Course Number and Name

BCE4L2 - SOIL MECHANICS LABORATORY

Credits and Contact Hours

2 & 45

Course Coordinator's Name

Mr.K.Venkatraman

Course Description

- To understand and assess both Physical and Engineering behavior of soils through laboratory testing procedures.

Prerequisites	Co-requisites
Soil Mechanics	NIL

required, elective, or selected elective (as per Table 5-1)

Course Outcomes (COs)

CO1	To learn about the different type of soil according to their classification and their size distribution
CO2	To determine the soil's property and their atterberg's limit.
CO3	To have a clear understanding about determining the optimum moisture
CO4	About the compressive strength of the soil which is obtain from the site.
CO5	To know about permeability of the soil, consolidate test on the soil.

Student Outcomes (SOs) from Criterion 3 covered by this Course

COs/SOs	a	b	c	d	e	f	g	h	i	j	k
CO1	M	H	M	M	M						
CO2	L	M	H								
CO3			M	M							
CO4	L										
CO5			M	M							

List of Topics Covered

LIST OF EXPERIMENTS

1. Grain size distribution - Sieve analysis
2. Grain size distribution - Hydrometer analysis
3. Atterberg limits test
4. Determination of moisture - Density relationship using standard proctor.
5. Permeability determination (constant head and falling head methods)
6. Determination of shear strength parameters.

a) Direct shear test on cohesion less soil

b) Unconfined compression test on cohesive soil

c) Tri axial compression test on cohesion less soil