Faculty of Engineering & Technology

Dynamics of Rigid Bodies (Mechanics3)

Information :

Course Code :	MEC 221	**Level :**	Undergraduate	**Course Hours :**	3.00- Hours

Department : Department of Petroleum Engineering

Instructor Information :

Title	Name	Office hours
Associate Professor	Arafa Soliman Sobh Khalil Arafa	2

Description :

Types of planar motion of rigid body (R.B.), Angular velocity and velocity relation, Angular acceleration and acceleration relation, Equations of General planar motion of a R.B., Translational motion, Motion about a fixed axis, and General motion including friction, Principle of work and kinetic energy, Conservative forces and principle of conservation of mechanical energy, Linear and angular impulse, Principles of impulse and momentum, Impulsive forces, Inelastic and eccentric impact, Free undamped vibrations of R.B., Damped free vibrations, Forced damped and undamped vibrations of R.B.

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