MECH 542. SPACECRAFT DYNAMICS.

Credits: 3

Offered by: Mechanical Engineering (Faculty of Engineering)

Terms offered: Fall 2025

View offerings for Fall 2025 in Visual Schedule Builder.

Description

Review of central force motion; Hohmann and other coplanar transfers, rotation of the orbital plane, patched conic method. Orbital perturbations due to the earth's oblateness, solar-lunar attraction, solar radiation pressure and atmospheric drag. Attitude dynamics of a rigid spacecraft; attitude stabilization and control; attitude manoeuvers; large space structures.

- Course description change awaiting University approval
- (3-0-6)
- Prerequisite (Undergraduate): MECH 220. Corequisite: MECH 412 or MECH 419