

ENCE-743: (UMD) Soil Dynamics and Earthquake Engineering

Theory of vibration and wave propagation in elastic media. Field and laboratory methods for determining dynamic soil properties. Analysis and design of soil-foundation systems subjected to machinery-generated vibrations and methods of foundation isolation. Earthquake causes, magnitude and intensity, seismic hazard evaluation, NEHRP site classification, site response analyses and ground motion amplification, liquefaction, and response of earth structures. Prerequisites: CIEG-434

Credits: 3

Program: Civil Engineering