

MECH 516. COMPUTATIONAL GASDYNAMICS.

Credits: 3

Offered by: Mechanical Engineering (Faculty of Engineering)

Terms offered: Winter 2026

[View offerings for Winter 2026 in Visual Schedule Builder.](#)

Description

Fundamentals of computational fluid dynamics. Numerical methods for hyperbolic conservation laws: first- and higher-order upwind schemes; monotonicity and Godunov theorem; total-variation-diminishing schemes; Riemann solvers; treatment of source terms; multi-dimensional methods. Introduction to grid generation and adaptation. Methodology for the comparison of numerical and experimental results.

- (3-0-6)
- Prerequisite(s): MECH 430 or permission of instructor

Most students use Visual Schedule Builder (VSB) to organize their schedules. VSB helps you plan class schedules, travel time, and more.

[Launch Visual Schedule Builder](#)