

Geotechnical Engineering Laboratory

CIVILEN 3541

Credit Hours:

1.00 - 1.00

Course Components:

Lab

Course Description:

Laboratory determination of soil properties including grain size distribution, plasticity, permeability, compaction and shear strength (both drained and undrained).

Course must be taken concurrently with 3540, 5561 or 5571. The 3541 course requirement may be waived in 5561 and 5571 by the instructor, if the student demonstrates previous completion of a similar lab program.

Prerequisites and Co-requisites:

Concur: 3540, 5561, or 5571.

Course Goals / Objectives:

- This Geotechnical Engineering course must be taken concurrently with 3540, 5561 or 5571.
- The laboratory experiments that the students perform allow the determination of specific soil properties including grain size distribution, plasticity, permeability, compaction and shear strength (both drained and undrained).
- Students perform tests to classify soils, and determine the mechanical and hydraulic conductivity properties that Geotechnical Engineers use when soils are used as construction materials (e.g., for building levees and earth dams)
- and for the support of buildings and other civil engineering structures (e.g., for foundations engineering).