



INSTITUTE OF  
MANAGEMENT &  
TECHNOLOGY

INNOVATION • MOTIVATION • TRANSFORMATION

# **GEOTECHNICAL ENGINEERING LAB (P-25002)**

- 1) To determine the moisture content of a given sample of soil.
- 2) Auger Boring and Standard Penetration Test:
  - a. Identifying the equipment and accessories
  - b. Conducting boring and SPT at a given location
  - c. Collecting soil samples and their identification
  - d. Preparation of boring log and SPT graphs
  - e. Interpretation of test results
- 3) Extraction of Disturbed and Undisturbed Samples Extracting a block sample:
  - a. Extracting a tube sample
  - b. Extracting disturbed samples for mechanical analysis.
  - c. Field identification of samples
- 4) Field Density Measurement (Sand Replacement and Core Cutter Method):
  - a. Calibration of sand
  - b. Conducting field density test at a given location
  - c. Determination of water content
  - d. Computation and interpretation of results
- 5) Liquid Limit and Plastic Limit Determination:
  - a. Identifying various grooving tools
  - b. Preparation of sample
  - c. Conducting the test
  - d. Observing soil behavior during tests
  - e. Computation, plotting and interpretation of results

**Department of  
Civil Engineering**