







Ref.No.: TIAS/DICT/MCA/2023-24/158

Date: 06/07/2023

Department of Information, Communication & Technology

Master of Computer Application

List of Courses

S. N	Sem	Code No.	Paper	Type of Course	L	TIP	Credit s
1	1	MCA 101	Discrete Structures	Core	3	1	4
2	1	MCA 103	Computer Networks	Core	3	1	4
3	1	MCA 105	Operating Systems with Linux	Core	3	1	4
4	1	MCA107	Database Management Systems	Core	3	1	4
5	1	MCA 109	Object Oriented Programming and JAVA	Core	3	1	4
6	1	MCA161	Computer Networks Lab	Practical & Project	0	2	1
7	1	MCA163	Operating Systems with Linux Lab.	Practical & Project	0	2	1
8	1	MCA165	Database Management Systems Lab.	Practical & Project	0	2	1
9	1	MCA167	Object Oriented Programming and JAVA Lab.	Practical & Project	0	2	1
10	2	MCA 169	Minor Project – I	Practical & Project	0	6	3
11	2	MCA 171	Professional Proficiency – I	NUES	0	2	1

13	2	MCA104	Object Oriented Software Engineering	Core	3	1	4
		WCA104	Software Engineering	-	3	1	4
14	2	MCA106	Python Programming	Core	3	1	4
2.24411			Advanced Database	Core			
15	2.	MCA108	Management Systems	Elective	3	1	4
tem est			Data Warehousing and	Core			
16	2	MCA110	Data Mining	Elective	-	-	-
			Mobile Application	Core			
17	2		Design and	Elective	-	-	-
		MCA112	Development				
2/2/				Core			
18	2	MCA114	Full Stack Development	Elective	-		-
2861.2250				Core			
19	3	MCA116	Web Technologies	Elective	-	-	-
			Theory of	Core			
20	3	MCA118	Computations	Elective	1	-	-
				Core			
21	3	MCA120	Software Testing	Elective		-	-
#12×4.2×40				Core			
22	3	MCA122	Microprocessors	Elective		-	-
				Core		1	
23	3	MCA124	Embedded System	Elective	-	-	-
				Core			
24	3	MCA126	Information Security	Elective	-	-	-
				Open			
25	3	MCA128	Digital Marketing	Elective	3	1	4
			Management	Open			
26	3	MCA130	Information System	Elective	-	-	-
			Management Principles	Open			
27	3 .	MCA132	and	Elective	-	-	-

			Organizational	Open	Γ. Ι		
28	3	MCA 134	Behaviour	Elective	-	20	-
29	3	MCA162	Data and File Structures Lab.	Practical & Project	0	2	1
30	3	MCA164	Object Oriented Software Engineering Lab.	Practical & Project	0	2	1
31	3	MCA166	Python Programming Lab.	Practical & Project	0	2	1
32	3	MCA168	Lab. based on Core Elective - I	Practical & Project	0	2	1
33	3	MCA170	Minor Project – II	Practical & Project	0	6	3
34	3	MCA172	Environment Science (NUES)	NUES*	3	0	3
35	3	MCA174	Professional Proficiency – II	NUES*	0	2	1
36	3	MCA201	Design and Analysis of Algorithms	Core	3	1	4
37	3	MCA203	Artificial Intelligence and Machine Learning	Core	3	1	4
38	3	. MCA205	Statistics and Data Analytics	Core Elective	3	1	4
39	3	MCA207	Enterprise Computing with JAVA	Core Elective	-		-
40	3	MCA209	Natural Language Processing	Core Elective	-	-	(-
41	3	MCA211	Computer Graphics	Core Elective	-	-	-
42	3.	MCA213	Wireless Sensor Networks	Core Elective			-

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42	,		Software Project	Core		-	
43	3	MCA215	Management	Elective	-	-	-
			Advanced Computer	Core			
44	3	MCA217	Architecture	Elective	-	-	-
				Core			1
45	3	MCA219	Distributed Systems	Elective	-	-	-
				Core			
46	3	MCA221	Applied Cryptography	Elective	-	-	-
				Core			
47	3	MCA223	Cloud Computing	Elective	-	-	-
				Core			
48	3	MCA225	e-Business Systems	Elective		-	-
			Web Intelligence and	Core			
49	3	MCA227	Big Data	Elective	3	1	4
				Core			
50	3	MCA229	Flutter and Dart	Elective	2.4	-	-
2050			Service Oriented	Core			
51	3	MCA231	Architecture	Elective	-	-	-
Title :			Multimedia	Core			
52	4	MCA233	Technologies	Elective	1.	-	
				Core			
53	4	MCA235	Internet of Things	Elective	-	-	-
		*		Core			
54	4	MCA237	Soft Computing	Elective	-	-	-
			Software Quality	Core			
55	4.	MCA239	Management	Elective	-	-	-
			Digital Image	Core			
56	4	MCA241	Processing	Elective	-	-	
				Core			
57	4	MCA243	Compiler Design	Elective	-	-	+

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58	4	MCA245	Parallel Computing	Core Elective	-	-	-
59	4	MCA247	Numerical and Scientific Computing	Core Elective		-	-
60	4	MCA249	Research Methodology	Open Elective	3	1	4
61	4	MCA251	Operational Research	Open Elective	-	-	-
62	4	MCA253	Cyber Security and Cyber Laws	Open Elective	-	-	-
63	4.	MCA255	e-Content Development	Open Elective	-		-
64	4	MCA261	Design and Analysis of Algorithms Lab.	Practical & Project	0	2	1
65	4	MCA263	Artificial Intelligence and Machine Learning Lab.	Practical & Project	0	2	1
66	4	MCA265	Lab. based on Core Elective - II	Practical & Project	0	2	1
67	4	MCA267	Lab. based on Core Elective - III	Practical & Project	0	2	1
68	4	MCA269	Minor Project – III	Practical & Project	0	6	3
69	4	MCA271	Entrepreneurship Mindset (NUES)	NUES	3	0	3
70	4	MCA273	Professional Proficiency – III	NUES	0	2	1
71	4	MCA202	Dissertation (Major Project)	Core	-	-	20
72	4	MCA272	One MOOC Course (from SWAYAM Platform)	NUES		•	2

73	4	MCA274	Professional Proficiency – IV	NUES		-	-	4
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Head of the Department
Department of Information, Communication & Technology

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