

SCHOOL OF ENGINEERING AND SCIENCES

M.Tech in Artificial Intelligence and Machine Learning 2023-25 Batch

Semester Wise Course Credit Distribution Under Various Categories

Category	S1	S2	S 3	S4	Total	%age
Value Added Courses (UG Common) (VAC)	2	-	-	-	02	2.5%
Skill Enhancement Courses (SEC)	2	2	-	1	04	5%
Multidisciplinary / Interdisciplinary / Foundation Core (FIC)	3	3	-	-	06	7.5%
Major Core (CC) + Specialization (SE) + Core Elective (CE)	18	18	-	-	36	45%
Research / Design / Industrial Practice / Project (RDIP)	-	-	17	15	32	40%
Grand Total	23	25	17	15	80	100%

VAC- Community Engagement & Social Responsibility

SEC-Problem Solving or Entrepreneurial mindset or Design Thinking

FIC- Mathematics or AIML or Project Management

M.Tech in Artificial Intelligence and Machine Learning

		Semester-1				
Category	Sub- Category	Course Title	L	T/D	P/Pr	Credite
VAC	University AEC	Community Engagement & Social Responsibility	-	-	1	01*
VAC	University AEC	Research Seminar		-	1	01*
SEC1	SEC	Design Thinking	1	-	1	02
CC	CORE	Machine Learning Techniques	3	0	1	4
CC	CORE	Computer Vision	3	0	1	4
CC	CORE	Artificial Intelligence And Knowledge Representation	3	0	1	4
CC	CORE	Advanced Algorithms And Analysis	3	0	1	4
CC	CORE	Advanced Python Programming Lab	0	0	2	2
Multidisciplinary	School (Engg./Sc.)	Advanced Probability, Linear Algebra and Optimization Techniques	-	2	1	3
Semester Total						
		Semester-2				•
Category	Sub- Category	Course Title	L	T/D	P/Pr	Credits
VAC	University AEC	Community Engagement & Social Responsibility	-	-	1	1
VAC	University AEC	Research Seminar	-	-	1	1
SEC2	SEC	Entrepreneurial mindset	1	-	1	2
CE	Core Elective	Industry - Core Elective-1	3	0	0	3
CE	Core Elective	Industry - Core Elective-2	3	0	0	3
	Elective					
CC	Core	Deep Learning: Methodologies and Techniques	3	0	1	4
			3	0	1	4
CC	Core	and Techniques				
CC CC	Core Core	and Techniques Natural Language Computing Data Warehousing and Pattern	3	0	1	4

	Semester-3							
Category	Sub- Category	Course Title	L	T/D	P/Pr	Credits		
RDIP	Research / Design / Industrial Practice / Project	Thesis (Project)	-	-	14	14		
RDIP	Research / Design / Industrial Practice / Project	Industrial Practice			3	3		
Semester Total								
	Semester-4							
Category	Sub- Category	Course Title	L	T/D	P/Pr	Credits		
RDIP	Internship / Research / Thesis	Thesis	-	-	15	15		
Semester Total						15		

List of Core Electives

- 1 Modelling & Simulation of Digital Systems
- 2 Knowledge Engineering and Expert Systems
- 3 Pattern Recognition
- 4 Problem Solving Methods in Artificial Intelligence
- 5 Cognitive Systems
- 6 Introduction to High Performance Computing
- 7 Information Retrieval
- 8 Applied Cryptography
- 9 Agent Systems
- 10 Artificial Intelligence and Neural Networks
- 11 Statistical Modelling for Computer Sciences
- 12 Fuzzy Logic and its Applications
- 13 Electronic Design Automation
- 14 Big Data Security and Privacy
- 15 Spatial Data Science and Visualization
- 16 Data Science for Healthcare
- 17 Business Intelligence and Data Analytics
- 18 Optimization Paradigms: Exploring Methods and Strategic Frameworks
- 19 Soft Computing