

ME 614 Random Vibrations (3-0-0-6)

Introduction to probability theory, random process. Excitation response relations for stationary random processes- single and multi-degree of freedom system with linear and non-linear characteristics, continuous systems. Failure due to random vibration in mechanical systems. Brief discussion on measurement and processing of random data.

Textsbooks:

- [1] D. E. Newland, *An Introduction to Random Vibrations and Spectral Analysis*, Second Ed., Longman Inc., NewYork, 1984
- [2] N. C. Nigam, *Introduction to Random Vibrations*, MIT Press, Cambridge, 1983