

1.	Title of the course	Ground Improvement and Geosynthetics Laboratory
2.	Course number	CE526P
3.	Structure of credits	0-0-3-2
4.	Offered to	PG
5.	New course/modification to	Modification To CE5294/11
6.	To be offered by	Department of Civil and Environmental Engineering
7.	To take effect from	July 2022
8.	Prerequisite	Nil
9.	Course Objective(s): To provide hands on experience with testing of soils with different types of ground improvement and ascertain the improved performance. To impart knowledge on conducting various types of tests for determining the physical, mechanical and hydraulic properties of geosynthetics materials.	
10.	Course Content: Determination of improved properties of compacted soils; Consolidation tests on soils with granular inclusions; Determination of strength and compaction characteristics of soils stabilised with fibres, fly ash, and chemical additives; Determination of physical and strength properties of geosynthetics materials; Evaluation of interface shear strength parameters of various interfaces.	
11.	Textbook(s): 1. Bowles J, <i>Engineering Properties of Soils and their Measurement</i> , 4th Edition, McGraw-Hill (2001). 2. Rao G V and Pothal G K, <i>Geosynthetics Testing - A Laboratory Manual</i> , 1st Edition, Sai Master Geoenvironmental Service Pvt. Ltd. (SAGES) (2008).	
12.	Reference(s): 1. Head K H, <i>Manual of Soil Laboratory Testing, Vol. I, II, and III</i> , 3rd Edition, Whittles Publishing (2006).	