

Indus University
Indus Institute of Information and Communication Technology
Department of Computer Science
Dual Degree BCA + MCA

INDUS UNIVERSITY, AHMEDABAD												
Dual Degree BCA + MCA SEMESTER-I SYLLABUS W.E.F. YEAR 2019-20												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Examination Scheme				Total Marks
								Theory		Practical		
				CIE	End Sem	CIE	End Sem					
Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.					
1	IMCA0106	Logic Building Techniques	4	3	0	2	5	60	40	60	40	200
2	IMCA0107	Fundamentals of Database Management System	6	4	0	4	8	60	40	60	40	200
3	IMCA0108	Computer Organization	4	4	0	0	4	60	40	0	0	100
4	IMCA0109	Matrix Algebra and Graph Theory	4	4	0	0	4	60	40	0	0	100
5	IMCA0110	Communication & Presentation Skills	3	3	0	0	3	60	40	0	0	100
6		Open Elective - I	2	2	0	0	2	60	40	0	0	100
		TOTAL	23	20	0	6	26	360	240	120	80	800

INDUS UNIVERSITY, AHMEDABAD												
Dual Degree BCA + MCA SEMESTER-II SYLLABUS W.E.F. YEAR 2019-20												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Examination Scheme				Total Marks
								Theory		Practical		
				CIE	End Sem	CIE	End Sem					
				Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.	
1	IMCA0206	Principles of Programming	6	4	0	4	8	60	40	60	40	200
2	IMCA0207	Advanced Database Management System	6	4	0	4	8	60	40	60	40	200
3	IMCA0208	Discrete Mathematics	4	4	0	0	4	60	40	0	0	100
4	IMCA0209	Microprocessor	4	4	0	0	4	60	40	0	0	100
5	IMCA0210	Personal Computer Software	2	0	0	4	4	0	0	60	40	100
		TOTAL	22	16	0	12	28	240	160	180	120	700

INDUS UNIVERSITY, AHMEDABAD												
Dual Degree BCA + MCA SEMESTER-III SYLLABUS W.E.F. YEAR 2019-20												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Examination Scheme				Total Marks
								Theory		Practical		
				CIE	End Sem	CIE	End Sem					
Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.					
1	IMCA0306	Introduction to Web Technology	6	4	0	4	8	60	40	60	40	200
2	IMCA0307	Object Oriented Programming using C++	6	4	0	4	8	60	40	60	40	200
3	IMCA0308	Operating System	4	4	0	0	4	60	40	0	0	100
4	IMCA0309	E-Commerce & M-Commerce	4	4	0	0	4	60	40	0	0	100
5		Open Elective - II	3	3	0	0	3	60	40	0	0	100
		TOTAL	23	19	0	8	27	300	200	120	80	700

INDUS UNIVERSITY, AHMEDABAD												
Dual Degree BCA + MCA SEMESTER-IV SYLLABUS W.E.F. YEAR 2019-20												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Examination Scheme				Total Marks
								Theory		Practical		
				CIE	End Sem	CIE	End Sem					
Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.					
1	IMCA0406	Advanced Object Oriented Programming	6	4	0	4	8	60	40	60	40	200
2	IMCA0401	Data Structure	6	4	0	4	8	60	40	60	40	200
3	IMCA0407	Fundamentals of Networking	4	4	0	0	4	60	40	0	0	100
4	IMCA0408	Structured & Object Oriented Analysis & Design Methodology	4	4	0	0	4	60	40	0	0	100
5	IMCA0409	Operations Research	4	4	0	0	4	60	40	0	0	100
		TOTAL	24	20	0	8	28	300	200	120	80	700

INDUS UNIVERSITY, AHMEDABAD												
Dual Degree BCA + MCA SEMESTER-V SYLLABUS W.E.F. YEAR 2019-20												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Examination Scheme				Total Marks
								Theory		Practical		
				CIE	End Sem	CIE	End Sem					
Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.					
1	IMCA0506	Open Source Programming using PHP	6	4	0	4	8	60	40	60	40	200
2	IMCA0507	Shell Scripting and Programming	6	4	0	4	8	60	40	60	40	200
3	IMCA0508	Software Engineering	6	4	0	4	8	60	40	60	40	200
4	IMCA0505	Software Development Project – I	4	0	0	8	8	0	0	60	40	100
5		Elective-I	3	3	0	0	3	60	40	0	0	100
		TOTAL	25	15	0	20	35	240	160	240	160	800

INDUS UNIVERSITY, AHMEDABAD												
Dual Degree BCA + MCA SEMESTER-VI SYLLABUS W.E.F. YEAR 2019-20												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Examination Scheme				Total Marks
								Theory		Practical		
				CIE	End Sem	CIE	End Sem					
Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.					
1	IMCA0601	.NET Programming using C#	6	4	0	4	8	60	40	60	40	200
2	IMCA0605	Android Application Development	6	4	0	4	8	60	40	60	40	200
3	IMCA0607	Software Development Project - II	8	0	0	0	0	0	0	120	80	200
4		Elective-II	6	4	0	4	8	60	40	60	40	200
		TOTAL	26	12	0	12	24	180	120	300	200	800

INDUS UNIVERSITY, AHMEDABAD												
Dual Degree BCA + MCA SEMESTER-VII SYLLABUS W.E.F. YEAR 2019-20												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Examination Scheme				Total Marks
								Theory		Practical		
				CIE	End Sem	CIE	End Sem					
Th.	Tut .	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.					
1	IMCA0708	Introduction to Python	6	4	0	4	8	60	40	60	40	200
2	IMCA0709	PHP with Framework (CMS / E-commerce)	6	4	0	4	8	60	40	60	40	200
3	IMCA0710	Object Oriented Analysis & Design	4	4	0	0	4	60	40	0	0	100
4	IMCA0711	Software Testing and Quality Assurance	4	4	0	0	4	60	40	0	0	100
5	IMCA0712	MOOC Certification	2	0	0	4	4	0	0	60	40	100
6	IMCA0713	Case Study on STQA	2	0	0	4	4	0	0	60	40	100
		TOTAL	24	16	0	16	32	240	160	240	160	800

INDUS UNIVERSITY, AHMEDABAD												
Dual Degree BCA + MCA SEMESTER-VIII SYLLABUS W.E.F. YEAR 2019-20												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Examination Scheme				Total Marks
								Theory		Practical		
				CIE	End Sem	CIE	End Sem					
Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.					
1	IMCA0807	Object Oriented Technology	6	4	0	4	8	60	40	60	40	200
2	IMCA0808	Big Data & Data Analytics	6	4	0	4	8	60	40	60	40	200
3	IMCA0809	Mobile Application Development with Android	6	4	0	0	4	60	40	0	0	100
4	IMCA0810	Advance Networking	4	4	0	4	8	60	40	60	40	200
5	IMCA0811	Case Study on Advanced Networking	2	0	0	4	4	0	0	60	40	100
		TOTAL	24	16	0	16	32	240	160	240	160	800

INDUS UNIVERSITY, AHMEDABAD												
Dual Degree BCA + MCA SEMESTER-IX SYLLABUS W.E.F. YEAR 2019-20												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Examination Scheme				Total Marks
								Theory		Practical		
				CIE	End Sem	CIE	End Sem					
Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.					
1	IMCA0906	Cryptography & Network and Security	06	4	0	4	8	60	40	60	40	200
2	IMCA0907	Web Development Tools	06	4	0	4	8	60	40	60	40	200
3	IMCA0908	Virtualization & Applications of Cloud	04	4	0	0	4	60	40	0	0	100
4		Elective	04	4	0	0	4	60	40	0	0	100
5	IMCA0910	Mini Project	04	0	0	8	8	0	0	60	40	100
		TOTAL	24	16	0	16	32	240	160	180	120	700

INDUS UNIVERSITY, AHMEDABAD												
Dual Degree BCA + MCA SEMESTER-X SYLLABUS W.E.F. YEAR 2019-20												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Examination Scheme				Total Marks
								Theory		Practical		
				CIE	End Sem	CIE	End Sem					
Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.					
1	IMCA1001	Software Development Project	24	0	0	0	0	0	0	700	100	600
		TOTAL	24	0	0	0	0	0	0	700	100	600