



**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 Basic and Applied Sciences**



**NEP aligned Curriculum Structure**

**for**

**M.Sc (DS & AI)**

**(Effective from AY: 2025-26)**



# JSPM University Pune

FACULTY OF SCIENCE & TECHNOLOGY

SCHOOL OF BASIC AND APPLIED SCIENCES

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

COURSE STRUCTURE  
(NEP 2020 Aligned)

W. E. F

2024-2025

RELEASE DATE

01/07/2025

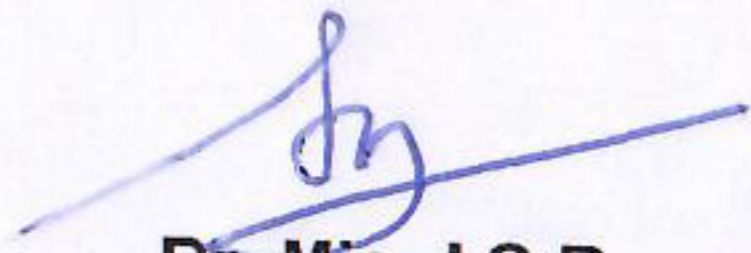
REVISION NO.


1.0 (NEP)


## SEMESTER I (LEVEL – 6.5)

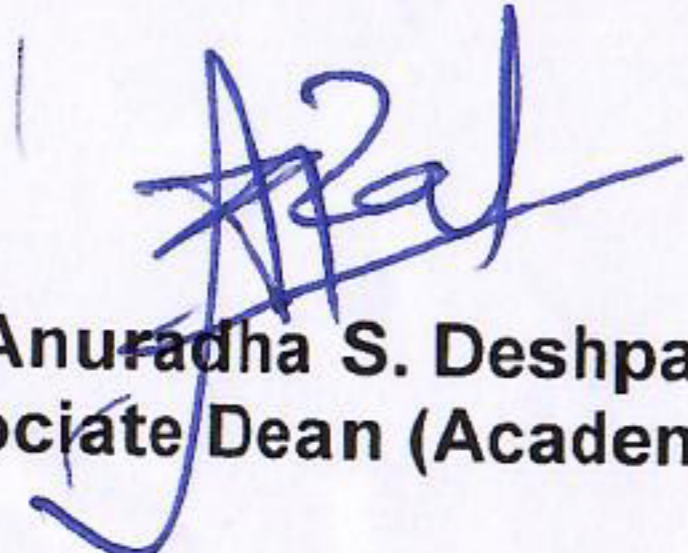
COURSE		TEACHING SCHEME	EXAMINATION SCHEME AND MARKS													
TYPE	CODE	COURSE NAME	Hours / Week				THEORY (Equal Weightage for CIE and ESE)				PRACTICAL (Equal Weightage for CIE and ESE)		ORAL (Equal Weightage for CIE and ESE)		MARKS	CREDITS
			L	T	P	EL	CONTINUOUS INSEMESTER EVALUATION (100 Marks)			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	230GMAM04_01	Mathematical Foundations of Computer Science	2	1	-	-	30	30	40	100	-	-	-	-	100	3
PCC	231GCAM01_01	Data Structure and Algorithm	2	-	-	2	30	30	40	100	-	-	-	-	100	2.5
PCC	240GCAM31_01	Introduction to Artificial Intelligence and Machine Learning	2	-	-	-	30	30	40	50	-	-	-	-	50	2
PCC	232GCAM03_01	Data Communication and Computer Networking	2	-	-	-	30	30	40	50	-	-	-	-	50	2
SEC	240GCAM40_01	Object-Oriented Programming with Java	2	-	2	-	-	-	-	-	50	50	50	50	100	3
MMC	---	Multidisciplinary Minor Course	1	-	2	-	-	-	-	-	50	50	50	50	100	2
VSC	230IDCB01_01	Design Thinking and Creativity	1	-	-	2	-	-	-	-	-	-	50	50	50	1.5
AEC	231UENM01_01	Communicative English for Professionals	1	-	2	-	-	-	-	-	50	50	-	-	50	2
RMC	230IRMM01_01	Research Methodology	2	-	-	-	30	30	40	50	-	-	-	-	50	2
LC	231GCAM17_01	Data Structure and Algorithm Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1
LC	240GCAM41_01	Introduction to Artificial Intelligence and Machine Learning Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1
<b>TOTAL</b>			<b>15</b>	<b>1</b>	<b>10</b>	<b>4</b>									<b>750</b>	<b>22</b>


Sem.	Multidisciplinary Minor Course (MMC)						
I	Course Code	230UEEB02_01	250VMCM01	240GCEB37_01	230UPYB04_01	250UPOM10_01	230UEEB02_01
	Course Name	Public Economics	MS Excel Applications	Smart Transportation System	Positive Psychology	Global Challenges	Public Economics
II	Course Code	230GETB34_02	230VBCB17_02	250UPOM10_02	230UHIB04_02	230VBCB19_02	230VDMM02_02
	Course Name	Internet of Things and Applications	Elements of Company Law	Global Challenges	Making of the Modern Indian	Risk and Insurance Management	Customer Relationship Management

  
**Dr. Misal S.B.**  
 Programme Coordinator, MSc-DSAI

  
**Dr. G. A. Patil**  
 Director, School of Computational Sciences

  
**Dean**  
**FACULTY OF SCIENCE AND TECHNOLOGY**  
**JSPM UNIVERSITY PUNE**  
**Dr. 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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## SEMESTER II (LEVEL – 6.5)

COURSE		TEACHING SCHEME	EXAMINATION SCHEME AND MARKS												CREDITS		
TYPE	CODE		COURSE NAME	Hours / Week				THEORY (Equal Weightage for CIE and ESE)				PRACTICAL (Equal Weightage for CIE and ESE)		ORAL (Equal Weightage for CIE and ESE)		MARKS	
				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)
PSMC	240GMAB33_02	Foundation of Data Analysis and Statistical Measures	2	1	-	-	30	30	40	100	-	-	-	-	100	3	
PCC	231GCAM04_02	Advanced Database Management Systems	2	-	-	2	30	30	40	100	-	-	-	-	100	2.5	
PCC	240GDIM15_02	Python Programming for Data Science	2	-	-	-	30	30	40	50	-	-	-	-	50	2	
PCC	240GDIM16_02	Foundations of Data Science	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	231UENM02_02	Business Communication	1	-	2	-	-	-	-	-	50	50	-	-	50	2	
RMC	230IRMM03_02	Research Data Analysis	2	-	-	-	30	30	40	50	-	-	-	-	50	2	
LC	230GCAM19_02	Advanced Database Management System Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1	
LC	240GDIM25_02	Python Programming for Data Science Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1	
LC	240GDIM26_02	Data Visualization Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1	
IITP/FP/CEP	230GDIM07_02	Internship/Field Project/Community Engagement Program	4 to 6 weeks				-	-	-	-	-	-	-	50	50	50	2
<b>TOTAL</b>			<b>13</b>	<b>1</b>	<b>10</b>	<b>4</b>									<b>750</b>	<b>22</b>	

Note: A Post Graduate 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.

a) An internship / OJT of 8 - 10 weeks (4 credits) over and above semester 2 internship of minimum 4 weeks.

b) Additional one Course of 4 credits (Course offered will be Vocational Skill Course (VSC) or Skill Enhancement Course (SEC) or a mini project).

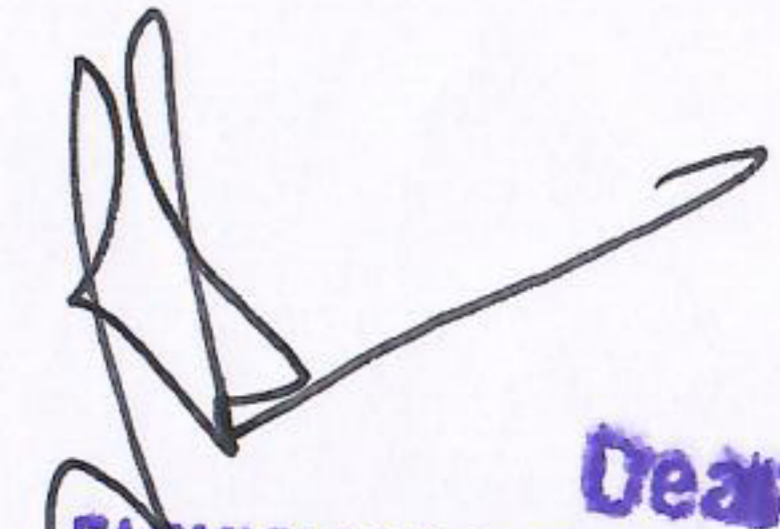
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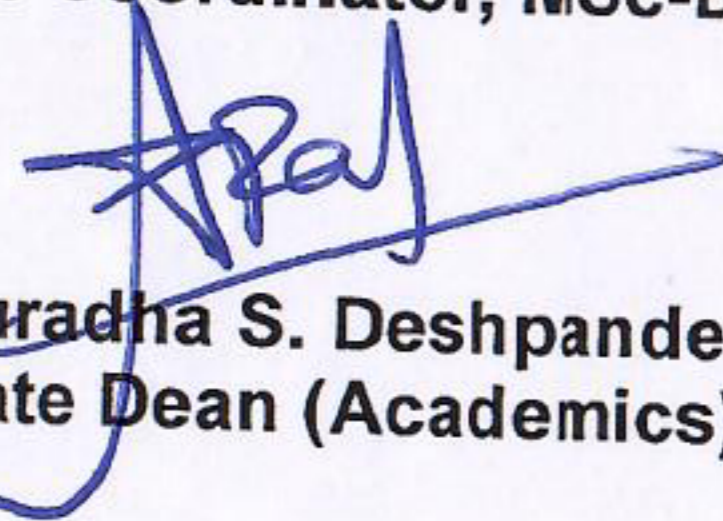
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