

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

<b>INT MCA SEMESTER I</b>										
Course No	Course	Hours/week			IA Marks	ESE Marks	Total	Credits	Exam Slot	
		L	T	P						
20INMCA101	English	4	-	-	40	60	100	4	A	
20INMCA103	Basic Mathematics	3	1	-	40	60	100	4	B	
20INMCA105	Introduction to Programming	3	1	-	40	60	100	4	C	
20INMCA107	Introduction to Computers & PC hardware	3	1	-	40	60	100	4	D	
20INMCA109	Fundamentals of Accountancy	3	1	-	40	60	100	4	E	
20INMCA131	Office Automation Lab			5	100		100	1	S	
20INMCA133	Introduction - PC hardware Lab			4	100		100	1	T	
		<b>16</b>	<b>4</b>	<b>9</b>	<b>400</b>	<b>300</b>	<b>700</b>	<b>22</b>		
<b>INT MCA SEMESTER II</b>										
Course No	Course	Hours/week			IA Marks	ESE Marks	Total	Credits	Exam Slot	
		L	T	P						
20INMCA102	Technical Communication	3	1	-	40	60	100	4	A	
20INMCA104	Introduction to Discrete Mathematics	3	1	-	40	60	100	4	B	
20INMCA106	Introduction to Digital Systems & Logic Designs	3	1	-	40	60	100	4	C	
20INMCA108	Problem Solving and Structured Programming	3	1	-	40	60	100	4	D	
20INMCA110	Personality Development and Soft Skills	3	1	-	40	60	100	4	R	
20INMCA132	Problem Solving and Structured Programming Lab			5	100		100	1	S	
20INMCA134	Technical Communication Lab			4	100		100	1	T	
		<b>15</b>	<b>5</b>	<b>9</b>	<b>400</b>	<b>300</b>	<b>700</b>	<b>22</b>		

### INT MCA SEMESTER III

Course No	Course	Hours/week			IA Marks	ESE Marks	Total	Credits	Exam Slot
		L	T	P					
20INMCA201	Computer Organization	3	1	-	40	60	100	4	A
20INMCA203	Probability and Statistics	3	1	-	40	60	100	4	B
20INMCA205	Introduction to Object Oriented Programming	3	1	-	40	60	100	4	C
20INMCA207	Accounting and Financial Management	3	1	-	40	60	100	4	D
20INMCA209	Data Structures	3	1	-	40	60	100	4	E
20INMCA231	Data Structures Lab			5	100		100	1	S
20INMCA233	Basic Object Oriented Programming Lab			4	100		100	1	T
		<b>15</b>	<b>5</b>	<b>9</b>	<b>400</b>	<b>300</b>	<b>700</b>	<b>22</b>	

### INT MCA SEMESTER IV

Course No	Course	Hours/week			IA Marks	ESE Marks	Total	Credits	Exam Slot
		L	T	P					
20INMCA202	Linux/ Unix Fundamentals	3	1	-	40	60	100	4	A
20INMCA204	Statistical Applications	3	1	-	40	60	100	4	B
20INMCA206	Operating Systems	3	1	-	40	60	100	4	C
20INMCA208	Elements of Business Management	3	1	-	40	60	100	4	D
20INMCA210	Internet Concepts and Web Technology	3	1	-	40	60	100	4	E
20INMCA232	Scripting Lab			5	100		100	1	S
20INMCA234	Statistics Lab			4	100		100	1	T
		<b>15</b>	<b>5</b>	<b>9</b>	<b>400</b>	<b>300</b>	<b>700</b>	<b>22</b>	

### INT MCA SEMESTER V

Course No	Course	Hours/week			IA Marks	ESE Marks	Total	Credits	Exam Slot
		L	T	P					
20INMCA301	Numerical Methods	3	1	-	40	60	100	4	A
20INMCA303	User Interface Design	3	1	-	40	60	100	4	B
20INMCA305	Introduction to RDBMS and SQL	3	1	-	40	60	100	4	C
20INMCA307	Fundamentals of Information Systems Security	3	1	-	40	60	100	4	D
20INMCA309	Introduction to Operations Research	3	1	-	40	60	100	4	E
20INMCA331	RDBMS Lab			5	100		100	1	S
20INMCA333	User Interface Design Lab			4	100		100	1	T
		<b>15</b>	<b>5</b>	<b>9</b>	<b>400</b>	<b>300</b>	<b>700</b>	<b>22</b>	

### INT MCA SEMESTER VI

Course No	Course	Hours/week			IA Marks	ESE Marks	Total	Credits	Exam Slot
		L	T	P					
20INMCA302	Introduction to Software Engineering	3	1	-	40	60	100	4	A
20INMCA304	Fundamentals of Data Science	3	1	-	40	60	100	4	B
20INMCA306	Visual Programming	3	1	-	40	60	100	4	C
20INMCA308	Design & Analysis of Algorithms	3	1	-	40	60	100	4	D
20INMCA310	Mini Project 1			4	100		100	2	R
20INMCA332	Open Source Platforms - Lab		1	4	100		100	1	S
20INMCA334	Visual Programming Lab			4	100		100	1	T
		<b>12</b>	<b>5</b>	<b>12</b>	<b>460</b>	<b>240</b>	<b>700</b>	<b>20</b>	

### INT MCA SEMESTER VII

Course No	Course	Hours/week			IA Marks	ESE Marks	Total	Credits	Exam Slot
		L	T	P					
20INMCA401	M- Commerce	3	1	-	40	60	100	4	A
20INMCA403	Java Programming	3	1	-	40	60	100	4	B
20INMCA405	Advanced Web programming	3	1	-	40	60	100	4	C
20INMCA407	Advanced Software Engineering	3	1	-	40	60	100	4	D
20INMCA409	Distributed Computing	3	1	-	40	60	100	4	E
20INMCA431	Java Programming - Lab		1	3	100		100	1	S
20INMCA433	Advanced Web programming Lab		1	3	100		100	1	T
20INMCANC1	Entrepreneurship & Innovations in Technology			1				0	
		<b>15</b>	<b>7</b>	<b>7</b>	<b>400</b>	<b>300</b>	<b>700</b>	<b>22</b>	

### INT MCA SEMESTER VIII

Course No	Course	Hours/week			IA Marks	ESE Marks	Total	Credits	Exam Slot
		L	T	P					
20INMCA402	Advanced Database Management Systems	3	1	-	40	60	100	4	A
20INMCA404	Advanced Computer Networks	3	1	-	40	60	100	4	B
20INMCA406	Research Methodology	3	1	-	40	60	100	4	C
20INMCA4--	Elective 1	3	1	-	40	60	100	4	D
20INMCA4--	Elective 2	3	1	-	40	60	100	4	E
20INMCA432	Advanced DBMS Lab		1	3	100		100	1	S
20INMCA434	Networking & System Administration Lab		1	3	100		100	1	T
20INMCANC2	Industrial Readiness Training			1				0	
		<b>15</b>	<b>7</b>	<b>7</b>	<b>400</b>	<b>300</b>	<b>700</b>	<b>22</b>	

### INT MCA SEMESTER IX

Course No	Course	Hours/week			IA Marks	ESE Marks	Total	Credits	Exam Slot
		L	T	P					
20INMCA501	Data Science & Machine Learning	3	1	-	40	60	100	4	A
20INMCA503	Mobile Computing	3	1	-	40	60	100	4	B
20INMCA5--	Elective 3	3	1	-	40	60	100	4	C
20INMCA5--	Elective 4	3	1	-	40	60	100	4	D
20INMCA509	Mini Project 2			4	100		100	2	R
20INMCA531	Data Science Lab		1	3	100		100	1	S
20INMCA533	Mobile Application Development Lab		1	3	100		100	1	T
20INMCANC3	Domain Expertise Workshops			1				0	
		<b>12</b>	<b>6</b>	<b>11</b>	<b>460</b>	<b>240</b>	<b>700</b>	<b>20</b>	

### INT MCA SEMESTER X

Course No	Course	Hours/week			IA Marks	ESE Marks	Total	Credits	Exam Slot
		L	T	P					
20INMCA502	Comprehensive Viva	-	-	-	-	100	100	6	
20INMCA504	Seminar	-	-	2	50	-	50	2	
20INMCA506	Main Project	-	-	27	70	30	100	12	
		-	-	<b>29</b>	<b>120</b>	<b>130</b>	<b>250</b>	<b>20</b>	
	<b>TOTAL</b>						<b>6550</b>	<b>214</b>	

<b>Elective I</b>	
20INMCA462	Applied Statistics
20INMCA464	Organizational Behaviour
20INMCA466	Functional Programming
20INMCA468	Virtualisation and Containers
20INMCA472	Advanced Operating Systems
<b>Elective II</b>	
20INMCA482	Business Management
20INMCA484	Embedded Systems
20INMCA486	Computer Graphics
20INMCA488	Artificial Intelligence
20INMCA492	IPR and Cyber Laws
<b>Elective III</b>	
20INMCA561	Operations Research
20INMCA563	Cyber Security & Cryptography
20INMCA565	Cloud Computing
20INMCA567	Cyber Forensics
20INMCA569	Compiler Design
<b>Elective IV</b>	
20INMCA581	Internet of Things
20INMCA583	Deep Learning
20INMCA585	Digital Image Processing
20INMCA587	Bioinformatics
20INMCA589	Social Network Analysis