Course Name:
Soil Dynamics

Course Number:
20441

Credit:
3

Course Content (outline):

1. Introduction
2. Characteristics of Dynamic Problems
3. Fundamentals of Vibrations
4. Wave Propagation
5. Representation of Stress-Strain Relations in Cyclic Loading
6. Dynamic Soil Properties
7. Foundation Vibration
8. Liquefaction
9. Dynamic Bearing Capacity of Shallow Foundations
10. Dynamic Lateral Earth Pressure

References:

- Soil Dynamics, Shamsher Prakash, 1981, Mac Graw Hill
- Geotechnical Earthquake Engineering, Ikuo Towhata, 2008, Springer