Maulana Azad
NATIONAL INSTITUTE OF TECHNOLOGY, Bhopal-462003
DEPARTMENT OF CIVIL ENGINEERING
M. Tech. in Civil Engineering
With Specialization in: Transportation Engineering
SCHEME OF STUDY (Revised April 2020)

FIRST SEMESTER

Course No.	Subject	Scheme of Studies Periods per week			Total Credits
		L	**T**	**P**	
MTH101TR	Advanced Mathematics	3	1	-	4
TR102	Analysis and Design of Pavement Structures	3	1	-	4
TR103	Traffic Engineering and Management	3	1	-	4
TR104	Transport Planning	3	1	-	4
	Elective 1(A)	3	1	-	4
	Elective 2(B)	3	1	-	4
TR105	Lab practice- 1	-	-	2	1
TR106	Seminar- 1	-	-	2	1
TR107	Computational skills NPTL/MOOC/Hum deptt.	2	-	-	2
Total Hours 30 **Total Credits (Cumulative) 28**		**Total Credits**			**28**

SECOND SEMESTER

Course No.	Subject	Scheme of Studies Periods per week			Total Credits
		L	**T**	**P**	
TR201	Highway Construction and Maintenance	3	1	-	4
TR202	Public Transport system	3	1	-	4
TR203	Highway Geometric Design	3	1	-	4
	Elective 3(A)	3	1	-	4
	Elective 4(A)	3	1	-	4
	Elective 5(C)	3	1	-	4
TR204	Lab practice -2	-	-	2	1
TR205	Seminar -2	-	-	2	1
TR206	Research Methodology, Technical Report and Paper Writing	-	2	-	2
Total Hours 30 **Total Credits (Cumulative) 56**		**Total Credits**			**28**

THIRD SEMESTER:

Course No.	Subject	Scheme of Studies Periods per week			Total Credits
		L	**T**	**P**	
TR301	Dissertation Phase- I	-	-	24	12
Total Hours 24		**Total Credits**			**12**
Total Credits (Cumulative) 68					

FOURTH SEMESTER:

Course No.	Subject	Scheme of Studies Periods per week			Total Credits
		L	**T**	**P**	
TR401	Dissertation Phase- 2	-	-	24	12
Total Hours 24		**Total Credits**			**12**
Total Credits (Cumulative) 80					

LIST OF ELECTIVES

Group-A Program Electives

TR501   Analysis and Design of Highway Intersections
TR502   Transport System Analysis
TR503   Pavement Evaluation Technique
TR504   Highway Maintenance Management System
TR505   Planning and Design of Airports
TR506   Intelligent Transportation Systems
TR507   Road Safety Audit
TR508   Traffic Flow Theory
TR509   Transport Economics and Finance
TR510   Traffic Simulation Modeling

Group–B Department Electives (for otherprograms of same department only)

TR601   Analysis and Design of Pavement Structures
TR602   Traffic Engineering and Management
TR603   Transport Planning
TR604   Planning and Design of Airports

Group-C Institute Electives (for other departments only)

TR701   Highway Construction and Maintenance
TR702   Public Transport system
TR703   Highway Geometric Design
TR704   Road Safety Audit
TR705   Highway Maintenance Management System