Indian Institute of Science



Mechanical Engineering Indian Institute of Science Bengaluru, 560 012 India E-mail: chair.me@iisc.ac.in

URL: www.mecheng.iisc.ac.in

Telephone: +91 (80) 2293 2332 (office)



ME 240 (JAN) 3:0

Dynamics and Control of Mechanical Systems

Instructor(s): Ashitava Ghosal, Jayanth G R, Jishnu Keshavan

Course description:

Representation of translation and rotation of rigid bodies, degrees of freedom and generalized coordinates, motion of a rigid body and multi-body systems, Lagrangian and equations of motion, small vibrations, computer generation and solution of equations of motion, review of feedback control, PID control, root locus, Bode diagrams, state space method, control system design and computer simulation.

Prerequisites: Greenwood, D.T., Principles of Dynamics, Second Edn., Prentice Hall
Resources:
Outcomes:
Additional information:
Course website: