



**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: 2025-26)**



# JSPM University Pune

FACULTY OF SCIENCE & TECHNOLOGY

SCHOOL OF CIVIL AND ENVIRONMENTAL SCIENCES

## COURSE STRUCTURE (NEP 2020 Aligned)

W. E. F

2024-2025

RELEASE DATE

01/07/2025

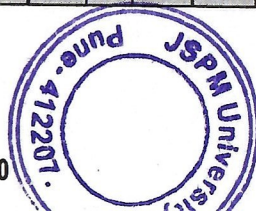
FIRST YEAR MASTER OF TECHNOLOGY  
(CONSTRUCTION MANAGEMENT)

REVISION NO.

1.0 (NEP)

### SEMESTER I (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)							
PSMC	230GMAM03_01	Probability and Statistics	2	1	-	-	30	30	40	100	-	-	-	-	100	3
PCC	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	2.5
PCC	250GCMM01_01	Construction Cost Analysis	2	-	-	-	30	30	40	50	-	-	-	-	50	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)	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	230GCMM26_01	Project Planning Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1
TOTAL			16	1	8	4									750	22



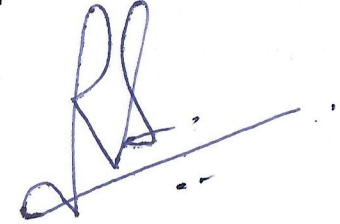
Sem	Multidisciplinary Minor Course (MMC)	
I (MMC – I)	Course Code	230GRAM24_01
	Course Name	Sensors and Automation
II (MMC – II)	Course Code	230GETM16_02
	Course Name	IoT Basics and Applications



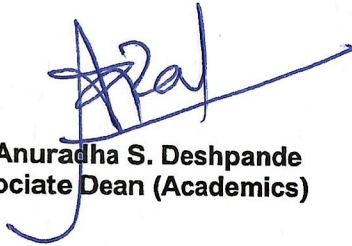
**Dr. Nikita Bhagat**  
Programme Coordinator, MTech-CM



**Dr. Aniket Patil**  
Director (I/C), School of Civil and Environmental  
Sciences



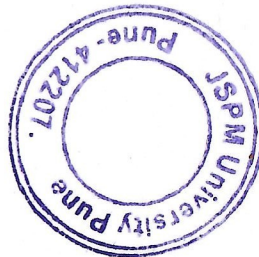
**Dr. R. S. Deshpande**  
Dean, Faculty of Science and Technology



**Dr. Anuradha S. Deshpande**  
Associate Dean (Academics)



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





# 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)

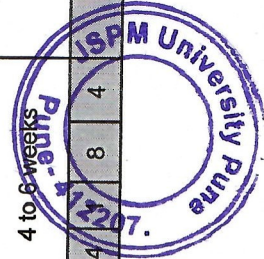
W. E. F 2024 - 2025

RELEASE DATE 01/07/2025

REVISION NO. 1.0 (NEP)

## SEMESTER II (LEVEL 6.5)

TYPE	CODE	COURSE NAME	TEACHING SCHEME			EXAMINATION SCHEME AND MARKS						C R E D I T S				
			Hours / Week			THEORY (Equal Weightage for CIE and ESE)		PRACTICAL (Equal Weightage for CIE and ESE)		ORAL (Equal Weightage for CIE and ESE)			T O T A L			
			L	T	P E L	CONTINUOUS INSEMESTER EVALUATION (100 Marks)		CONTINUOUS INSEMESTER EVALUATION (50marks)	CONTINUOUS INSEMESTER EVALUATION (50marks)	END SEMESTER EXAMINATION (50 marks)	END SEMESTER EXAMINATION (50 marks)					
						T1 (30 Marks)	T2 (30 Marks)							Assignments (40 Marks)	END SEMESTER EXAMINATION (100 / 50 marks)	
PCC	230GCM03_02	Construction Contracts, Administration and Management	2	1	-	-	30	30	40	100	-	-	50	50	100	3
PCC	230GCM04_02	Construction Techniques	2	-	-	2	30	30	40	100	-	-	-	-	100	2.5
PCC	230GCM05_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)	231JENM02_02	Business Communication	1	-	2	-	-	-	-	-	50	50	-	-	50	2
RMC	230IRMM02_02	Research Design and Techniques	2	-	-	-	30	30	40	50	-	-	-	-	50	2
LC	230GCM17_02	Project Management Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1
ITP/FP/CEP	230GCM25_02	Internship / Field Project / Community Engagement Programme	4 to 6 weeks			-	-	-	-	-	-	-	-	50	50	2
TOTAL			14	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))

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



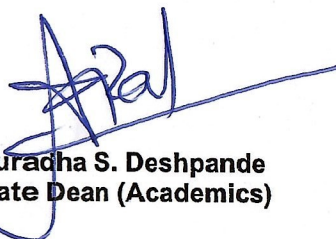
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 Programme Coordinator, MTech-CM



**Dr. Aniket Patil**  
 Director (I/C), School of Civil and Environmental Sciences



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SCHOOL OF CIVIL AND ENVIRONMENTAL SCIENCES

## COURSE STRUCTURE (NEP 2020 Aligned)

W. E. F

2025-2026

RELEASE DATE

01/07/2025

SECOND YEAR MASTER OF TECHNOLOGY  
(CONSTRUCTION MANAGEMENT)

REVISION NO.

0.0 (NEP)

### SEMESTER III (LEVEL 7)

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)	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	240GCMM03_03	Seminar	-	-	-	8	-	-	-	-	-	-	50	50	50	2
PROJ	240GCMM01_03	Field Project	-	-	4	8	-	-	-	-	50	50	50	50	100	4
TOTAL			12	0	12	0									600	18
MLC#		Audit Course - I	1	-	-	-	-	-	-	50	-	-	-	-	50	1


Sem.	Interdisciplinary Open Course (IOC)		
	Specialization	(IOC - I)	(IOC - II)
III	Course Code	250GCSM03_03	230GCSM33_03
	Course Name	Fundamentals of Artificial Intelligence and Machine Learning	Introduction to Python Programming
III	Course Code	230VMSM11_03	230VBCB04_03
	Course Name	Fundamentals of Financial Management	Basics of Accounting

Sem.	Specialization	Programme Elective Course (PEC)		
		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

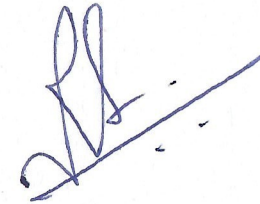
Sem.	Mandatory Learning Course (MLC <sup>#</sup> )- Audit Course	
III (Audit Course - I)	Course Code	230GSEM29_03
	Course Name	Structural Audit
IV (Audit Course - II)	Course Code	230UPOB02_04
	Course Name	Introduction to Indian Constitution



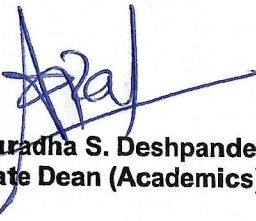
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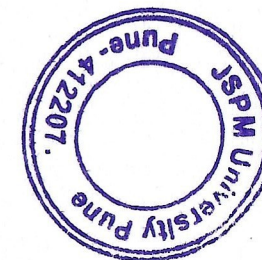
SECOND YEAR MASTER OF TECHNOLOGY (REGULAR)  
(CONSTRUCTION MANAGEMENT)

REVISION NO.

0.0 (NEP)

### SEMESTER IV (LEVEL 7)

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)							
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	240GCMM02_04	Project/ Internship with Project	-	-	12	24	-	-	-	-	200	200	200	100	300	12
<b>TOTAL</b>			<b>6</b>	<b>0</b>	<b>24</b>	<b>0</b>									<b>500</b>	<b>18</b>
MLC#		Audit Course - II	1	-	-	-	-	-	-	50	-	-	-	-	50	1



Sem.	Interdisciplinary Open Course (IOC)		
	Specialization	(IOC - I)	(IOC - II)
III	Course Code	250GCSM03_03	230GCSM33_03
	Course Name	Fundamentals of Artificial Intelligence and Machine Learning	Introduction to Python Programming
III	Course Code	230VMSM11_03	230VBCB04_03
	Course Name	Fundamentals of Financial Management	Basics of Accounting

Sem.	Specialization	Programme Elective Course (PEC)		
		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
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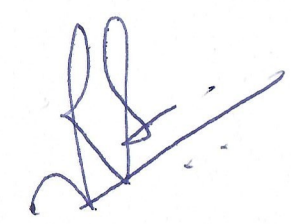
Sem.	Mandatory Learning Course (MLC#)- Audit Course	
III (Audit Course - I)	Course Code	230GSEM29_03
	Course Name	Structural Audit
IV (Audit Course - II)	Course Code	230UPOB02_04
	Course Name	Introduction to Indian Constitution



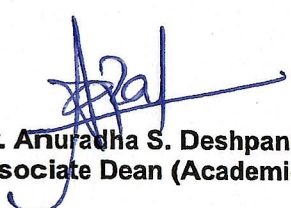
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PCC	231GCMM01_01	Construction Project Planning and Management	3	-	-	-	30	30	40	100	-	-	-	-	100	3
PCC	231GCMM02_01	Construction Materials and Materials Management	2	-	-	2	30	30	40	100	-	-	-	-	100	2.5
PCC	232GTEM03_01	Applications of Remote Sensing and Geographic Information System	2	-	-	-	30	30	40	50	-	-	-	-	50	2
MMC	-	Multidisciplinary Minor Course- I	1	-	2	-	-	-	-	-	50	50	50	50	100	2
SEC	230GCSM26_01	Python Programming for Engineers	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)	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	230GCMM26_01	Project Planning Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1
<b>TOTAL</b>			<b>16</b>	<b>1</b>	<b>8</b>	<b>4</b>									<b>750</b>	<b>22</b>

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  
Page 1 of 2

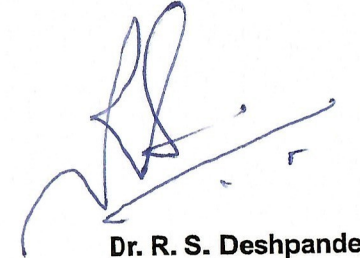
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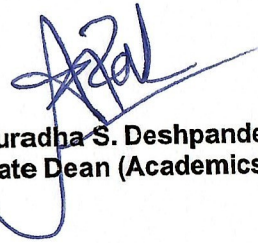
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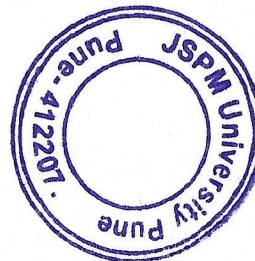
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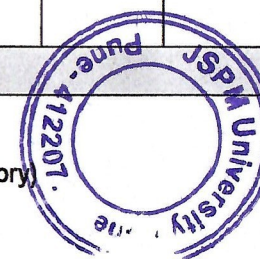
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PCC	230GCMM05_02	Construction Equipment and Machinery	3	-	-	-	30	30	40	100	-	-	-	-	100	3	
MMC	-	Multidisciplinary Minor Course- II	1	-	2	-	-	-	-	-	50	50	50	50	100	2	
SEC	230GSEM19_02	Building Information Modelling	2	-	2	-	-	-	-	-	50	50	50	50	100	3	
VSC (HSMC)	230IINB02_02	Innovation	1	-	-	2	-	-	-	-	-	-	50	50	50	1.5	
AEC (HSMC)	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	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											50	50	50	2
<b>TOTAL</b>			<b>14</b>	<b>1</b>	<b>8</b>	<b>4</b>									<b>750</b>	<b>22</b>	

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  
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))

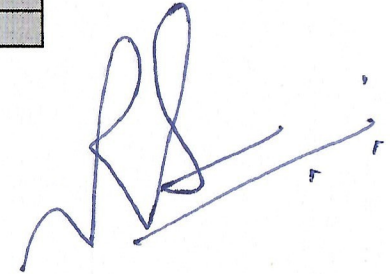
Sem	Multidisciplinary Minor Course (MMC)	
I (MMC - I)	Course Code	230GRAM24_01
	Course Name	Sensors and Automation
II (MMC - II)	Course Code	230GETM16_02
	Course Name	IoT Basics and Applications



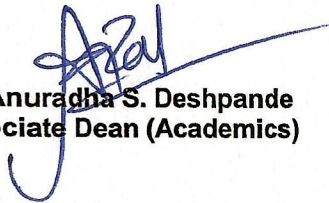
**Dr. Nikita Bhagat**  
Programme Coordinator, MTech-CM



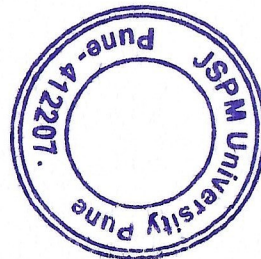
**Dr. Aniket Patil**  
Director (I/C), School of Civil and Environmental  
Sciences



**Dr. R. S. Deshpande**  
Dean, Faculty of Science and Technology



**Dr. Anuradha S. Deshpande**  
Associate Dean (Academics)



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