

Dual Degree (B.Tech & M.Tech) Curriculum
Transportation and Infrastructure Engineering
For B.Tech 2017 Batch

Semester - I

S.No	Course No	Course Name	Category	L-T-P-C
1.	CS1100	Computational Engineering	BET	2-0-3-4
2.	CY1010	Chemistry-I (Physical and Theoretical)	SCY	2-1-0-3
3.	ID1100	Concepts in Engineering and Design	BET	3-0-0-3
4.	MA1010	Mathematics-I	SMA	3-1-0-4
5.	ME1120	Engineering Drawing	BES	1-0-3-3
6.	PH1010	Physics-I	SPH	2-1-0-3
7.	PH1030	Physics Laboratory	SPH	0-0-3-2
8.	WS1010	Workshop-I	BES	0-0-3-2
Total				24

Semester - II

S.No	Course No	Course Name	Category	L-T-P-C
1.	AM1100	Engineering Mechanics	BET	3-1-0-4
2.	CY1020	Chemistry-II (Organic and Inorganic)	SCY	2-1-0-3
3.	CY1030	Chemistry Laboratory	SCY	0-0-3-2
4.	GN1100	Life skills	BES	2-0-0-2
5.	ID1200	Ecology and Environment	BET	2-0-0-2
6.	MA1020	Mathematics-II	SMA	3-1-0-4
7.	ME1100	Thermodynamics	BET	2-1-0-3
8.	PH1020	Physics-II	SPH	2-1-0-3
9.	WS1020	Workshop-II	BES	0-0-3-2
Total				25

Semester - III

S.No	Course No	Course Name	Category	L-T-P-C
1.	AM2200	Strength of Materials	PMT	3-1-0-4
2.	CE1020	Functional Design of Buildings	PMT	2-0-0-2
3.	CE2050	Building Drawing	PML	0-0-3-2
4.	CE2330	Civil Engineering Materials and Construction	PMT	4-0-0-4
5.	EE1100	Basic Electrical Engineering	BET	3-0-0-3
6.	BT1010	Life Sciences	SLS	2-0-0-2
7.	MAE1	Mathematics Elective-1	SMA	3-0-0-3
8.	HSE1	Humanities Elective-1	HSS	3-0-0-3
Total				23

Semester - IV

S.No	Course No	Course Name	Category	L-T-P-C
1.	CE2020	Structural Analysis	PMT	3-1-0-4
2.	CE2040	Hydraulic Engineering	PMT	3-1-0-4
3.	CE2060	Geology and Soil Mechanics	PMT	3-1-0-4
4.	CE2080	Surveying	PMT	3-1-0-4
5.	CE2100	Surveying Practical	PML	0-0-3-2
6.	MAE2	Mathematics Elective-2	SMA	3-0-0-3
7.	HSE2	Humanities Elective-2	HSS	3-0-0-3
Total				24

Semester - V

S.No	Course No	Course Name	Category	L-T-P-C
1.	CE3010	Transportation Engineering-I	PMT	3-0-0-3
2.	CE3030	Water Resources Engineering	PMT	3-1-0-4
3.	CE3050	Basic Structural Steel Design	PMT	3-1-0-4
4.	CE3350	Geotechnical Engineering	PMT	3-1-0-4
5	CE3410	Construction Materials Laboratory	PML	0-0-3-2
6.	FRE1	Free Elective-1	FRE	3-0-0-3
Total				20

Semester - VI

S.No	Course No	Course Name	Category	L-T-P-C
1.	CE3020	Transportation Engineering-II	PMT	3-0-0-3
2.	CE3040	Environmental Engineering	PMT	3-1-0-4
3.	CE3060	Basic Reinforced Concrete Design	PMT	3-1-0-4
4.	DPE1	Department Elective-1	PMT	3-0-0-3
5.	CE3100	Structural Engineering Laboratory	PML	0-0-3-2
6.	CE4030	Hydraulic and Environmental Engineering	PML	0-0-3-2
7.	FRE2	Free Elective-2	FRE	3-0-0-3
8.	CE3280	Industrial/Research Training	PIT	0-0-0-2
Total				23

Semester - VII

S.No	Course No	Course Name	Category	L-T-P-C
1.	CE4010	Estimation and Construction Management	PMT	3-1-0-4
2.	CE5117	Pavement Analysis and Design	PMT	3-0-0-3
3.	CE5109	Traffic Engineering and Road Safety	PMT	3-0-0-3
4.	CE5195	Pavement Engineering Laboratory	PML	0-0-3-2
5.	CE5197	Traffic Engineering Laboratory	PML	0-0-3-2
6.	MAE3	Mathematics Elective-3	SMA	2-0-0-2
7.	HSE3	Humanities Elective-3	HSS	3-0-0-3
8.	CE4020	Industrial Lecture	PIL	1-0-0-1
Total				20

Semester - VIII

S.No	Course No	Course Name	Category	L-T-P-C
1.	CE5101	Pavement Materials and Construction	PMT	3-0-0-3
2.	CE5022	Traffic Flow Modeling and Simulation	PMT	3-0-0-3
3.	DPE2	Department Elective-2	PMT	3-0-0-3
4.	DPE3	Department Elective-3	PMT	3-0-0-3
5.	FRE3	Free Elective-3	FRE	3-0-0-3
6.	HS3050	Professional Ethics	HPE	2-0-0-2
Total				17

Semester – IX

S.No	Course No	Course Name	Category	L-T-P-C
1.	CE6111	Seminar	PMT	- - - 1
2.	DPE4	Department Elective-4	PMT	3-0-0-3
3.	FRE4	Free Elective-4	FRE	3-0-0-3
4.	CE6151	Project Phase-I	PMP	- - - 10
Total				17

Semester – X

S.No	Course No	Course Name	Category	L-T-P-C
1.	CE6251	Project Phase-II	PMP	- - - 15
2.	FRE5	Free Elective-5	FRE	3-0-0-3
Total				18

Total - 211**Department Electives**

- 1) CE5027 Geotechnical Investigations and Foundation Design
- 2) CE5026 GIS and Remote Sensing
- 3) CE5023 Integrated Impact Assessment
- 4) CE5031 Air Pollution Control Engineering
- 5) CE5206 Ground Improvement and Geosynthetics
- 6) ME5102 Finite Element Method in Engineering Mechanics
- 7) CE5034 Advanced Concrete Technology

Mathematics and Statistics Electives:

Mathematics Elective-3:

- 1) MA5021 Linear Algebra for Engineers
- 2) MA5022 Probability Theory for Engineers
- 3) MA5023 Differential Equations for Engineers