



JSPM UNIVERSITY PUNE

Recognized by UGC u/s 2 (f) of UGC Act 1956 and enacted by the
State Government of Maharashtra - JSPM University Act, 2022 (Mah. IV of 2023)

JSPM University Pune
Faculty of Science and Technology
School of Computational Sciences



NEP aligned Curriculum Structure

for

M. Tech (Data Science and Artificial Intelligence)

(Effective from AY: 2025-26)



JSPM University Pune

FACULTY OF SCIENCE AND TECHNOLOGY
SCHOOL OF COMPUTATIONAL SCIENCES

FIRST YEAR MASTER OF TECHNOLOGY
(DATA SCIENCE AND ARTIFICIAL INTELLIGENCE)

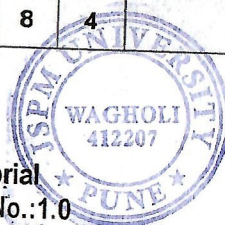
COURSE STRUCTURE
(NEP 2020 Aligned)

W. E. F
RELEASE DATE
REVISION NO.

2024-2025
01/07/2025
1.0 (NEP)

SEMESTER I (LEVEL 6.5)

TYPE	CODE	COURSE NAME	TEACHING SCHEME				EXAMINATION SCHEME AND MARKS								TOTAL	CREDITS
			Hours / Week				THEORY (Equal Weightage for CIE and ESE)			PRACTICAL (Equal Weightage for CIE and ESE)		ORAL (Equal Weightage for CIE and ESE)				
			L	T	P	EL	CONTINUOUS INSEMESTER EVALUATION (100 Marks)			END SEMESTER EXAMINATION (100 / 50 Marks)	CONTINUOUS INSEMESTER EVALUATION (50 Marks)	END SEMESTER EXAMINATION (50 Marks)	CONTINUOUS INSEMESTER EVALUATION (50 Marks)	END SEMESTER EXAMINATION (50 Marks)		
							T1 (30 Marks)	T2 (30 Marks)	Assignments (40 Marks)							
PSMC	240GDSM01_01	Mathematical Foundations for Data Science and Artificial Intelligence	3	-	-	-	30	30	40	100	-	-	-	-	100	3
PCC	240GCSM02_01	Advanced Algorithms	2	-	-	-	30	30	40	50	-	-	-	-	50	2
PCC	240GDSM02_01	Artificial Intelligence: Techniques and Applications	3	-	-	-	30	30	40	100	-	-	-	-	100	3
PCC	240GCSM04_01	Soft Computing and Optimization Techniques	2	-	-	2	30	30	40	100	-	-	-	-	100	3
MMC	---	Multidisciplinary Minor Course	1	-	2	-	-	-	-	-	-	-	-	-	100	2.5
SEC	240GCSM05_01	Advanced Python Programming	2	-	2	-	-	-	-	-	50	50	50	50	100	2
VSC	230IDCB01_01	Design Thinking and Creativity	1	-	-	2	-	-	-	-	50	50	50	50	100	3
AEC (HSMC)	231UENM01_01	Communicative English for Professionals	1	-	2	-	-	-	-	-	-	-	50	50	50	1.5
RMC	230IRMM01_01	Research Methodology	2	-	-	-	30	30	40	50	-	-	-	-	50	2
LC	240GCSM06_01	Advanced Algorithms Lab	-	-	2	-	-	-	-	-	-	-	-	-	50	2
TOTAL			16	-	8	4					50	50	-	-	50	1
															750	22



L-Lecture
Format No.: JSPMUni/ACAD/001

T-Tutorial
Rev. No.: 1.0

P-Practical Session (Laboratory)
Rev. Date: 01/07/2025

EL-Experiential Learning
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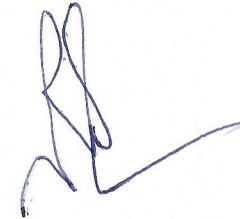
Multidisciplinary Minor Course (MMC)		
Course Code	230GRAM24_01	230GETM17_01
Course Name	Sensors and Automation	Embedded System
Course Code	230GETM16_01	230VOSM26_01
Course Name	IoT Basics and Applications	Project Management



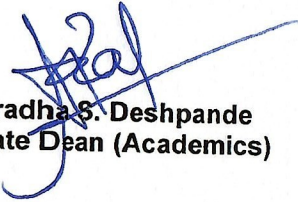
Dr. Rahul R. Chakre
Programme Coordinator, MTech-DSAI



Prof. G. A. Patil
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Prof. R. S. Deshpande
Dean, Faculty of Science and Technology



Dr. Anuradha S. Deshpande
Associate Dean (Academics)



Prof. B. B. Ahuja
Vice Chancellor, JSPM University Pune

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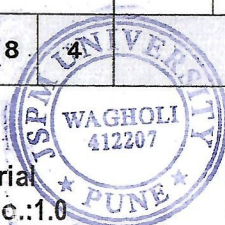
FIRST YEAR MASTER OF TECHNOLOGY
(DATA SCIENCE AND ARTIFICIAL INTELLIGENCE)

REVISION NO.

1.0 (NEP)

SEMESTER II (LEVEL 6.5)

TYPE	CODE	COURSE NAME	TEACHING SCHEME				EXAMINATION SCHEME AND MARKS								TOTAL	CREDITS	
			Hours / Week				THEORY (Equal Weightage for CIE and ESE)			PRACTICAL (Equal Weightage for CIE and ESE)		ORAL (Equal Weightage for CIE and ESE)					
			L	T	P	EL	CONTINUOUS INSEMESTER EVALUATION (100 / 25 Marks)			END SEMESTER EXAMINATION (100 / 75/ 50 Marks)	CONTINUOUS INSEMESTER EVALUATION (50 Marks)	END SEMESTER EXAMINATION (50 Marks)	CONTINUOUS INSEMESTER EVALUATION (50 Marks)	END SEMESTER EXAMINATION (50 Marks)			
							T1 (30 Marks)	T2 (30 Marks)	Assign-ments (40 Marks)								
PSMC	240GDSM04_02	Applied Linear Algebra in AI and ML (MOOC)	3	-	-	-	25			75	-	-	-	-	100	3	
PCC	240GDSM05_02	Computational Data Science	3	-	-	-	30	30	40	100	-	-	-	-	100	3	
PCC	240GDSM06_02	Machine Intelligence and Data Analysis	2	-	-	2	30	30	40	100	-	-	-	-	100	2.5	
PCC	240GDSM07_02	Advanced Neural Computing and Deep Learning	2	-	-	-	30	30	40	50	-	-	-	-	50	2	
MMC	---	Multidisciplinary Minor Course	1	-	2	-	-	-	-	-	50	50	50	50	100	2	
VSC	230IINB02_02	Innovation	1	-	-	2	-	-	-	-	-	-	50	50	50	1.5	
AEC (HSMC)	231UENM02_02	Business Communication	1	-	2	-	-	-	-	-	50	50	-	-	50	2	
RMC	230IRMM02_02	Research Design and Techniques	2	-	-	-	30	30	40	50	-	-	-	-	50	2	
LC	240GDSM08_02	Computational Data Science Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1	
LC	240GDSM09_02	Advanced Neural Computing and Deep Learning Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1	
IITP/FP/CEP	230GDSM05_02	Internship/Field Project/Community Engagement Programme	4 to 6 weeks				-	-	-	-	-	-	-	50	50	50	2
TOTAL			15	-	8	4								750	22		



Multidisciplinary Minor Course (MMC)		
Course Code	230GRAM24_01	230GETM17_02
Course Name	Sensors and Automation	Embedded System
Course Code	230GETM28_02	230VOSM26_02
Course Name	IoT and Embedded Systems	Project Management

Note: A Postgraduate Diploma will be awarded if a student exits after first year.

For "Exit" at the end of "First Year" the student must complete a total of 8 additional credits.

- An internship / OJT of 8 - 10 weeks (4 credits) over and above semester 6 internship of minimum 4 weeks.
- Additional one Course of 4 credits (Course offered will be Vocational Skill Course (VSC) or Skill Enhancement Course (SEC) or a mini project).



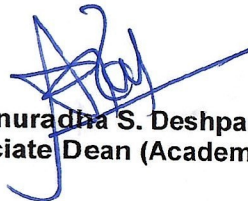
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