

Course Type	Course Code	Name of Course	L	T	P	Credit
DP	CEC211	Transportation Laboratory	0	0	0	2

Course Objective
<ul style="list-style-type: none"> To provide exposure to the students for various tests for characterization of materials used in road construction.
Learning Outcomes
<ul style="list-style-type: none"> Students will get hands on experience on various tests pertaining to pavement material characterization and pavement performance evaluation.

Unit No.	Topics to be Covered	Lecture Hours	Learning Outcome
1	Experiment-1: Determination of crushing value and aggregate impact value aggregate Experiment-2: Determination of abrasion value of aggregate by Los Angeles's abrasion test and determination of specific gravity test Experiment-3: Determination of Flakiness index, Elongation index and Angularity number of aggregates	3	Understating on various tests for characterization of aggregate for road construction.
2	Experiment-4: Determination of penetration value of bitumen Experiment-5: Determination of ductility of bitumen Experiment-6: Determination of softening point and flash and fire point of bitumen of bitumen Experiment-7: Determination of viscosity of bitumen and specific gravity of bitumen	4	Understating on various tests for characterization of bitumen for road construction.
3	Experiment-8: Determination of optimum binder content of bitumen mix by Marshall Stability Method Experiment-9: Determination of bitumen content of bitumen mix	3	Understating on various tests for evaluation of properties of prepared bitumen mix.
5	Project	2	To apply the understating of the conducted experiments to carry out a project on highway materials.

Text Books:

1. Relevant Indian and International Standard codes of practices.