



SCHOOL OF ARTS AND SCIENCE
DEPARTMENT OF COMPUTATIONAL STUDIES
B.Sc. Data Science and Analytics

I SEMESTER

Code No.	Title of Course	Periods			Course Category	Credits	Max. Marks		
		L	P	T			CAM	ESM	Total
A23DAT101D	C Programming	4	0	0	MJD	4	25	75	100
A23DAT102D	Data Structures and Algorithms	4	0	0	MJD	4	25	75	100
A23MAD104D	Applied Probability and Statistics	3	1	0	MID	4	25	75	100
A23ENSA02C	Soft Skills	3	0	0	MLD	3	25	75	100
A23TAT101C/ A23FRT101C	Tamil I /French I	3	0	0	AEC	2	25	75	100
A23DAL101D	C Programming Lab	0	4	0	SEC	3	50	50	100
A23DAL102D	Data Structures and Algorithms Lab	0	4	0	SEC	3	50	50	100
A23AET101C	Public Administration	2	0	0	VAC	2	100	0	100
						25	325	475	800

II SEMESTER

Code No.	Title of Course	Periods			Course Category	Credits	Max. Marks		
		L	P	T			CAM	ESM	Total
A23DAT203D	C++ Programming	4	0	0	MJD	4	25	75	100
A23DAT204D	Introduction to Big Data	4	0	0	MJD	4	25	75	100
A23MAD207D	Statistics for Data Science	3	1	0	MID	4	25	75	100
A23ENSA01C	Communication Skill	3	0	0	MLD	3	25	75	100
A23TAT202C/ A23FRT202C	Tamil II /French II	3	0	0	AEC	2	25	75	100
A23DAL203D	C++ Programming Lab	0	4	0	SEC	3	50	50	100
A23DAL204D	Big Data Analytics Lab	0	4	0	SEC	3	50	50	100
A23VAC201C	Environmental Science	2	0	0	VAC	2	100	0	100
A23VAC202C	Understanding India	2	0	0	VAC	2	100	0	100

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	27	425	475	900
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III SEMESTER									
Code No.	Title of Course	Periods			Course Category	Credits	Max. Marks		
		L	P	T			CAM	ESM	Total
A23DAT306D	Python for Data Science	4	0	0	MJD	4	25	75	100
A20DAT305D	Digital Logic Fundamentals	4	0	0	MJD	4	25	75	100
A23MAD309D	Linear Algebra	3	1	0	MID	4	25	75	100
A23DAE3XXX	Multi-Disciplinary - I	0	0	4	MLD	3	25	75	100
A23DAL306D	Python for Data Science Lab	0	4	0	SEC	3	50	50	100
A23DAT307D	Interactive Data Visualization	4	0	0	SEC	3	50	50	100
A23VAC301C	Health and wellness, Yoga Education, Sports and Fitness	2	0	0	VAC	2	100	0	100
						23	300	400	700

IV SEMESTER									
Code No.	Title of Course	Periods			Course Category	Credits	Max. Marks		
		L	P	T			CAM	ESM	Total
A23DAT408D	Problem Solving using JAVA	4	0	0	MJD	4	25	75	100
A23DAT409D	Computer System Architecture	4	0	0	MJD	4	25	75	100
A23DAT410D	Design and Analysis of Algorithm	3	1	0	MJD	4	25	75	100
A23DAT411D	Applied Regression Analysis	0	0	4	MID	4	25	75	100
A23ENS404C	General English - II	3	0	0	AEC	2	25	75	100
A23DAL408D	Programming in Java Lab	0	4	0	SEC	3	50	50	100
A23DAL409D	Digital And Technological Solutions	0	0	4	VAC	2	100	0	100
A23VAC401C	Community Engagement and Service	2	0	0	VAC	2	100	0	100
						25	375	425	800

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V SEMESTER

Code No.	Title of Course	Periods			Course Category	Credits	Max. Marks		
		L	P	T			CAM	ESM	Total
A23DAT512D	Operating Systems	4	0	0	MJD	4	25	75	100
A23DAT513D	Database Management Systems	4	0	0	MJD	4	25	75	100
A23DAT514D	Management Strategies and Concepts	3	1	0	MJD	4	25	75	100
A23DAE515D	Artificial Intelligence	0	0	4	MID	4	25	75	100
A23DAL513D	Data Base Management Systems Lab	0	3	0	SEC	3	25	75	100
A23DAN516D	Summer Internship	0	4	0	SKD	4	0	0	0
						23	250	23	600

VI SEMESTER

Code No.	Title of Course	Periods			Course Category	Credits	Max. Marks		
		L	P	T			CAM	ESM	Total
A23DAT617D	Computer Networks	4	0	0	MJD	4	25	75	100
A23DAT618D	Software Engineering Theory and Practice	4	0	0	MJD	4	25	75	100
A23DAT619D	System Modeling and Simulations	3	1	0	MJD	4	25	75	100
A23DAT620D	Web Engineering	0	0	4	MJD	4	25	75	100
A23DAE621D / A23DAE622D	Massive Data Management / Hadoop Eco-System	3	0	0	MID	4	25	75	100
						25	200	20	500

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VII SEMESTER									
Code No.	Title of Course	Periods			Course Category	Credits	Max. Marks		
		L	P	T			CAM	ESM	Total
A23DAT722D	Software Testing and Quality Assurance	4	0	0	MJD	4	25	75	100
A23DAT723D	Distributed Systems	4	0	0	MJD	4	25	75	100
A23DAT724D	Wireless Communication Networks (5G)	3	1	0	MJD	4	25	75	100
A23DAE725D / A23DAE726D	Big Data Analytics / Predictive Analytics	0	0	4	MID	4	25	75	100
A23DAE727D / A23DAE728D	Data Mining / Text and Speech Analytics	3	0	0	MID	4	25	75	100
						25	200	375	500

VIII SEMESTER(Honors)									
Code No.	Title of Course	Periods			Course Category	Credits	Max. Marks		
		L	P	T			CAM	ESM	Total
A23DAT823D	Software Testing and Quality Assurance	4	0	0	MJD	4	25	75	100
A23DAT824D	Distributed Systems	4	0	0	MJD	4	25	75	100
A23DAT825D	Wireless Communication Networks (5G)	3	1	0	MJD	4	25	75	100
A23DAE826D / A23DAE827D	Big Data Analytics / Predictive Analytics	0	0	4	MID	4	25	75	100
A23DAE828D / A23DAE829D	Data Mining / Text and Speech Analytics	3	0	0	MID	4	25	75	100
						20	125	375	500

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VIII SEMESTER (Honors with Research)

Code No.	Title of Course	Periods				Course Category	Credits	Max. Marks		
		L	P	T	PW			CAM	ESM	Total
A23DAT830D / A23DAT831D	Machine Learning / Health Care Analytics	4	0	0	0	MJD	4	25	75	100
A23DAT832D / A23DAT833D	Business Analytics / Social Network Analytics	4	0	0	0	MJD	4	25	75	100
A23DAP834D	Research Project	0	3	0	9	MJD	12	50	50	100
							20	100	200	300

TOTAL CREDITS: 183



R.D. Mishra