



AMBO UNIVERSITY WOLISO CAMPUS
DEPARTMENT OF CONSTRUCTION TECHNOLOGY AND
MANAGEMENT

Course Number **CEng 2182**

ECTS credits. 5 Cr. Hrs. 3

Course Title: **Soil Mechanics**

Academic Year: 2019/20 G.C

Pre-requisites: Strength of material

COURSE OUTLINE

Introduction

1. *Origin and formation of Soils and Soil Categories.*
2. *Simple Soil properties*
3. *Classification of Soils for Engineering purposes,*
4. *Water in Soils:*
 - 4.1 *Soil Moisture,*
 - 4.2 *Permeability,*
 - 4.3 *Seepage through Soils,*
- 5.. *Compressibility and Consolidation: -*
 - 5.1 *One -dimensional Consolidation Theory.*
6. *Vertical Stress Distribution and Settlement Analysis*
- 7.. *Moisture Density Relationship,*
 - 7.1 *Compaction of soil in the Field.*
8. *Lateral Earth pressure, Slope stability*

Mark Distribution

- Assignments20%*
Continuous Assessment20%
Lab.....20%
Final Examination40%

References:

- 1 . *Budhu M. (2000), Soil Mechanics and Foundations,*
2. *Lambe, T. W., Whitman, R. V. (1999), Soil Mechanics, John Wiley & Sons Inc*

Instructor: Solomon K