

CE 5003

Structural Dynamics

4 ch (3C 2L)

Dynamic equilibrium of structural engineering problems with topics including linear dynamics, discrete and continuous systems, free and forced vibration, transient response using numerical integration and Duhamel's integral, and modal analysis of multi-degree-of-freedom systems. Practical problems exploring structures under dynamic loads such as earthquake, wind, and blast are covered.

Prerequisite: CE2033 and either CE3053 or CE3063 and either CE3933 or CE2913