



University of Engineering & Management, Jaipur
Syllabus to be implemented from the Academic Year 2016-17
Master of Computer Application
MCA First Year 1st Semester

A. THEORY								
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS	
			L	T	P	TOTAL		
1	MCA101	Computer Organization & Architecture	3	1	-	4	4	
2	MCA102	Computer Programming with C	3	1	-	4	4	
3	MCA103	Business Systems & Applications	3	1	-	4	4	
4	M101	Discrete Mathematical Structure	3	1	-	4	4	
5	HU101	Business English & Communication	3	1	-	4	4	
Total of Theory						20	20	
B.PRACTICAL								
6	MCA191	Micro Programming & Architecture Lab	-	-	4	4	2	
7	MCA192	Programming Lab (C)	-	-	4	4	2	
8	HU191	Business presentation & language lab	-	-	4	4	2	
Total of Practical						12	6	
Total of Semester						32	26	



University of Engineering & Management, Jaipur
MCA First Year 2nd Semester

A. THEORY							
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS
			L	T	P	TOTAL	
1	MCA204	Data Communication & Computer Networks	3	1	-	4	4
2	MCA205	Information Systems Analysis & Design	3	1	-	4	4
3	MCA201	Data Structures with C	3	1	-	4	4
4	MCA202	Data Base Management System-I	3	1	-	4	4
5	MCA203	Object Oriented Programming With C++	3	1	-	4	4
Total of Theory						20	20
B. PRACTICAL							
6	MCA291	Data Structure lab	-	-	4	4	2
7	MCA292	Data Base lab	-	-	4	4	2
8	MCA293	Object-Oriented Programming lab (C++)	-	-	4	4	2
Total of Practical						12	6
Total of Semester					32		26



University of Engineering & Management, Jaipur
MCA Second Year 3rd Semester

A. THEORY							
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS
			L	T	P	TOTAL	
1	MCA301	Unix & Shell Programming	3	1	-	4	4
2	MCA302	Cloud Computing	3	1	-	4	4
3	MCA303	Intelligent Systems	3	1	-	4	4
4	MCA304	Operating Systems & Systems Software	3	1	-	4	4
5	HU302	Management Accounting	2	-	-	2	2
6	M301	Statistics & Numerical Techniques	2	-	-	2	2
Total of Theory						20	20
B. PRACTICAL							
7	MCA391	Unix Lab	-	-	4	4	2
8	M 392	Statistics & Numerical Analysis Lab	-	-	4	4	2
9	MCA392	Computer Networks Lab	-	-	4	4	2
Total of Practical						12	6
Total of Semester					32		26



University of Engineering & Management, Jaipur
MCA Second Year 4th Semester

A. THEORY								
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS	
			L	T	P	TOTAL		
1	MCA401	Software Engineering & TQM	3	1	-	4	4	
2	MCA402	Computer Graphics & Multimedia	3	1	-	4	4	
3	MCA403	Data Base Management System-II	3	1	-	4	4	
4	MM401	Operation Research & Optimization Techniques	3	1	-	4	4	
5	HU401	Basic Environment & Ecology	3	-	-	3	3	
Total of Theory						19	19	
B. PRACTICAL								
6	MCA491	Software Project Management lab	-	-	4	4	2	
7	MCA492	Graphics & Multimedia Lab	-	-	4	4	2	
8	MCA493	Advanced Database lab	-	-	4	4	2	
Total of Practical						12	6	
Total of Semester					31		25	



University of Engineering & Management, Jaipur

MCA Third Year 5th Semester

A. THEORY								
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS	
			L	T	P	TOTAL		
1	MCA 501/A/B/C	Elective 1	3	1	-	4	4	
2	MCA 502/A/B	Elective 2	3	1	-	4	4	
3	MCA 503/A/B	Elective 3	3	1	-	4	4	
4	MCA 504/A/B	Elective 4	3	1	-	4	4	
5	HU501	Values & Ethics of Profession	3	-	-	3	3	
Total of Theory						19	19	
B. PRACTICAL								
6	MCA 592/A/B	Elective 2 Lab	-	-	4	4	2	
7	MCA591	Minor project	-	-	12	12	9	
Total of Practical						16	11	
Total of Semester					35	30		

MCA Third Year 6th Semester

A. THEORY								
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS	
			L	T	P	TOTAL		
B. PRACTICAL								
1	MCA691	Major project	-	-	30	30	26	
2	MCA692	PHP, .NET Lab	-	-	6	6	4	
Total of Practical						36	29	
Total of Semester					36	30		



University of Engineering & Management, Jaipur

Electives for Semesters 5

Elective No	Course Code	Topic
2	MCA 502A	System Administration & Linux
	MCA 502B	Windows Programming With VB
3	MCA 503A	Advanced Unix programming
	MCA 503B	Object Oriented Programming With Java
4	MCA 504A	Compiler Design
	MCA 504B	E-Commerce
1	MCA 501A	Distributed database management
	MCA 501B	Image Processing
	MCA 501C	Parallel Programming

Summary

Semester No	Contact hr/wk	Credit
1	32	29
2	32	29
3	32	29
4	31	28
5	35	31
6	36	29
Total		175

Semester duration: 15 weeks