

AERO 150: Introduction to Rocketry

This is a general introductory course to rocket science. Principles of propulsion, aerodynamics, and safety protocols for design and ground operations are stressed.

Credits: 3

Lecture Hours: 3

Designation: DP

Program: Aeronautics

Recommended:

Credit in Math 25, 26, 29, 82, or higher.

Student Learning Outcomes:

- Demonstrate a solid understanding of propulsive methods, especially as pertains to space.
- Solve applicable problems of spacecraft kinematics, dynamics, and energy considerations.
- Apply the laws of planetary motion and celestial mechanics.
- Outline the historical development of manned and unmanned space flight.
- Identify and describe the appropriate instruments, detectors and space probes used by astronomers and space scientists to explore the solar system, especially in the area of remote sensing.
- Discuss the future of space colonization and exploitation.