



Course Weekly Outline

Week No.	Theoretical	Experimental
1	Introduction	Road materials identification and testing
2	Bituminous Materials, Test for Asphalt	Aggregate gradation analysis
3	Bituminous Materials, Test for Asphalt	Bitumen property tests
4	Aggregate, Physical Properties of Methods of Blending	Marshall mix design
5	Aggregate, Physical Properties of Methods of Blending	Asphalt specimen preparation
6	Bituminous Mix Design, Marshal Mix Design	Compaction testing
7	Bituminous Mix Design, Marshal Mix Design	Pavement thickness evaluation
8	Stress distribution through the pavement, Calculation of stresses and deflections	Field density test
9	Stress distribution through the pavement, Calculation of stresses and deflections	California Bearing Ratio (CBR) test
10	Design Introduction to Pavement, Types of Pavements, CBR Design Method	Road geometric design exercises
11	Design Introduction to Pavement, Types of Pavements, CBR Design Method	Traffic data collection and analysis
12	Flexible pavement design methods, AASHTO Design Methods	Laboratory evaluation of pavement materials according to standard specifications
13	Rigid Pavement, Rigid Pavement Types, Types of Joints in Rigid Pavement	Road materials identification and testing
14	Rigid Pavement, Critical load position, Temperature Stresses	Aggregate gradation analysis
15	Applications of PDE	Bitumen property tests