

B.Tech	IV Year	L	T	P	To	C
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CE447 TRANSPORTATION ENGINEERING LABORATORY

Course Description and Objective:

Students are expected to conduct the experiments on Aggregates, Bituminous materials and mixes and also on subgrade soils to find out their properties.

Course Outcome:

- Characterize the pavement materials
- Perform quality control tests on pavements and pavement materials.

Tests on Aggregates

1. Aggregate Crushing value test.
2. Aggregate impact value test.
3. Los Angeles abrasion test.
4. Deval's attrition value test.
5. Shape test: a) Flakiness index test b) Elongation index test c) Angularity number test .
6. Specific gravity Test.

Tests on Bituminous Materials

7. Penetration test.
8. Softening point test.
9. Flash and fire point test.
10. Ductility test.
11. Viscosity test.
12. Bitumen Extractions Test.
13. Specific gravity of Bitumen.

Test on Bituminous Mixes

14. Marshall stability test.

Test on Soil Sub-grade

15. California bearing ratio test