AERODYNAMICS LAB

EXPERIMENTS

- **Venturi Tube**
  - Static Pressure
  - Volume flow
- **Open Aerodynamic Working Station**
  - Air resistance vs. wind speed
  - Air resistance vs. cross section area
- **Wind Tunnel Station**
  - Lift & Drag Force
  - Angle of attack
  - Flow velocity
  - Volume flow
  - Dynamic pressure
  - Bernoulli equation

This laboratory course introduces students to the concepts of engineering measurement and experimentation in aerodynamics . It develops physical understanding through experimentation as students analyze raw data and organize the results into a comprehensive lab report.

Major Equipment

- Venturi Tube
- Open Aerodynamic Working Station
- Wind Tunnel Station

Attachments

- Airfoil geometry model
- Suction & pressure fan
- Measurement trolley: lift & drag forces
- Prandtl pressure probe
- Precision manometer
- Cassy software device
- Aerodynamic accessories
- Dynamometer