

UNIVERSITY OF ENGINEERING AND MANAGEMENT, KOLKATA						
DEPARTMENT OF COMPUTER APPLICATIONS						
MCA STRUCTURED SYLLABUS -UEMK & UEMJ - EVEN SEM 2025-26 - 2nd Semester						
Course Code	Course Title	Total No. of Contact Hours				Total No. of Credits
		Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	
<b>2<sup>nd</sup> Semester (Theory)</b>						
MCA201	Database Management System	3	1	0	4	4
MCA202	Object-Oriented Programming with Java	3	1	0	4	4
MCA203	Data Communication & Computer Networks	3	1	0	4	4
MCA204	Advanced-Data Structures with Python	3	1	0	4	4
MCA(GS)201	General Studies & Current Affairs-II	2	0	0	2	0.5
Total of Theory					18	16.5
<b>2<sup>nd</sup> Semester (Practical)</b>						
MCAC291	Database Management System Laboratory	0	0	3	2	3
MCAC292	Object-Oriented Programming with Java Laboratory	0	0	3	2	3
MCAC294	Advanced-Data Structures with Python Laboratory	0	0	3	2	3
Total of Practical					6	9
<b>2<sup>nd</sup> Semester (Sessional)</b>						
MCA271	Basic Python Programming	0	0	2	2	1
IVC272	Economics, Finance and Entrepreneurship Skills - Intermediate	0	2	0	2	0
	PPT - VERBAL				2	
	PPT - TECHNICAL				3	
MCA(GS)281	Competitive Aptitude Training - II	2	0	0	2	0.5
IFC	Industry and Foreign Certification	0	0	0	0	0
MAR	Mandatory Additional Requirements	0	0	0	0	0
MOOCs	Massive Open Online Course	0	0	0	0	0
Total of Sessional					11	0.5

Total of Semester	35	26
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DEPARTMENT OF COMPUTER APPLICATIONS						
MCA STRUCTURED SYLLABUS -UEMK & UEMJ - EVEN SEM 2025-26 - 4th Semester						
Course Code	Course Title	Total No. of Contact Hours				Total No. of Credits
		Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	
<b>4<sup>th</sup> Semester (Theory)</b>						
MCA401 A/B/C/D	Elective - I	3	1	0	4	3
MCA402 A/B/C	Elective - II	3	1	0	4	3
MCA403	Values and Ethics	2	0	0	2	1
MCA405	Management & Accounting	2	0	0	2	2
MCA(GS)401	General Studies & Current Affairs - IV	2	0	0	2	0.5
Total of Theory					14	9.5
<b>4<sup>th</sup> Semester (Practical)</b>						
MCA491	Major Project	0	0	10	10	15
Total of Practical					10	15
<b>4<sup>th</sup> Semester (Sessional)</b>						
MCA(GS)481	Competitive Aptitude Training - IV	2	0	0	2	0.5
IFC	Industry and Foreign Certification	0	0	0	0	0
MAR	Mandatory Additional Requirements	0	0	0	0	0
MOOCS	Massive Open Online Courses	0	0	0	0	0
Total of Sessional					2	2.5
Total of Semester					31	27

Elective - I		Elective - II	
Course Code	Topic	Course Code	Topic

MCA401A	Distributed Database Management	MCA402A	Compiler Design
MCA401B	Image Processing	MCA402B	Mobile Computing
MCA401C	Parallel Programming	MCA402C	Embedded Systems
MCA401D	Cloud Computing	MCA402D	Natural Language Processing
<b>*NB:</b> Highlighted Elective subjects are taught in this semester			