Programme Structure of MCA

Course Code	Course Title	Type of course	L	T	P	Credits
Semester-I						
OMCA102	Object Oriented Programming using C++	Core	4	0	0	4
OMCA119	Advanced Database Management System	Core	4	0	0	4
OMCA120	Digital Electronics	Multi-Disciplinary	3	0	0	3
OMCA107	Object Oriented Programming using C++ Lab	Skill based	0	0	6	3
OMCA121	Advanced Database Management System Lab	Skill based	0	0	4	2
Discipline Elective I (Any one of the following)						
OMCA111	Cloud Computing	Disciplinary Elective I	3	0	0	3
OMCA114	Big Data					
OMCA115	Software Engineering					
Discipline Elective II (Any one of the following)						
OMCA116	Machine Learning	Disciplinary Elective II	3	0	0	3
OMCA117	IoT and Its Applications					
OMCA118	Digital Image Processing					
Value added Course						
OMCA122	Ethical hacking	**VAC**	2	0	0	2
Total			**19**	**0**	**10**	**24**

Semester-II						
Course Code	**Course Title**	**Type of course**	**L**	**T**	**P**	**Credits**
OMCA202	Programming using Python	Core	4	0	0	4
OMCA212	Artificial Intelligence (Using LISP)	Core	4	0	0	4
OMCA215	Analysis & Design of Algorithms	Core	4	0	0	4
OMCA222	Soft Computing	Elective Foundation	2	0	0	2
OMCA223	Design and Analysis of Algorithms using Python Lab	Skill based	0	0	4	2
OMCA299	XXXX	MOOC	Not Offered			
Discipline Elective III (Any one of the following)						
OMCA216	Data Warehousing and Data Mining Techniques	Disciplinary Elective III	3	0	0	3
OMCA217	Information and Network Security					
OMCA224	Deep Learning					
Discipline Elective IV (Any one of the following)						
OMCA218	Software Project Management	Disciplinary Elective IV	3	0	0	3
OMCA219	Mobile Application Development					
OMCA220	Advanced Web Technologies					
Total						**22**

Semester-III

Course Code	Course Title	Type of course	L	T	P	Credits
OMCA312	Research Methodology	Compulsory Foundation	4	0	0	4
OMCA316	Computer Lab	Research Skill	0	0	4	2
OMCA317	Service Learning	Skill Based	2	0	0	2
OMCA319	Research Publications and Ethics (IPR)	Research Skill	4	0	0	4
OMCA320	Computer System Architecture	Compulsory Foundation	2	0	0	2
OMCA321	Digital Marketing	Entrepreneurship	2	0	0	2
OMCA399	XXXX	MOOC	Not offered			
Value added Course						
OMCA322	Numerical Aptitude & Reasoning	VAC	2	0	0	2
Open Elective Course						
XXXX		OEC	2	0	0	2
Total			**16**	**0**	**4**	**20**
Open Elective Course (for other departments)						
OEC059	E-Commerce	OEC	2	0	0	2

Semester-IV						
Course Code	Course Title	Type of course	L	T	P	Credits
OMCA401	Dissertation	Research Skill	-	-	-	20
OMCA402	Communication Skills	AEC	1	0	0	1
Total			**1**	**0**	**0**	**21**
Grand Total			**56**	**0**	**18**	**89**