

Geotechnical Engineering

In-Situ Soil Mechanics



CIV ENG 5001

Coming Summer 2021

CREDIT: 3 hours

This course offers students an increased knowledge base of modern testing methods outside of conventional lab settings.

Students will learn to:

- Conduct specific measurements of soil attributes
- Develop project site soil profiling and characteristics
- Monitor construction such as soil densification

This course supplements the existing courses in geotechnical engineering and gives additional and innovative perspectives on in-situ soil testing.

In-person Section - 5001 #71244
Distance Section - 5001 #71247

This course will cover in detail the tools and methods of in-situ soil testing, as well as the interpretations of the test results.

It will combine lectures and a 3-day field testing demonstration and exercise in cooperation with MoDOT testing and data gathering from the two most used in-situ testing methods — Standard Penetration Testing (SPT) and Cone Penetration Testing with Piezometric Readings (CPTU) and Seismic Readings (SCPTU). It will also include lectures on Vane Shear Testing, Pressuremeter Testing (PMT) and Dilatometer Testing (DMT).

For those that can not attend in person, a virtual option will be presented.

MISSOURI S&T



CIVIL, ARCHITECTURAL AND ENVIRONMENTAL ENGINEERING

FOR MORE INFORMATION contact Dr. Kevin McLain by email at kwmb6a@mst.edu.