70	100	3
8	MCA-328P	Data Science Lab Using R	0	0	4	3	30	70	100	3
9	MCA-329P	#Research Paper and Presentation	0	0	3	3	30	70	100	3
Sub Total			0	0	15		120	280	400	12
Total Credits for III Semester			15	0	15		270	630	900	27
#It is suggested to have Technical Paper Writing Course and in End Term Examination there should be a Presentation of a research paper and submit the papers with below 20% Plagiarism report.										

Elective – I

Sr. No.	Course Code	Course Name
1	MCA-324A	Artificial Intelligence & Machine Learning
2	MCA-324B	Internet of Things
3	MCA-324C	Natural Language Processing
4	MCA-324D	Soft Computing

Elective - II

Sr. No.	Course Code	Course Name
1	MCA-325A	Deep Learning
2	MCA-325B	Web Intelligence and Big Data
3	MCA-325C	Software Quality Management
4	MCA-325D	Information Security

MCA Second Year: IV-Semester

Course Code	Course Title	Type of Paper	Contact Hours Per Week	Exam Hrs	Internal Assessment	End Term Exam	Total	Credits
MCA-421P	Industrial/Field Training	Practical	-	-	100	300	400	12
MCA-422P	Dissertation & Seminar	Practical	4	-	30	70	100	03
Total Credits for IV Semester							500	15
Total Credits for MCA							100	