

AE 2220 – Dynamics
Fall 2026

Course description

Motion of particles and mass center of bodies, kinematics and kinetics of rigid bodies in plane motion, work-energy and impulse-momentum methods, 3-D dynamics of rigid bodies.

Prerequisite: COE 2001 – Statics, MATH 2552 – Differential Equations (co-requisite)

Instructor: Prof. Mayuresh Patil

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Graduate Teaching Assistant: Martin Mure

Website

Canvas will be used for all course related information.

Grading distribution

Graded work	Weight
~18 Homeworks	25%
1+3 Creative Assignments	15%
3 Tests	30%
Project	10%
Final (comprehensive)	20%
Total	100%

Text

No text book required. Slides will be uploaded on Canvas.

Topics Covered

- Newton's second law of motion and Euler's first and second laws of motion
- Motion of particles and mass center of bodies
- Kinematics of plane motion of rigid bodies
- Kinetics of rigid bodies in plane motion
- 3-D dynamics of rigid bodies

Learning Accommodations: <https://disabilityservices.gatech.edu>

Student-Faculty Expectations Agreement: <https://catalog.gatech.edu/rules/21/>

Georgia Tech Honor Code: <https://policylibrary.gatech.edu/student-life/academic-honor-code>