

Faculty of Engineering & Technology

Dynamics of rigid bodies

Information :

Course Code : MEC261

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Mechatronics Engineering

Instructor Information :

| Title | Name | Office hours |
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| Lecturer | AMR MOHAMED METWALLY ISMAIEL | 3 |
| Teaching Assistant | Donia Waheed Mohamed Abdelmonem Saleem | |

Description :

Types of planar motion of rigid body; Kinematics of Rigid bodies: Translational, Rotational, and General Plane Motion Equations. Instantaneous center, Relative velocity and Relative acceleration. Kinetics of rigid bodies: Newton's laws and equations of motion. Principle of work and energy, Conservation of mechanical energy, Linear and angular impulse. Principle of impulse and momentum, Conservation of Momentum.