



THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI-15

(A Govt. Aided Autonomous Institution affiliated to Anna University)

- *where Quality and Ethics matter*



QEEE COURSES

VIBRATION - THEORY OF VIBRATION / DYNAMICS OF MACHINES / THEORY OF MACHINES / STRUCTURAL DYNAMICS

COURSE CONTENT:

Nature of Vibration – Harmonic and Transient Vibration, Lumped Parameter modeling for vibratory system, Phasor / complex exponential representation of harmonic quantities.

Single degree of freedom vibration analysis, Free vibration, Damped and Undamped vibration, Natural Frequency, Logarithmic decrement.

Forced harmonic vibration, Resonance, Support motion, Transmissibility