



**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 Civil and Environmental Science**

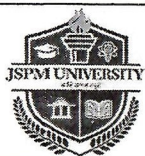


**NEP aligned Curriculum Structure**

**For**

**M.Tech (Transportation Engineering)**

**(Effective from AY: 2023-24)**



# JSPM University Pune

FACULTY OF SCIENCE & TECHNOLOGY

SCHOOL OF CIVIL AND ENVIRONMENTAL SCIENCES

FIRST YEAR MASTER OF TECHNOLOGY  
(TRANSPORTATION ENGINEERING)

COURSE STRUCTURE  
(NEP 2020 Aligned)

W. E. F

2023-2024

RELEASE DATE

01/07/2023

REVISION NO.

0.0 (NEP)

## SEMESTER I (LEVEL 6.5)

### COURSE

### TEACHING SCHEME

### EXAMINATION SCHEME AND MARKS

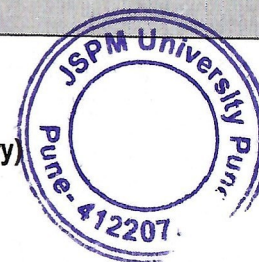
TYPE	CODE	COURSE NAME	Hours / Week				THEORY (Equal Weightage for CIE and ESE)				PRACTICAL (Equal Weightage for CIE and ESE)		ORAL (Equal Weightage for CIE and ESE)		TOTAL	CREDITS
			L	T	P	EL	CONTINUOUS INSEMESTER EVALUATION (100 Marks)			END SEMESTER EXAMINATION (100 / 50 Marks)	CONTINUOUS INSEMESTER 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	230GMAM03_01	Probability and Statistics	2	1	-	-	30	30	40	100	-	-	-	-	100	3
PSBC	230GTEM01_01	Traffic Engineering	3	-	-	2	30	30	40	100	-	-	-	-	100	3.5
PCC	230GTEM02_01	Pavement Materials and Construction	2	-	-	-	30	30	40	100	-	-	-	-	100	2
PCC	230GTEM03_01	Applications of Remote Sensing Geographic Information System	2	-	-	-	30	30	40	100	-	-	-	-	100	2
MMC	-	Multidisciplinary Minor Course- I	1	-	2	-	-	-	-	-	50	50	50	50	100	2
SEC	230GTEM19_01	Geospatial Analysis	2	-	2	-	-	-	-	-	50	50	50	50	100	3
VSC (HSMC)	230IDCB01_01	Design Thinking and Creativity	1	-	-	2	-	-	-	-	-	-	50	50	50	1.5
AEC (HSMC)	230UENM01_01	Communicative English for Professionals	1	-	2	-	30	30	40	50	-	-	-	-	50	2
RMC	230IRMM01_01	Research Methodology	2	-	-	-	30	30	40	50	-	-	-	-	50	2
LC	230GTEM20_01	Transportation Engineering lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1
TOTAL			16	1	8	4									800	22

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

T-Tutorial  
Rev. No.:0.0

P-Practical Session (Laboratory)  
Rev. Date:01/07/2023

EL-Experiential Learning  
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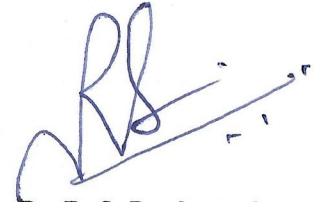
Sem	Multidisciplinary Minor Course (MMC)	
I (MMC - I)	Course Code	230GRAM24_01
	Course Name	Sensors and Automation
II (MMC - II)	Course Code	230GETM16_02
	Course Name	IoT Basics and Applications



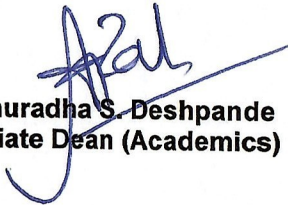
**Dr. Prashant Sudani**  
Programme Coordinator, MTech-TRE



**Dr. M. Nithya**  
Director, School of Civil and Environmental Sciences



**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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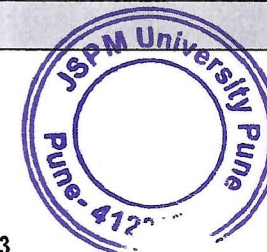
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## SEMESTER II (LEVEL 6.5)

COURSE			TEACHING SCHEME				EXAMINATION SCHEME AND MARKS									TOTAL	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)					
			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)								
PCC	230GTEM04_02	Pavement Analysis and Design	2	1	-	-	30	30	40	100	-	-	-	-	100	3	
PCC	230GTEM05_02	Highway Structures	2	-	-	2	30	30	40	100	-	-	-	-	100	2.5	
PCC	230GTEM06_02	Highway Geotechnology	3	-	-	-	30	30	40	100	-	-	-	-	100	3	
MMC	-	Multidisciplinary Minor Course- II	1	-	2	-	-	-	-	-	50	50	50	50	100	2	
SEC	230GSEM20_02	MATLAB for Engineers	2	-	2	-	-	-	-	-	50	50	50	50	100	3	
VSC (HSMC)	230IINB02_02	Innovation	1	-	-	2	-	-	-	-	-	-	50	50	50	1.5	
AEC (HSMC)	230UENM02_02	Business Communication	1	-	2	-	30	30	40	50	-	-	-	-	50	2	
RMC	230IRMM02_02	Research Design and Techniques	2	-	-	-	30	30	40	50	-	-	-	-	50	2	
LC	230GTEM21_02	Traffic and Pavement Engineering lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1	
IITP/FP/CEP	230GTEM22_02	Internship / Field Project / Community Engagement Programme	4 to 6 weeks											50	50	50	2
<b>TOTAL</b>			14	1	8	4										750	22



**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: (Total credits = 8 )

a) An internship / OJT of 8 - 10 weeks (4 credits)

b) Additional Course 1 (4 credits) (Vocational Skill Course (VSC) / Skill Enhancement Course (SEC))

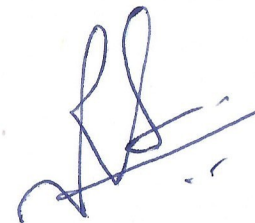
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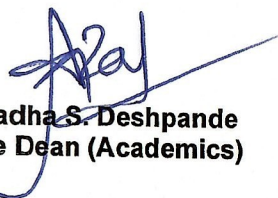
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