TRANSPORTATION ENGINEERING LABORATORY

Civil Engineering Department,
University of Engineering and Technology, Lahore
LOCATION
Ground Floor, Civil Engineering Department
University of Engineering and Technology, Lahore

OBJECTIVES
1. Provide a platform to undergraduate and graduate students for practical implementation of Transportation Engineering projects.
2. Bring Engineering students to the level of industrial standards in field of Transportation Engineering.
3. Provide a platform for integration of academics and research.
LAB. DIRECTOR
Engr. Ammad Hassan Khan

LAB. ENGINEERS/INSTRUCTORS
1. Engr. Hassan Mujtaba
2. Engr. Muhammad Irfan
3. Engr. Faizan Shafique

LAB. STAFF
1. Mr. Khalid Latif
2. Mr. Zeeshan
3. Mr. Mohammad Ishaq
4. Mr. Mohammad Hafeez
5. Mr. Owais Sadiq
LAB. EQUIPMENT

1. Fine Sieve Shaker
2. Coarse Sieve Shaker
3. Electrical Drying Ovens
4. Los Angeles Abrasion Machine
5. Cleveland Open Cup Flash Point Tester
6. Say Bolt Viscometer
7. Skid Resistance Apparatus
8. Ring And Ball Apparatus
9. Asphalt Mixer
10. Penetrometer
11. Penetrometer
COURSE: TRANSPORTATION ENGINEERING
7th Semester
BSc Civil Engineering

Laboratory Tests for Bituminous Materials

Sr. #  Test
1. Penetration Test
2. Ductility Test
3. Specific Gravity
4. Softening Point Test
5. Solubility Test
6. Foaming Test
7. Loss on Heating Test
8. Thin Film Oven Test
9. Adhesion/Stripping Test
10. Fire Point Test
11. Flash Point Test
12. Kinematics Viscosity (for Bitumen)
    (for Liquid Asphalt)
13. Bitumen Content Determination
14. Job Mix Design ||(JMF) and Marshall Stability Test
15. Highway Surface Frictional Properties using British Pendulum Skid Resistance Tester
## Laboratory Tests for Aggregates

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Test</th>
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<tbody>
<tr>
<td>1.</td>
<td>Gradation/Sieve Analysis</td>
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<tr>
<td>2.</td>
<td>Specific Gravity Test and Water Absorption</td>
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<td>3.</td>
<td>Unit Weight</td>
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<td>4.</td>
<td>Clay lumps and Friable Particles</td>
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<td>5.</td>
<td>Materials Finer than #200 Sieve</td>
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<td>6.</td>
<td>Los Angeles Abrasion Test</td>
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<td>7.</td>
<td>Shape Test (Flaky and Elongation)</td>
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<td>8.</td>
<td>Maximum Lab. Dry Density</td>
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<td></td>
<td>a. Standard Procter</td>
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<td>b. Modified Procter</td>
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<td>9.</td>
<td>Soundness Test</td>
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<td>10.</td>
<td>Field Determination of Dry Density</td>
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<td>11.</td>
<td>Angularity Number</td>
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<td>12.</td>
<td>Organic Impurities Determination</td>
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Laboratory Tests

Sr. #  Test

1. Determination of moisture content of wood
2. Study of different type of construction materials
3. Determination of finess modulus of sand
4. Determination of finess modulus of cement
5. Determination of solubility of wood
6. Determination of specific gravity of wood
Students Conducting Laboratory Tests
Students Conducting Laboratory Tests
Students Conducting Laboratory Tests