MECH 535. TURBOMACHINERY AND PROPULSION.

Credits: 3

Offered by: Mechanical Engineering (Faculty of Engineering)

Terms offered: Fall 2025

View offerings for Fall 2025 in Visual Schedule Builder.

Description

Introduction to propulsion: turboprops, turbofans and turbojets. Review of thermodynamic cycles. Euler turbine equation. Velocity triangles. Axial-flow compressors and pumps. Centrifugal compressors and pumps. Axial-flow turbines. Loss mechanisms. Dimensional analysis of turbomachines. Performance maps. 3-D effects. Introduction to numerical methods in turbomachines. Prediction of performance of gas turbines.

- (3-0-6)
- Corequisites: MECH 430
- Prerequisite: MECH 331.