

# NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

NPTEL Video Course - Mechanical Engineering - Engineering Mechanics

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Co-ordinating Institute - IIT - Guwahati

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

- Lecture 1 - Fundamentals Of Engineering Mechanics
- Lecture 2 - Equations of Equilibrium
- Lecture 3 - Truss Analysis - Part 1
- Lecture 4 - Truss Analysis - Part 2
- Lecture 5 - Analysis of Frames Machines
- Lecture 6 - Internal Forces
- Lecture 7 - Internal Forces in Beams
- Lecture 8 - Cables
- Lecture 9 - Friction
- Lecture 10 - Application of Friction - Part 1
- Lecture 11 - Application of Friction - Part 2
- Lecture 12 - Application of Friction - Part 3
- Lecture 13 - Centroids Center of Mass
- Lecture 14 - Centroids Area of Moments
- Lecture 15 - Product of Inertia, Rotation of Axis and Principle Moments of Inertia
- Lecture 16 - Principle Mass Moments of Inertia
- Lecture 17 - Second Moment of Mass
- Lecture 18 - Virtual Work of Ideal System
- Lecture 19 - Principle of Virtual Work
- Lecture 20 - Systems with Friction
- Lecture 21 - Potential Energy
- Lecture 22 - Stability of Equilibrium
- Lecture 23 - Kinematics of a Particles
- Lecture 24 - Kinematics of a Particle Moving on a Curve
- Lecture 25 - Relative Motion
- Lecture 26 - Plane Kinematics of Rigid Bodies
- Lecture 27 - Kinematics of a Particle
- Lecture 28 - Work and Energy
- Lecture 29 - Impulse and Momentum

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- Lecture 30 - Direct and Oblique Impulse
- Lecture 31 - Plane Kinetics of Rigid Bodies
- Lecture 32 - Kinetics of a Body
- Lecture 33 - Method of Momentum and Analysis of Robot Manipulator
- Lecture 34 - Kinematics in 3D
- Lecture 35 - Kinetics in 3D
- Lecture 36 - Free Vibration
- Lecture 37 - Forced Vibration Damped Undamped
- Lecture 38 - Vibration of Rigid Bodies - Part 1
- Lecture 39 - Vibration of Rigid Bodies - Part 2
- Lecture 40 - Some Problems of Vibration