

**Department of Civil Engineering**  
**M.Tech in Transportation Engineering**  
**I Semester**

Sr.No.	Course Code	Course Types	Course Name	L	T	P	C	Basket	
1	CENG5001	PR	Professional and Communication Skills	0	0	4	2	Core	
2	MATH5001	PP+TUT	Advanced Numerical and Statistical Methods	3	1	0	4	Core	
3	MTPE5001	PP	Material Characterization and Pavement Engineering	3	0	0	3	Core	
4	MTPE5002	PP	Highway Geometric Design	3	0	0	3	Core	
5	MTPE5003	PP	Traffic Engineering and Safety	3	0	0	3	Core	
6	MTPE5004	PP	Intelligent Transportation Systems	3	0	0	3	Core	
7	MTPE5005	PR	Pavement Material Lab	0	0	2	1	Core	
8	MTPE5006	PR	Traffic Engineering Lab	0	0	2	1	Core	
							<b>Total</b>	<b>20</b>	

**II Semester**

Sr.No.	Course Code	Course Types	Course Name	L	T	P	C	Basket	
1	MTPE6001	PP	Advanced Traffic Engineering and Safety	3	0	0	3	Core	
2	MTPE6002	PP	Urban Mass Transportation Planning Operations and Management	3	0	0	3	Core	
3	MTPE6003	PP	Computational Techniques In Transportation Engineering	3	0	0	3	Core	
4		PP	Program Elective - I	3	0	0	3	Elective	
5		PP	Program Elective - II	3	0	0	3	Elective	
6		PP	Program Elective - III	3	0	0	3	Elective	
7	MTPE6004	PR	Transportation Systems Planning and Management Lab	0	0	2	1	Core	
8	MTPE6005	PR	Seminar	0	0	2	1	Core	
							<b>Total</b>	<b>20</b>	

**III Semester**

Sr.No.	Course Code	Course Types	Course Name	L	T	P	C	Basket
1	MTPE7001	PP	Smart and Sustainable Transportation	3	0	0	3	Core

2		PP	Program Elective - IV	3	0	0	3	Elective
3		PP	Program Elective - V	3	0	0	3	Elective
4	MTPE7005	PR	GIS Application in Transportation	0	0	2	1	Core
4	MTPE7002	PR	Mini Project	0	0	2	1	Core
5	MTPE7003	PR	Comprehensive Examination	0	0	0	2	Core
6	MTPE7004	PR	Project (Phase I)	0	0	0	5	Core
							<b>Total</b>	<b>18</b>

#### Semester IV

Sr.No.	Course Code	Course Types	Course Name	L	T	P	C	Basket
1	MTPE8001	PR	Project(Phase II)	0	0	0	15	Core
							<b>Total</b>	<b>15</b>

<b>Total Credits</b>								<b>73</b>
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#### List of Program Electives

Sr.No.	Course Code	Course Types	Course Name	L	T	P	C
1	MTPE6010	PP	Airport planning and design	3	0	0	3
2	MTPE6011	PP	Remote Sensing and GIS	3	0	0	3
3	MTPE6012	PP	Selection of Construction Equipment and Modelling	3	0	0	3
4	MTPE6013	PP	Transport Economics and Finance	3	0	0	3
5	MTPE6014	PP	Traffic Flow Theory	3	0	0	3
6	MTPE6015	PP	Highway construction practices	3	0	0	3
7	MTPE6016	PP	ML and Deep learning techniques to transportation problems	3	0	0	3
8	MTPE6017	PP	Behavioural Travel Modelling	3	0	0	3
9	MTPE6018	PP	Rural Road Technology	3	0	0	3
10	MTPE6019	PP	Traffic Management & Design	3	0	0	3
11	MTPE6020	PP	Public Transportation System	3	0	0	3
12	MTPE6021	PP	Ground Improvement Techniques	3	0	0	3
13	MTPE6022	PP	Bridge Engineering	3	0	0	3
14	MTPE6023	PP	Transportation Network Analysis	3	0	0	3
15	MTPE6024	PP	Project Management	3	0	0	3
16	New Course	PP	Mass Transit System	3	0	0	3