## **GEOTECHNICAL EARTHQUAKE ENGINEERING**

3-0-0-0-9

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 the ground motion; Liquefaction: evaluation of liquefaction hazards, effects of liquefaction; Case studies.