

COURSE STRUCTURE AND SYLLABUS
For
M. TECH. - TRANSPORTATION ENGINEERING
(CIVIL ENGINEERING)
VR 21



VIGNAN'S INSTITUTE OF INFORMATION TECHNOLOGY
DUVVADA- VISAKHAPANAM, ANDHRA PRADESH, 530049

TRANSPORTATION ENGINEERING

DEPARTMENT OF CIVIL ENGINEERING

COURSE STRUCTURE

[Minimum Credits to be earned:68]

I Semester						
S.No	Code	Course	L	T	P	Credits
1	2022211100	Pavement Materials and Construction	3	1*	0	3
2	2022211101	Pavement Analysis and Design	3	1*	0	3
3	Programme Elective – I	2022211150 Ground Improvement Techniques	3	1*	0	3
		2022211151 RS & GIS for Transportation Engineering				
		2022211152 Numerical Methods and Applied Statistics				
4	Programme Elective –II	2022211153 Intelligent Transportation Systems	3	0	0	3
		2022211154 Transportation System Modeling and Simulation				
		2022211155 Bridge Engineering				
5	2022211110	Highway Aggregates and Soil Testing Lab	0	0	4	2
6	2022211111	Bituminous Testing and Pavement Evaluation Lab	0	0	4	2
7	2000211130	Constitution of India	2	0	0	2
8	2000211131	Soft Skills	2	0	0	0
Total						18

II Semester						
S.No	Code	Course	L	T	P	Credits
1	2022211200	Highway Traffic Analysis and Design	3	1*	0	3

2	2022211201	Transportation Planning		3	1*	0	3
3	Programme Elective – III	2022211250	Traffic Flow Theory	3	1*	0	3
		2022211251	Pavement Construction				
		2022211252	Aviation Infrastructure and Planning				
4	Programme Elective – IV	2022211253	Port and Harbor Engineering	3	0	0	3
		2022211254	Sustainable Urban and Transport Development				
		2022211255	Environmental Impact Assessment				
5	2022211210	Traffic Engineering Laboratory		0	0	4	2
6	2022211211	Transportation Simulation Lab		0	0	4	2
7	2000211230	Research Methodology and IPR.		2	0	0	0
8	2022211270	Mini Project with Seminar		0	0	4	2
Total							18

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M.Tech (TE) 2019 Admitted Batch Program structure & detailed syllabus

III Semester							
S.No .	Code	Course		L	T	P	Credits
1	Programme Elective – V*	2022212150	Financial and Economic Analysis of Transportation Projects	3	1*	0	3
		2022212151	Highway Safety Engineering				
		2022212152	Computational Techniques in Transportation Engineering				
	Open Elective	2022212160	1.MOOCs-(NPTEL/SWAYAM)-any 12 week course on Engineering/Management/Mathematics offered by other than parent department.				
2			2. Course offered by other departments in the college	3	0	0	3
3	Dissertation	2022212170	Dissertation –I/Industrial Project #	0	0	20	10
Total							16

Students going for Industrial Project/Thesis will complete these courses through MOOCs.

Courses offered by Civil Engineering to other departments as Open Elective						
S.No.	Code	Course	L	T	P	Credits
1	2022211152	Numerical Methods and Applied Statistics	3	0	0	3
2	2022212160	Environmental Impact Assessment	3	0	0	3

IV Semester							
S.No .	Code	Course		L	T	P	Credits
1	Dissertation	2022212270	Dissertation Phase -II	0	0	32	16
Total							16

PG-Coordinator

HoD-Civil