

D. Y. PATIL DEEMED TO BE UNIVERSITY
SCHOOL OF ENGINEERING AND MANAGEMENT
Teaching and Evaluation Scheme from Year 2024-25 (as per NEP-2020)
B. Tech. Data Science Engineering (SEMESTER- III)

Sr. No.	Course Code	Course Type	Course Name	Teaching Scheme				Theory			Practical		Total Marks
				Credits	Contact Hrs			ISE	MSE	ESE	INT	OE/ PoE	
					L	P	T						
1	24DSEU3P01	PCC	Probability & Statistics	3	3	-	-	20	30	50	-	-	100
2	24DSEU3P02	PCC	Data Structures	3	3	-	-	20	30	50	-	-	100
3	24DSEU3P03	PCC	Data Structures Laboratory	1	-	2	-	-	-	-	25	25	50
4	24DSEU3P04	PCC	Programming Lab - I	3	2	2	-	-	-	-	50	50	100
5	24DSEU3M05	MDM-I	Fundamentals of Data Science	2	2	-	-	-	-	50	-	-	50
6	24DSEU3O06	OEC-I \$	Data Science for Engineers	3	3	-	-	20	30	50	-	-	100
7	24DSEU3O07	OEC-I \$	Data Science for Engineers Lab	1	-	2	-	-	-	-	25	-	25
8	24DSEU3F08	CEP/FP	Domain Specific Mini Project	2	-	4	-	-	-	-	25	25	50
9	24DSEU3V09	VEC	Environmental Studies-I	2	2	-	-	-	-	50	-	-	50
10	24DSEU3H10	HSSM	Economics and Management for IT	2	2	-	-	-	-	50	-	-	50
11	24DSEU3D11	AC	Liberal Learning	-	2*	-	-	-	-	-	50*	-	
12	24DSEU3D12	AC	Finishing School Training - III	-	2*	-	-	-	-	-	50*	-	
			Total	22	17	10	0						675

Note:

\$ - Open & Distance Learning

* - Values are not included in total marks

Min. Marks for Passing: 40% of total marks of individual course



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SCHOOL OF ENGINEERING AND MANAGEMENT
Teaching and Evaluation Scheme from Year 2024-25 (as per NEP-2020)
B. Tech. Data Science Engineering (SEMESTER- IV)

Sr. No.	Course Code	Course Type	Course Name	Teaching Scheme				Theory			Practical		Total Marks
				Credits	Contact Hrs			ISE	MSE	ESE	INT	OE/ PoE	
					L	P	T						
1	24DSEU4P01	PCC	Discrete Mathematical Structure	3	3	-	-	20	30	50	-	-	100
2	24DSEU4P02	PCC	Design and Analysis of Algorithm	3	3	-	-	20	30	50	-	-	100
3	24DSEU4P03	PCC	Programming Lab - II	4	2	4	-	-	-	-	50	50	100
4	24DSEU4M04	MDM-II	Data Analysis and Visualization	2	2	-	-	-	-	50	-	-	50
5	24DSEU4O05	OEC-II	Introduction to Data Engineering	2	2	-	-	-	-	50	-	-	50
6	24DSEU4A06	AEC	Soft Skill	2	-	4	-	-	-	-	25	25	50
7	24DSEU4N07	VSEC	Web Application Development - I	2	1	2	-	-	-	-	25	25	50
8	24DSEU4V08	VEC	Environmental Studies-II	2	2	-	-	-	-	50	-	-	50
9	24DSEU4H09	HSSM	Leveraging Technologies for Project Management and Startup Ventures	2	1	2	-	-	-	-	50	-	50
10	24DSEU4D10	AC	Liberal Learning	-	2*	-	-	-	-	-	50*	-	
11	24DSEU4D11	AC	Finishing School Training - IV	-	2*	-	-	-	-	-	50*	-	
Total				22	16	12	0						600

HONORS

Sr. No.	Course Code	Course Type	Course Name	Teaching Scheme				Theory			Practical		Total Marks
				Credits	L	P	T	ISE	MSE	ESE	INT	OE/	
1	23DSEU4Z01	Honors	Fundamentals of Cyber Security	3	3	-	-	20	30	50	-	-	100
2	23DSEU4Z02	Honors	Fundamentals of Cyber Security Lab	1	-	2	-	-	-	-	25	-	25

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SCHOOL OF ENGINEERING AND MANAGEMENT
Teaching and Evaluation Scheme from Year 2024-25 (as per NEP-2020)
B. Tech. Data Science Engineering (SEMESTER- V)

Sr. No.	Course Code	Course Type	Course Name	Teaching Scheme				Theory			Practical		Total Marks
				Credits	Contact Hrs			ISE	MSE	ESE	INT	OE/ PoE	
					L	P	T						
1	24DSEU5P01	PCC	Operating Systems	3	3	-	-	20	30	50	-	-	100
2	24DSEU5P02	PCC	Computer Networks	2	1	2	-	-	-	-	25	25	50
3	24DSEU5P03	PCC	Database Engineering	3	3	-	-	20	30	50	-	-	100
4	24DSEU5P04	PCC	Database Engineering Lab	1	-	2	-	-	-	-	25	25	50
5	24DSEU5P05	PCC	Programming Lab - III	3	2	2	-	-	-	-	50	50	100
6	24DSEU5M06	MDM-III	Data Mining and Warehousing	3	3	-	-	20	30	50	-	-	100
7	24DSEU5M07	MDM-III	Data Mining and Warehousing Laboratory	1	-	2	-	-	-	-	25	-	25
8	24DSEU5E08	PEC-I	Information Security	3	3	-	-	20	30	50	-	-	100
9	24DSEU5E09		Theory of Computation										
10	24DSEU5E10		IT Infrastructure										
11	24DSEU5E11	PEC-I	Information Security Lab	1	-	2	-	-	-	-	25	-	25
12	24DSEU5E12		Theory of Computation Lab										
13	24DSEU5E13		IT Infrastructure Lab										
14	24DSEU5O14	OEC-III	Business Analysis using Python	2	2	-	-	-	-	50	-	-	50
15	24DSEU5D15	AC	Liberal Learning	-	2*	-	-	-	-	-	50*	-	
16	24DSEU5D16	AC	Finishing School Training - V	-	2*	-	-	-	-	-	50*	-	
			Total	22	18	10							700

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HONORS

Sr. No.	Course Code	Course Type	Course Name	Teaching Scheme				Theory			Practical		Total Marks
				Credits	L	P	T	ISE	MSE	ESE	INT	OE/	
1	24CSEU5Z01	Honors	Data Security Systems	3	3	-	-	20	30	50	-	-	100
2	24CSEU5Z02	Honors	Data Security Systems Lab	1	-	2	-	-	-	-	25	-	25



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Teaching and Evaluation Scheme from Year 2024-25 (as per NEP-2020)
B. Tech. Data Science Engineering (SEMESTER- VI)

Sr. No.	Course Code	Course Type	Course Name	Teaching Scheme				Theory			Practical		Total Marks
				Credits	Contact Hrs			ISE	MSE	ESE	INT	OE/ PoE	
					L	P	T						
1	24DSEU6P01	PCC	Data Engineering	3	3	-	-	20	30	50	-	-	100
2	24DSEU6P02	PCC	Machine Learning	3	3	-	-	20	30	50	-	-	100
3	24DSEU6P03	PCC	Data Engineering Lab	1	-	2	-	-	-	-	25	25	50
4	24DSEU6P04	PCC	Machine Learning Lab	1	-	2	-	-	-	-	25	-	25
5	24DSEU6P05	PCC	Data Analytics Tools	2	1	2	-	-	-	-	25	25	50
6	24DSEU6M06	MDM-IV	Fundamentals of Business Intelligence	2	2	-	-	-	-	50	-	-	50
7	24DSEU6E07	PEC-II	Cyber Security and Digital Forensics	3	3	-	-	20	30	50	-	-	100
8	24DSEU6E08		Software Architecture										
9	24DSEU6E09		Internet of Things										
10	24DSEU6E10	PEC-II	Cyber Security and Forensics Tutorial	1	-	-	1	-	-	-	25	-	25
11	24DSEU6E11		Software Architecture Tutorial										
12	24DSEU6E12		Internet of Things Tutorial										
13	24DSEU6E13	PEC-III	Blockchain Technology	3	3	-	-	20	30	50	-	-	100
14	24DSEU6E14		Cloud Computing										
15	24DSEU6E15		High Performance Computing										
16	24DSEU6E16	PEC-III	Blockchain Technology Laboratory	1	-	2	-	-	-	-	25	-	25
17	24DSEU6E17		Cloud Computing Laboratory										
18	24DSEU6E18		High Performance Computing Laboratory										
19	24DSEU6N19	VSEC	Web Application Development - II	2	1	2	-	-	-	-	25	25	50
20	24DSEU6D20	AC	Liberal Learning	-	2*	-	-	-	-	-	50*	-	
21	24DSEU6D21	AC	Finishing School Training - VI	-	2*	-	-	-	-	-	50*	-	
Total				22	16	10	1						675

Note:

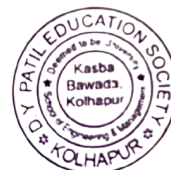
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Min. Marks for Passing: 40% of total marks of individual course

HONORS

Sr. No.	Course Code	Course Type	Course Name	Teaching Scheme				Theory			Practical		Total Marks
				Credits	L	P	T	ISE	MSE	ESE	INT	OE/	
1	24DSEU6Z01	Honors	Ethical Hacking	3	3	-	-	20	30	50	-	-	100
2	24DSEU6Z02	Honors	Ethical Hacking Lab	1	-	2	-	-	-	-	25	-	25



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Teaching and Evaluation Scheme from Year 2023-24 (as per NEP-2020)
B. Tech. Data Science Engineering (SEMESTER- VII)

Sr. No.	Course Code	Course Type	Course Name	Teaching Scheme				Theory			Practical		Total Marks
				Credits	Contact Hrs			ISE	MSE	ESE	INT	OE/ PoE	
					L	P	T						
1	23DSEU7P01	PCC	Deep Learning	3	3	-	-	20	30	50	-	-	100
2	23DSEU7P02	PCC	Deep Learning Lab	1	-	2	-	-	-	-	25	25	50
3	23DSEU7P03	PCC	Data Visualization	2	1	2	-	-	-	-	25	25	50
4	23DSEU7M04	MDM-V	Big Data Analytics	2	2	-	-	-	-	50	-	-	50
5	23DSEU7E05	PEC-IV	Business Intelligence	3	3	-	-	20	30	50	-	-	100
6	23DSEU7E06		Big Data Analytics										
7	23DSEU7E07		Social Network Analysis										
8	23DSEU7E08	PEC-V	Image Processing	3	3	-	-	20	30	50	-	-	100
9	23DSEU7E09		Natural Language Processing										
10	23DSEU7E10		Soft Computing										
11	23DSEU7R11	RM\$	Research Methodology	4	4	-	-	20	30	50	-	-	100
12	23DSEU7J12	PR	Project	4	-	8	-	-	-	-	75	75	150
13	23DSEU7D13	AC	Liberal Learning	-	2*	-	-	-	-	-	50*	-	
Total				22	14	12							700

Note:

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Min. Marks for Passing: 40% of total marks of individual course

HONORS

Sr. No.	Course Code	Course Type	Course Name	Teaching Scheme				Theory			Practical		Total Marks
				Credits	L	P	T	ISE	MSE	ESE	INT	OE/	
1	23DSEU7Z01	Honors	Cyber-crime and Laws	3	3	-	-	20	30	50	-	-	100
2	23DSEU7Z02	Honors	Cyber-crime and Laws Lab	1	-	2	-	-	-	-	25	-	25



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Teaching and Evaluation Scheme from Year 2023-24 (as per NEP-2020)
B. Tech. Data Science Engineering (SEMESTER- VIII)

Sr. No.	Course Code	Course Type	Course Name	Teaching Scheme				Theory			Practical		Total Marks
				Credits	Contact Hrs			ISE	MSE	ESE	INT	OE/ PoE	
					L	P	T						
1	23DSEU8P01	PCC \$	Agentic AI	3	3	-	-	20	30	50	-	-	100
2	23DSEU8P02	PCC \$	Agentic AI Lab	1	-	2	-	-	-	-	25	-	25
3	23DSEU8M03	MDM-VI \$	Capstone Project	2	-	4	-	-	-	-	25	25	50
4	23DSEU8E04	PEC-VI \$	Computer Vision	2	2	-	-	-	-	50	-	-	50
5	23DSEU8E05		Human Computer Interaction										
6	23DSEU8E06		Augmented and Virtual Reality										
7	23DSEU8I07	INT	Internship	12	-	24	-	-	-	-	200	200	400
			Total	20	5	30	-						625

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HONORS

Sr. No.	Course Code	Course Type	Course Name	Teaching Scheme				Theory			Practical		Total Marks
				Credits	L	P	T	ISE	MSE	ESE	INT	OE/	
1	23DSEU8Z01	Honors	Capstone Project Cyber Security\$	2	-	4	-	-	-	-	50	-	50



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