

Department of Computer Science Engineering

M.Tech. Data Science Curriculum

(Applicable to the students admitted from AY: 2025 onwards)



**School of Engineering and Sciences
SRM University AP, Andhra Pradesh**

ABBREVIATIONS

AEC	Ability Enhancement Courses
VAC	Value Added Courses
SEC	Skill Enhancement Courses
FIC	Foundation & Interdisciplinary Courses
OE	Open Elective
RDIP	Research / Design / Industrial Practice / Project / Thesis / Internship
CE	Core Elective
CC	Core Course
SE	Stream Elective
TE	Technical Elective

SEMESTER - I							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	VAC	U VAC	Community Engagement and Social Responsibility	0	0	1	1*
2	AEC	S AEC	Research Seminar	0	0	1	1*
3	SEC	S SEC	Design Thinking	1	0	1	2
4	FIC	D FIC	Advanced Probability, Linear Algebra and Optimization Techniques	3	0	0	3
5	Core	CC	Computational Essentials for Data Science	3	0	1	4
6	Core	CC	Big Data Analytics	3	0	1	4
7	Core	CC	Advanced Algorithms and Analysis	3	0	1	4
8	Core	CC	Machine Learning Techniques	3	0	1	4
9	Core	CC	Advanced Python Programming Lab	0	0	2	2
Semester Total				16	0	9	23

SEMESTER - II							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	VAC	U VAC	Community Engagement and Social Responsibility	0	0	1	1
2	AEC	S AEC	Research Seminar	0	0	1	1
3	SEC	S SEC	Entrepreneurial Mindset	1	0	1	2
4	Core	CC	Time Series Analysis & Forecasting	3	0	1	4
5	Core	CC	Deep Learning: Methodologies and Techniques	3	0	1	4
6	Core	CC	Data Warehousing and Pattern Mining	3	0	1	4
7	Elective	CE	Core Elective	3	0	0	3
8	Elective	CE	Core Elective	3	0	0	3
9	RDIP	RDIP	Project Management	0	0	3	3
Semester Total				16	0	9	25

SEMESTER - III							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	RDIP	RDIP	Thesis – I	0	0	14	14
2	RDIP	RDIP	Industrial Practice	0	0	3	3
Semester Total				0	0	3	17

SEMESTER - IV							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	RDIP	RDIP	Thesis - II	0	0	15	15
Semester Total				0	0	15	15

List of Core Electives							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	Elective	CE	Knowledge Engineering and Expert Systems	3	0	0	3
2	Elective	CE	Information Retrieval	3	0	0	3
3	Elective	CE	Artificial Intelligence and Neural Networks	3	0	0	3
4	Elective	CE	Optimization Paradigms: Exploring Methods and Strategic Frameworks	3	0	0	3
5	Elective	CE	Soft Computing	3	0	0	3