

# M E 529: Aerodynamics MECHANICAL ENGINEERING

Application of fluid mechanics concepts to describe the flow field and to calculate lift and drag forces as well as moments around wings and bodies at both subsonic and supersonic speeds. This is accomplished via the following methods: application of ideal flows and superposition to aerodynamic situations; introduction to conformal mapping, thin-wing and slender body theories; application of linearized potential flow for compressible flow in both subsonic and supersonic aircraft; shock- expansion theory.

3 Credits

## **Prerequisites**

Engr 323: Fluid Mechanics

#### **One-way corequisites**

• M E 401: Thermo-Fluid Dynamics

## Instruction Type(s)

Lecture: Lecture for M E 529

## **Subject Areas**

Mechanical Engineering

The University of Mississippi is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award certificates and baccalaureate, master's, specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, call 404-679-4500, or visit online at www.sacscoc.org for questions about the accreditation.

