

DEPARTMENT OF CIVIL ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY SRINAGAR, J&K - 190006

SCHEME FOR
M.TECH. IN TRANSPORTATION ENGINEERING & PLANNING
Applicable for Batch 2016 Onwards

SEMESTER – I

Sr. No.	Subjects	L	T	P	Credit
Core Courses					
MTHM-101	Applied Statistics	3	1	-	3
CTE-102	Transportation Planning – I	3	1	-	3
CTE-103	Traffic Engineering	3	1	-	3
CTE-104	Traffic Laboratory/Field studies	-	-	3	1
Elective I (any one)					
CTE-105-E1	Computer Applications	3	1	-	3
CTE-106-E1	Engineering Behavior of Soils	3	1	-	3
CTE-107-E1	Rail and Air Transport Engineering	3	1		3
CTE-108-E1	Public Transport Planning	3	1	-	3
Elective II (any one)					
CSE-103-E2	Advanced Concrete Technology	3	1	-	3
CTE-110-E2	Transportation Facility Design	3	1	-	3
CTE-111-E2	Construction Techniques and Management	3	1	-	3
CTE-112-E2	Environmental Impact Assessment and Management	3	1	-	3
Total					16

L – Lecture, T – Tutorial/Seminar, P – Practical/Studio work

SEMESTER – II

Sr. No.	Subjects	L	T	P	Credit
Core Courses					
CTE-201	Pavement Analysis & Design	3	1	-	3
CTE-202	Transportation Planning – II	3	1	-	3
CTE-203	Highway Materials Laboratory	-	-	3	1
CGE-201	Ground Improvement Techniques	3	1	-	3
Elective I (any one)					
CWE-213-E1	GIS & Remote Sensing Applications in Civil Engineering	3	1	-	3
CTE-206-E1	Geometric Design of Highways and Streets	3	1	-	3
CTE-207-E1	Road Safety & Environment	3	1	-	3
CTE-208-E1	Decision Models in Management	3	1	-	3
Elective II (any one)					
CTE-209-E2	Soft Computing Techniques	3	1	-	3
CTE-210-E2	Traffic Flow Theories	3	1	-	3
CTE-211-E2	Urban Planning Techniques & Practice	3	1	-	3
CWE-203-E2	Ground Water Hydrology	3	1	-	3
Total					16

L – Lecture, T – Tutorial/Seminar, P – Practical/Studio work

SEMESTER – III

Sr. No.	Subjects	L	T	P	Credit
Core Courses					
CTE-301	Transportation Economics & Evaluation	3	1	-	3
Elective (any one)					
CSE-301-E1	Advanced Bridge Engineering	3	1	-	3
CWE-302-E1	Hydraulic Structures	3	1	-	3
CTE-304-E1	Pavement Management System	3	1	-	3
CTE-305-E1	Project Appraisals & Development Management	3	1	-	3
Seminar and Dissertation					
CTE-306	Seminar	-	-	4*	2
CTE-307	Dissertation Preliminaries	-	-	8*	8
Total					16

L – Lecture, T – Tutorial/Seminar, P – Practical/Studio work

* Field studies and Studio work.

SEMESTER – IV

Sr. No.	Subjects	L	T	P	Credit
CTE-401	Dissertation	-	-	25	12
Total		-	-	25	12

Grand Total of Credits = 60

Evaluation:

Attendance & Class performance : 10%

Minor Tests (1 & 2) : (20% + 20%) = 40%

Major Test (1) : 50%

NOTE:

1. Each Elective Group contains at least one subject of inter-department or of other P.G. areas of the department in order to make the system more flexible and to meet the options of P.G. students of their interest area.
2. Examination of Practicals/Tutorials will be conducted by two internal examiners.
3. One external examiner & concerned internal examiners shall be conducting viva-voce examination in case of Dissertation at Semester IV.
4. Evaluation and examination system for seminar and dissertation will be at par with other P.G. programs of the department.
5. The dissertation involves a detailed study of a Transportation related, problem (actual field/ research) which a student has to carry out under the supervision of one of the faculty members of the Department. The dissertation work can also be of interdisciplinary nature with transportation element involved.
6. Part-time students will be eligible to take up the 3rd semester regular in their 5th semester, only when they have successfully completed the 1st and 2nd semesters.