#### <u>PG - Curriculum Structure (Transportation Engg.)</u>

## 1st Semester

Sr. No.	Course Code	Course Name	LTP	Credits
1	CEN521	Program Core-I (Geometric Design of Transportation	3-0-0	3
		Infrastructure)		
2	CEN522	Program Core-II (Advanced Traffic Engineering)	3-0-0	3
3	CEN599	Open Core-I ( Numerical Methods and Optimization	3-0-0	3
		Techniques)		
4		Program Elective-I	3-0-0	3
5		Program Elective-II	3-0-0	3
6	CEN 523P	Program Lab-I (Traffic Engineering Laboratory)	0-0-3	2
Total				17

# $\underline{2^{nd}\ Semester}$

Sr. No.	Course Code	Course Name	LTP	Credits	
1	ENN505	Open Core-II (Design of Experiments and Research	3-0-0	3	
		Methodology)			
2	CEN524	Program Core-III (Construction Project Management and	3-0-0	3	
		BOT System)			
3	CEN525	Program Core-IV (Transportation System Planning and	3-0-0	3	
		Management)			
4		Program Elective-III	3-0-0	3	
5		Open Elective*	3-0-0	3	
6	CEN526P	Program Lab-II** (Pavement Materials and Evaluation	0-0-3	2	
		Laboratory)			
	Total				

<sup>\*</sup>It could be intra/inter department course.

# 3<sup>rd</sup> Semester

Sr. No.	Course Code	Course Name	LTP	Credits
1	CEN601	Case Histories and Industry Experiences*	0-0-2	1
2	CEN602	Seminar and Technical Writing	0-0-2	1
3	CEN698	Project/Industry based Project-I	0-0-24	12
Total				

<sup>\*</sup>To include 4 to 5 Invited lectures by industrial experts.

# 4<sup>th</sup> Semester

Sr. No.	Course Code	Course Name	LTP	Credits
1	CEN699	Project/Industry based Project-II	0-0-36	18
		Total		18

#### List of Department Electives I, II, III

#### **Program Elective-I (Any One)**

Sr. No.	Course Code	Course Name	LTP	Credits

<sup>\*\*</sup>To include minimum of 2 industrial visits of half day duration to nearby industries.

3	CEN529 CEN532	Transportation Economics and Finance Intelligent Transportation Systems	3-0-0 3-0-0	3
4	CEN533	Airport Infrastructure, Planning and Design	3-0-0	3
5	CEN538	Highway Materials, Design and Construction	3-0-0	3
Total				03

#### **Program Elective-II (Any One)**

Sr. No.	Course Code	Course Name	LTP	Credits
1	CEN527	Pavement Management System	3-0-0	3
2	CEN531	Mass Transportation Systems	3-0-0	3
3	CEN534	Advanced Soil Engineering	3-0-0	3
4	CEN535	Advanced Engineering Geology	3-0-0	3
Total				03

## Program Elective-III (Any One)

Sr. No.	Course	Course Name	LTP	Credits	
	Code				
1	CEN 536	Pavement analysis and design	3-0-0	3	
2	CEN 537	Railway Infrastructure, Planning and Design	3-0-0	3	
3	CEN 530	Transportation and Environment	3-0-0	3	
4	CEN 510	Bridge Engineering	3-0-0	3	
5	CEN 514	Advanced Foundation Engineering	3-0-0	3	
Total					
	Program Elective Total 9-0-0				

## <u>List of Open Electives to be offered to other students</u>

Sr. No.	Course Code	Course Name	LTP	Credits	
1	CEN 530	Transportation and Environment	3-0-0	3	
	Total				

**Total Credits: 17+17+14+18 = 66**