

Structural dynamics with applications in earthquake and wind engineering

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20509734&lokasi=lokal>

Abstrak

This book offers a comprehensive introduction to the theory of structural dynamics, highlighting practical issues and illustrating applications with a large number of worked out examples. In the spirit of learning by doing it encourages readers to apply immediately these methods by means of the software provided, allowing them to become familiar with the broad field of structural dynamics in the process.

The book is primarily focused on practical applications. Earthquake resistant design is presented in a holistic manner, discussing both the underlying geophysical concepts and the latest engineering design methods and illustrated by fully worked out examples based on the newest structural codes. The spectral characteristics of turbulent wind processes and the main analysis methods in the field of structural oscillations due to wind gusts and vortex shedding are also discussed and applications illustrated by realistic examples of slender chimney structures.

The user‐friendly software employed is downloadable and can be readily used by readers to tackle their own problems.