



**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 (Construction Management)**

**(Effective from AY: 2024-25)**



# JSPM University Pune

FACULTY OF SCIENCE & TECHNOLOGY

SCHOOL OF CIVIL AND ENVIRONMENTAL SCIENCES

FIRST YEAR MASTER OF TECHNOLOGY  
(CONSTRUCTION MANAGEMENT)

COURSE STRUCTURE  
(NEP 2020 Aligned)

W. E. F

2024-2025

RELEASE DATE

01/07/2024

REVISION NO.

0.0 (NEP)

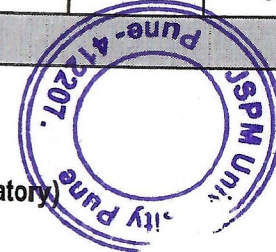
## SEMESTER I (LEVEL 6.5)

### 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	231GCMM01_01	Construction Project Planning and Management	3	-	-	-	30	30	40	100	-	-	-	-	100	3
PCC	231GCMM02_01	Construction Materials and Materials Management	2	-	-	2	30	30	40	100	-	-	-	-	100	3
PCC	231GTEM03_01	Applications of Remote Sensing and Geographic Information System	2	-	-	-	30	30	40	100	-	-	-	-	100	2.5
MMC	-	Multidisciplinary Minor Course- I	1	-	2	-	-	-	-	-	-	-	-	-	50	2
SEC	230GCSM26_01	Python Programming for Engineers	2	-	2	-	-	-	-	-	50	50	50	50	100	2
VSC (HSMC)	230IDCB01_01	Design Thinking and Creativity	1	-	-	2	-	-	-	-	50	50	50	50	100	3
AEC (HSMC)	230UENM01_01	Communicative English for Professionals	1	-	2	-	30	30	40	50	-	-	50	50	50	1.5
RMC	230IRMM01_01	Research Methodology	2	-	-	-	30	30	40	50	-	-	-	-	50	2
LC	230GCMM26_01	Project Planning Lab	-	-	2	-	-	-	-	-	-	-	-	-	50	2
<b>TOTAL</b>			16	1	8	4					50	50	-	-	50	1
															750	22



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



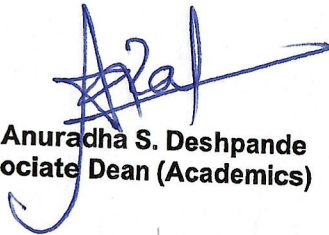
**Dr. Nikita Bhagat**  
Programme Coordinator, MTech-CM



**Dr. M. Nithya**  
Director (I/C), 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**  
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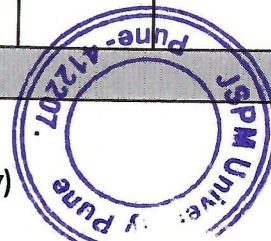
## SEMESTER II (LEVEL 6.5)

### 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 (50marks)	END SEMESTER EXAMINATION (50 marks)	CONTINUOUS INSEMESTER EVALUATION (50marks)			END SEMESTER EXAMINATION (50 marks)	
							T1 (30 Marks)	T2 (30 Marks)	Assignments (40 Marks)								
PCC	230GCMM03_02	Construction Contracts, Administration and Management	2	1	-	-	30	30	40	100	-	-	-	-	100	3	
PCC	230GCMM04_02	Construction Techniques	2	-	-	2	30	30	40	100	-	-	-	-	100	2.5	
PCC	230GCMM05_02	Construction Equipment and Machinery	3	-	-	-	30	30	40	100	-	-	-	-	100	3	
MMC	-	Multidisciplinary Minor Course- II	1	-	2	-	-	-	-	-	50	50	50	50	100	2	
SEC	230GSEM19_02	Building Information Modelling	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	230GCMM17_02	Project Management Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1	
IITP/FP/CEP	230GCMM25_02	Internship / Field Project / Community Engagement Programme	4 to 6 weeks				-	-	-	-	-	-	-	-	-	-	-
TOTAL			14	1	8	4						50	50	50	50	22	



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

T-Tutorial  
Rev. No.:0.0

P-Practical Session (Laboratory)  
Rev. Date:01/07/2024

EL-Experiential Learning  
Page 1 of 2

**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))

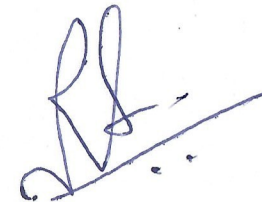
Sem	Multidisciplinary Minor Course (MMC)	
I (MMC - I)	Course Code	230GRAM24_01
	Course Name	Sensors and Automation
II (MMC - II)	Course Code	230GETM16_02
	Course Name	IoT Basics and Applications



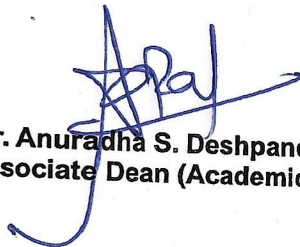
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 Programme Coordinator, MTech-CM



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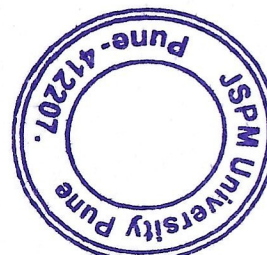
## SEMESTER III (LEVEL 7)

### 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)	Assign- ments (40 Marks)									
PEC	-	Program Elective-I / MOOCs	3	-	-	-	30	30	40	100	-	-	-	-	100	3		
PEC	-	Program Elective-II / MOOCs	3	-	-	-	30	30	40	100	-	-	-	-	100	3		
IOC	-	Interdisciplinary Open Course -I	2	-	-	-	30	30	40	100	-	-	-	-	100	2		
IOC	-	Interdisciplinary Open Course -II	2	-	-	-	30	30	40	100	-	-	-	-	100	2		
VEC	230USYB01_03	Behavioral Science and Ethics	2	-	-	-	30	30	40	50	-	-	-	-	50	2		
SLC	230GCMM19_03	Seminar	-	-	4	-	-	-	-	-	-	-	-	-	100	2		
IITP/F P/CEP	230GCMM20_03	Internship / Field Project / Community Engagement Programme	-	-	12	-	-	-	-	-	-	-	100	100	100	6		
<b>TOTAL</b>			12	0	16	0											650	20



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EL-Experiential Learning

Sem.	Interdisciplinary Open Course (IOC)		
	Specialization	Management (IOC - I)	Computer Science (IOC - II)
III	Course Code	230VBCB04_03	230GCSM31_03
	Course Name	Basics of Accounting	Artificial Intelligence for All
III	Course Code	230VMSM11_03	230GCSM32_03
	Course Name	Fundamentals of Financial Management	Machine Learning in Practice
III	Course Code	230VMSM08_03	230GCSM33_03
	Course Name	Startup and Entrepreneurship Development	Introduction to Python Programming

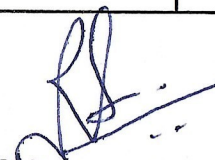
Sem.	Programme Elective Course (PEC)			
	Specialization	Construction Management		
III (PEC - I)	Course Code	230GCMM06_03	230GCMM07_03	230GCMM08_03
	Course Name	Construction Safety	Energy Efficient Buildings	Project Economics and Financial Management
III (PEC - II)	Course Code	230GCMM09_03	230GCMM10_03	230GCMM11_03
	Course Name	Quality Control in Construction	Infrastructure Development and Management	Building Services
IV (PEC - III)	Course Code	230GCMM12_04	230GCMM13_04	230GCMM22_04
	Course Name	Strategic Management	Project Risk Management	Airport Infrastructure Development
IV (PEC - IV)	Course Code	230GCMM14_04	230GCMM15_04	230GCMM23_04
	Course Name	Quality Control and Total Quality Management	Supply Chain Management	Repair, Retrofitting and Rehabilitation Techniques



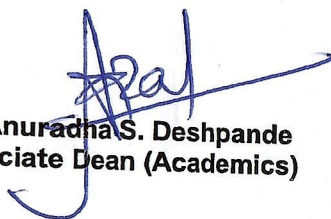
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### SEMESTER IV (LEVEL 7)

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			L	T	P	EL	CONTINUOUS INSEMESTER EVALUATION (100 Marks)			END SEMESTER EXAMINATIO N (100 / 50 Marks)	CONTINU OUS INSEMEST ER EVALUATI ON (50 Marks)	END SEMESTER EXAMINATIO N (50 Marks)	CONTINU OUS INSEMEST ER EVALUATI ON (50 Marks)	END SEMESTER EXAMINATIO N (50 Marks)		
							T1 (30 Marks)	T2 (30 Marks)	Assign- ments (40 Marks)							
PEC	-	Program Elective-III/ MOOCs	3	-	-	-	30	30	40	100	-	-	-	-	100	3
PEC	-	Program Elective-IV/ MOOCs	3	-	-	-	30	30	40	100	-	-	-	-	100	3
PROJ	230GCMM21_04	Project / Internship with Project	-	-	24	-	-	-	-	-	-	-	200	200	200	12
TOTAL			6	0	24	0									400	18
MLC#	-	Audit Course - I	1	-	-	-	-	-	-	50	-	-	-	-	50	1




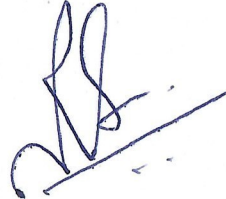
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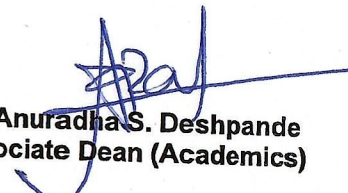
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IV (PEC - III)	Course Code	230GCMM12_04	230GCMM13_04	230GCMM22_04
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IV (PEC - IV)	Course Code	230GCMM14_04	230GCMM15_04	230GCMM23_04
	Course Name	Quality Control and Total Quality Management	Supply Chain Management	Repair, Retrofitting and Rehabilitation Techniques

Sem.	Mandatory Learning Course (MLC*) - Audit Course	
IV (Audit Course - I)	Course Code	230UPOB02_04
	Course Name	Introduction to Indian Constitution


  
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