

**B.Sc. DEGREE IN DATA SCIENCE WITH A MINOR DEGREE IN BLOCKCHAIN
TECHNOLOGY**

Curriculum

SEMESTER 1

S.No	Course Code	Course Title	Contact Hours	L	T	P	C	M
THEORY								
1.	UEASC01	Communicative English	2	2	0	0	2	100
2.	UEASC02	Linear Algebra & Calculus	4	3	1	0	4	100
3.	UEASC03	Computer Architecture	3	3	0	0	3	100
4.	UEASC04	Problem Solving and Programming using C	3	3	0	0	3	100
5.	UEASC05	Digital System Design	4	3	1	0	4	100
6.	UEASC06	Ethics and Human Values	2	2	0	0	2	100
PRACTICAL								
7.	UEASC1PA	Problem Solving using C Laboratory	4	0	0	4	2	100
8.	UEASC1PB	Communicative skills and Language Laboratory	2	0	0	4	1	100
TOTAL			24	16	2	8	21	

SEMESTER 2

S.No	Course Code	Course Title	Contact Hours	L	T	P	C	M
THEORY								
1.	UEASC21	Principles of Data Science	3	3	0	0	3	100
2.	UEASC22	Fundamentals of Statistics	4	3	1	0	4	100
3.	UEASC23	Operating Systems	3	3	0	0	3	100
4.	UEASC24	Database Management System	3	3	0	0	3	100
5.	UEASC25	Computer Networks	3	3	0	0	3	100
PRACTICAL								
6.	UEASC2PA	Statistics and Data Science Lab	4	0	0	4	2	100
7.	UEASC2PB	Database Management System (DBMS) Laboratory	4	0	0	4	2	100
8.	UEASC2PC	Operating Systems and Networks Laboratory	4	0	0	4	2	100
TOTAL			28	15	1	12	22	

SEMESTER 3

S.No	Course Code	Course Title	Contact Hours	L	T	P	C	M
THEORY								
1.	UEASC31	Probability Theory	3	3	0	0	3	100
2.	UEASC32	Cloud Computing	3	3	0	0	3	100
3.	UEASC33	Advanced Database Technologies	3	3	0	0	3	100
4.	UEASC34	Web Programming	3	3	0	0	3	100
5.	UEASC35	Data Mining	3	3	0	0	3	100
6.	UEASC36	Operation Research	3	3	0	0	3	100
PRACTICAL								
7.	UEASC3PA	Data Mining Lab	4	0	0	4	2	100
8.	UEASC3PB	Cloud Computing and Web Programming Lab	4	0	0	4	2	100
TOTAL			26	18	0	8	22	

SEMESTER 4

S.No	Course Code	Course Title	Contact Hours	L	T	P	C	M
THEORY								
1.	UEASC41	Data Handling and	3	3	0	0	3	100

		Visualization						
2.	UEASC42	Machine Learning	3	3	0	0	3	100
3.		PEC1	3	3	0	0	3	100
4.	UEASC44	Optimization Techniques	3	3	0	0	3	100
5.	UEASC45	Big Data Analytics	3	3	0	0	3	100
PRACTICAL								
6	UEASC4PA	Machine Learning Lab	4	0	0	4	2	100
7.	UEASC4PB	Big Data Analytics Lab	4	0	0	4	2	100
8.	UEASC4PC	Data Handling and Visualization lab	4	0	0	4	2	100
TOTAL			27	15	0	12	21	

SEMESTER 5

S.No	Course Code	Course Title	Contact Hours	L	T	P	C	M
THEORY								
1.	UEASC51	Deep Learning	3	3	0	0	3	100
2.	UEASC52	Natural Language Processing	3	3	0	0	3	100
3.		PEC 2	3	3	0	0	3	100
4.		PEC 3	3	3	0	0	3	100
PRACTICAL								
5.	UEASC5PA	Deep Learning Lab	4	0	0	4	2	100

6	UEASC5PB	Natural Language processing Lab	4	0	0	4	2	100
7.	UEASC5PC	Phase I Project	6	0	0	6	6	100
TOTAL			26	12	0	14	22	

SEMESTER 6

S.No	Course Code	Course Title	Contact Hours	L	T	P	C	M
THEORY/PRACTICAL								
1.	UEASC61	Stream Processing Analytics	3	3	0	0	3	100
2.	UEASC62	PEC 4	3	3	0	0	3	100
3.	UEASC63	PEC 5	3	3	0	0	3	100
4.	UEASC6P	Phase II project	12	0	0	12	12	100
TOTAL			21	9	0	12	21	

Total Credits: 129

Minor degree: BLOCKCHAIN TECHNOLOGY

Sl.no	Course Name	Credits
1	Network Security and Cryptography	3
2	Distributed Systems	3
3	Introduction to Blockchain Technology	3
4	Cyber Security	3

5	Mobile Computing	3
6	Mini Project	3

Total Credits: 18