APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
MASTER OF COMPUTER APPLICATIONS
CURRICULUM - SEMESTERS I TO IV
YEAR: 2020

SEMESTER I									
		Hours/week							
Course No	Course	L	T	P	IA Marks	ESE Marks	Total	Credits	Exam Slot
20MCA101	Mathematical Foundations for Computing	3	1	-	40	60	100	4	A
20MCA103	Digital Fundamentals & Computer Architecture	3	1	-	40	60	100	4	B
20MCA105	Advanced Data Structures	3	1	-	40	60	100	4	C
20MCA107	Advanced Software Engineering	3	1	-	40	60	100	4	D
20MCA131	Programming Lab	0	1	3	50	50	100	2	R
20MCA133	Web Programming Lab	0	1	3	50	50	100	2	S
20MCA135	Data Structures Lab	0	1	3	50	50	100	2	T
20MCANC1	Entrepreneurship & Innovations in Technology	-	-	1	-	-	-	0	
	Minimum one MOOC Course is to be completed	-	-	-	-	-	-	0	
		12	7	10	310	390	700	22	

SEMESTER II									
		Hours/week							
Course No	Course	L	T	P	IA Marks	ESE Marks	Total	Credits	Exam Slot
20MCA102	Advanced Database Management Systems	3	1	-	40	60	100	4	A
20MCA104	Advanced Computer Networks	3	1	-	40	60	100	4	B
20MCA1--	Elective 1	3	1	-	40	60	100	4	C
20MCA1--	Elective 2	3	1	-	40	60	100	4	D
20MCA132	Object Oriented Programming Lab	0	1	3	50	50	100	2	R
20MCA134	Advanced DBMS Lab	0	1	3	50	50	100	2	S
20MCA136	Networking & System Administration Lab	0	1	3	50	50	100	2	T
20MCANC2	Industrial Readiness Training	-	-	1	-	-	-	0	
	Second MOOC Course is to be completed	-	-	-	-	-	-	0	
		12	7	10	310	390	700	22	

SEMESTER III									
		Hours/week							
Course No	Course	L	T	P	IA Marks	ESE Marks	Total	Credits	Exam Slot
20MCA201	Data Science & Machine Learning	3	1	-	40	60	100	4	A
20MCA203	Design & Analysis of Algorithms	3	1	-	40	60	100	4	B
20MCA2--	Elective 3	3	1	-	40	60	100	4	C
20MCA2--	Elective 4	3	1	-	40	60	100	4	D
20MCA241	Data Science Lab	0	1	3	50	50	100	2	R
20MCA243	Mobile Application Development Lab	0	1	3	50	50	100	2	S
20MCA245	Mini Project	0		4	100	-	100	2	T
20MCANC3	Domain Expertise Workshops	-	-	1	-	-	-	0	
		12	**6**	**11**	**360**	**340**	**700**	**22**	

SEMESTER IV									
		Hours/week							
Course No	Course	L	T	P	IA Marks	ESE Marks	Total	Credits	Exam Slot
20MCA242	Comprehensive Viva	-	-	-	-	100	100	6	
20MCA244	Seminar	-	-	2	50	-	50	2	
20MCA246	Main Project	-	-	27	70	30	100	12	
				29	**120**	**130**	**250**	**20**	
							2350	**86**	

Elective I	
20MCA162	Applied Statistics
20MCA164	Organizational Behaviour
20MCA166	Functional Programming
20MCA168	Virtualisation and Containers
20MCA172	Advanced Operating Systems
Elective II	
20MCA182	Business Management
20MCA184	Embedded Systems
20MCA186	Computer Graphics
20MCA188	Artificial Intelligence
20MCA192	IPR and Cyber Laws
Elective III	
20MCA261	Operations Research
20MCA263	Cyber Security & Cryptography
20MCA265	Cloud Computing
20MCA267	Cyber Forensics
20MCA269	Compiler Design
Elective IV	
20MCA281	Internet of Things
20MCA283	Deep Learning
20MCA285	Digital Image Processing
20MCA287	Bioinformatics
20MCA289	Social Network Analysis