



Dubai Central Laboratory – Training Services		
Section: Engineering Materials Laboratory		
#	Chemical Analysis Training Programs	Durations/ Days
1	Chemical analysis by optical emission spectrometry (Steel Testing)	1
2	Chemical Analysis by X-ray (Cement Test)	3
3	Determination of water content, flashpoint, distillation of cutback asphaltic (bituminous) and emulsified asphalt	3
4	VOC content of paints and related coatings by GCMS (Gas chromatograph with mass spectrometer theory and technique)	3
5	Determination of lead (Pb) in paint by atomic emission spectrometry (ICP-AES)	2
6	VOC content of paints, adhesives, sealants and various materials by difference method	3
#	Green Building Materials Testing Training Programs	Durations/ Days
7	Energy saving insulation material for building (A theoretical approach)	1
8	Green Building Concept	1
9	Testing of Green Materials based on Dubai Conditions	1
10	Different type of thermal insulation materials used for building and its advantages and disadvantages (A theoretical approach)	1
11	Chemical analysis by optical emission spectrometry (Steel Testing)	1
#	SUPERPAVE Training Programs	Durations/ Days
12	Specimens Preparation for Rutting (APA) and Indirect Tensile Strength (ITD) Test	1
13	Determining Rutting Susceptibility of HMA by APA	1
14	Indirect Tensile strength Test of HMA	1
15	Determining the Effect of Binder on Performance of Asphalt Mixture by Comparative Test of Original binder vs RTFO Aged binder by Dynamic Shear Rheometer & Rotational Viscosity	1
16	Determining the Effect of Binder on Performance of Asphalt Mixture by Comparative Test of Original binder vs Modified binder by Dynamic Shear Rheometer & Rotational Viscosity	1



17	Superpave Method of Mix Design: Overview	1
18	Superpave Method of Mix Design: Specimens Preparation (Batching, Mixing, Gyrotory compaction, Gmm & Density determination)	1
19	Superpave Method of Mix Design: Volumetric Determination/Selection of optimum asphalt content	1
20	Testing of Binder as per SHRP Requirements: Rotational Viscosity Test	1
21	Testing of Binder as per SHRP Requirements: Rolling Thin Film Oven Test/percentage of mass change	1
22	Testing of Binder as per SHRP Requirements: Pressure Aging Vessel Test	1
23	Testing of Binder as per SHRP Requirements: Dynamic Shear Rheometer Test on aged binder	1
24	Testing of Binder as per SHRP Requirements: Ductility Test/Elastic Recovery Test	1
25	Testing of Aggregate as per SHRP Requirements: Aggregate Gradation	1
26	Testing of Aggregate as per SHRP Requirements: Coarse Aggregate Angularity/Unit weights (loose & rodding)	1
27	Testing of Aggregate as per SHRP Requirements: Fine Aggregate Angularity & Clay content (SEqv)	1
28	Testing of Aggregate as per SHRP Requirements: Flat and Elongated particles/ Fully Crushed Face & Partially Crushed Face	1
29	Testing of Aggregate as per SHRP Requirements: Toughness Test (Los Angeles abrasion/ Micro-Deval)	1
#	Other Training Programs	Durations/ Days
30	Site Investigation Works Overview	1
31	Site Investigation Methods	1
32	Site Investigation Mobilization & Installation of Rig Machine, Explanation/Calibration of Drilling Rigs accessories	1
33	Site Investigation Field Works – Light Cable Percussion/Rotary Core Drilling	1
34	Site Investigation Field Works – Mechanical Augers	1
35	Site Investigation Field Works – Wash Boring/Standard Penetration Test	1
36	Site Investigation Field Works – Dynamic Cone Penetration Test	1
37	Site Investigation – Soil Classification	1
38	Soil Investigation – Laboratory Testing	1
39	Site Investigation – Borehole Logs, N values calculation/Reporting	1