

**CE636A: Geotechnical Earthquake Engineering****3-0-0-0 [9]****Course Contents:**

Introduction; Seismic Hazards: Mitigation of Seismic Hazards, seismology and earthquakes, strong ground motion, seismic hazard analysis; Wave propagation in unbounded media: in semi infinite bodies, in layered soils and attenuation of stress waves; Dynamic soil properties; Ground response analysis; Effect of local site conditions on ground motion; Liquefaction: evaluation of liquefaction hazards, effects of liquefaction; Case studies.