Indus University

Indus Institute of Information and Communication Technology

Department of Computer Science

Bachelor of Science - Data Science

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	BSDS0101	Logic Building and Problem Solving	4	3	0	2	5	60	40	60	40	200
2	BSDS0102	Computer Organization	4	4	0	0	4	60	40	0	0	100
3	BSDS0103	Communication Skill in English	3	3	0	0	3	60	40	0	0	100
4	BSDS0104	Probability & Statistics	5	4	2	0	6	60	40	0	0	100
5	BSDS0105	Introduction to Programming	2	0	0	4	4	0	0	60	40	100
6	BSDS0106	Introduction to Data Analysis Using Spreadsheet	2	0	0	4	4	0	0	60	40	100
7		Open Elective-I	2	2	0	2	2	60	40	0	0	100
		TOTAL	**22**	**16**	**2**	**12**	**28**	**300**	**200**	**180**	**120**	**800**

INDUS UNIVERSITY, AHMEDABAD / **B.Sc. IN DATA SCIENCE SEMESTER-I SYLLABUS W.E.F. YEAR 2020-21**

		INDUS UNIVERSITY, AHMEDABAD											
		B.Sc. IN DATA SCIENCE SEMESTER-II SYLLABUS W.E.F. YEAR 2020-21											
								Examination Scheme					
				Teaching scheme (per week)				**Theory**		**Practical**		**Total Marks**	
								CIE	End Sem	CIE	End Sem		
Sr. No.	**Sub. Code**	**Name of the subject**	**CREDIT**	Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.		
1	BSDS0201	Fundamental of DBMS	5	3	0	4	7	60	40	60	40	200	
2	BSDS0202	Introduction to Python Programming	4	3	0	2	5	60	40	60	40	200	
3	BSDS0203	Basic of Data Science	3	3	0	0	3	60	40	0	0	100	
4	BSDS0204	Linear Algebra and Calculus	4	4	0	0	4	60	40	0	0	100	
5	BSDS0205	Environmental Sciences	2	2	0	0	2	60	40	0	0	100	
6	BSDS0206	Data Structure	4	3	0	2	5	60	40	60	40	200	
		TOTAL	**22**	**18**	**0**	**08**	**26**	**360**	**240**	**180**	**120**	**900**	

		INDUS UNIVERSITY, AHMEDABAD											
		B.Sc. IN DATA SCIENCE SEMESTER-III SYLLABUS W.E.F. YEAR 2021-22											
								Examination Scheme					
				Teaching scheme (per week)				**Theory**		**Practical**		**Total Marks**	
								CIE	End Sem	CIE	End Sem		
Sr. No.	**Sub. Code**	**Name of the subject**	**CREDIT**	Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.		
1	BSDS0301	Object Oriented Programming	6	4	0	4	8	60	40	60	40	200	
2	BSDS0302	System Programming and Operating Systems	6	4	0	4	8	60	40	60	40	200	
3	BSDS0303	Computer Networks	4	4	0	0	4	60	40	0	0	100	
4	BSDS0304	Numerical Methods	4	4	0	0	4	60	40	0	0	100	
5		Open Elective - II	2	2	0	0	2	60	40	0	0	100	
		TOTAL	**22**	**18**	**0**	**08**	**26**	**300**	**200**	**120**	**80**	**700**	

INDUS UNIVERSITY, AHMEDABAD												
B.Sc. IN DATA SCIENCE SEMESTER-IV SYLLABUS W.E.F. YEAR 2021-22												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Theory		Practical		Total Marks
								CIE	End Sem	CIE	End Sem	
				Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.	
1	BSDS0401	Data Analysis using Python	6	4	0	4	8	60	40	60	40	200
2	BSDS0402	Fundamentals of R Programming	6	4	0	4	8	60	40	60	40	200
3	BSDS0403	Data Warehousing and Data Mining	4	4	0	0	4	60	40	0	0	100
4	BSDS0404	Artificial Intelligence	4	4	0	0	4	60	40	0	0	100
5	BSDS0405	Applied Mathematics	4	3	2	0	5	60	40	0	0	100
		TOTAL	24	19	2	8	29	300	200	120	80	700

INDUS UNIVERSITY, AHMEDABAD												
B.Sc. IN DATA SCIENCE SEMESTER-V SYLLABUS W.E.F. YEAR 2021-22												
Sr. No.	Sub. Code	Name of the subject	CREDIT	Teaching scheme (per week)				Theory		Practical		Total Marks
								CIE	End Sem	CIE	End Sem	
				Th.	Tut.	Pr.	Total (hr.)	Th.	Th.	Pr.	Pr.	
1	BSDS0501	Big Data Analytics	6	4	0	4	8	60	40	60	40	200
2	BSDS0502	Machine Learning	6	4	0	4	8	60	40	60	40	200
3	BSDS0503	Data Visualization Using Tableau	6	4	0	4	8	60	40	60	40	200
4	BSDS0504	Cloud Computing	4	4	0	0	4	60	40	0	0	100
		TOTAL	22	16	0	12	28	240	160	180	120	700

		INDUS UNIVERSITY, AHMEDABAD										
		B.Sc. IN DATA SCIENCE SEMESTER-VI SYLLABUS W.E.F. YEAR 2021-22										
							Examination Scheme					
				Teaching scheme (per week)				**Theory**		**Practical**		**Total Marks**
Sr. No.	**Sub. Code**	**Name of the subject**	**CREDIT**					**CIE**	**End Sem**	**CIE**	**End Sem**	
				Th.	**Tut.**	**Pr.**	**Total (hr.)**	**Th.**	**Th.**	**Pr.**	**Pr.**	
1	BSDS0601	Deep Learning	6	4	0	4	8	60	40	60	40	200
2	BSDS0602	Predictive Modeling	6	4	0	4	8	60	40	60	40	200
3		Elective-1	4	4	0	0	4	60	40	0	0	100
4	BSDS0604	Major Project	8	0	0	16	16	0	0	0	200	200
		TOTAL	**24**	**12**	**0**	**24**	**36**	**180**	**120**	**120**	**280**	**700**