

**CENTRE FOR TRANSPORTATION SYSTEMS
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Program Code : **XXX M.Tech. (Transportation Systems Management)**
 Department : **Centre for Transportation Systems**
 Year : **I**
 Model : **2**

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
Semester-I (Autumn)									
1.	TSC-501	Transportation Infrastructure Planning	PCC	3	2	1	0	3	0
2.	TSC-503	Transportation Systems Analytics	PCC	3	2	1	0	3	0
3.	TSC-505	Intelligent Transportation System	PCC	3	2	1	0	3	0
4.	TSC-507	Transportation and Health	PCC	3	2	1	0	3	0
5.	TSC-509	Transportation Planning and Management Studio	PCC	4	0	0	8	0	0
6.		Social Science Course	SSC	2	-	-	-	-	-
		Total		18					
Semester-II (Spring)									
1.		Program Elective-I	PEC	3	-	-	-	-	-
2.		Program Elective-II	PEC	3	-	-	-	-	-
3.		Program Elective-III	PEC	3	-	-	-	-	-
4.		Program Elective-IV	PEC	3	-	-	-	-	-
5.		Program Elective-V	PEC	3/4	-	-	-	-	-
6.		Science, Technology, and Advanced Research-tools	STAR	3	-	-	-	-	-
7.	TSC-700	Seminar	SEM	2	-	-	-	-	-
		Total		20/21					

**CENTRE FOR TRANSPORTATION SYSTEMS
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Program Code : **XXX M.Tech. (Transportation Systems Management)**
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Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
Semester-I (Autumn)									
1.	TSC-691	Internship Social Activity	ISA	3	-	-	-	-	-
2.	TSC-701A	Thesis Stage-I	THESIS	10	-	-	-	-	-
		Total		13					
Semester-II (Spring)									
1.	TSC-701B	Thesis Stage-II	THESIS	14	-	-	-	-	-
		Total		14					

Summary				
Semester	1	2	3	4
Semester-wise Total Credits	18	20/21	13	14
Total Credits	65/66			

M.Tech. (Transportation Systems Management)

Program Elective Courses

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
1.	TSL-501	Public Transport Operations and Management	PEC	3	2	1	0	3	0
2.	TSL-502	Freight Transportation Planning and Management	PEC	3	2	1	0	3	0
3.	TSL-503	Advance Transportation Analytics	PEC	3	2	1	0	3	0
4.	TSL-504	Management of Transportation Projects	PEC	3	2	1	0	3	0
5.	TSL-505	Planning and Management of Non-motorized Transport	PEC	3	2	1	0	3	0
6.	TSL-506	Geographical Information System (GIS) Applications in Transportation Systems	PEC	4	3	0	2	3	0
7.	TSL-507	Active Mobility and Health	PEC	3	2	1	0	3	0
8.	TSL-508	Design and Rejuvenation of Urban Transport	PEC	3	2	1	0	3	0
9.	TSL-509	Sustainable Transportation Systems	PEC	3	2	1	0	3	0
10.	TSL-510	Ropeway Infrastructure Planning and Design	PEC	3	2	1	0	3	0
11.	TSL-511	Multimodal Transportation	PEC	3	2	1	0	3	0
12.	TSL-512	Inland Navigation and Water Transport	PEC	3	2	1	0	3	0
13.	TSL-513	Advance Transport Planning	PEC	3	2	1	0	3	0
14.	TSL-514	Airport Planning and Design	PEC	3	2	1	0	3	0
15.	TSL-515	Road Traffic Safety	PEC	4	3	0	2	3	0
16.	TSL-516	Transport Economics	PEC	3	2	1	0	3	0
17.	TSL-517	EV Charging Infrastructure	PEC	3	2	1	0	3	0

M.Tech. (Transportation Systems Management)

Science, Technology, and Advanced Research-tools Basket

Teaching Scheme					Contact Hours/Week			Exam Duration	
S.No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical
1.	TST-501	Sustainable Transportation Systems	STAR	3	2	1	0	3	0