

Faculty of Engineering & Technology

Structural Dynamics & Earthquake Engineering

Information:

Course Code: SCMx17 Level: Undergraduate Course Hours: 3.00- Hours

Department: Structural Engineering & Construction Management

Description:

Un-damped and damped free vibration analysis of SDOF systems, Response of SDOF system to harmonic loading, Free vibration analysis of MDOF systems, The nature of earthquake ground motion, Seismicity of the world and of Egypt, Causes of earthquakes, basic glossary and terminology, Seismic waves, Quantification of earthquakes, Damage mechanism, Characteristics of earthquake ground motions, Philosophy of design, Response spectrum analysis.