UNITED STATES MILITARY ACADEMY
WEST POINT®

Aeronautical Engineering Minor

Structure:

- Required:
  - ME387: Introduction to Applied Aerodynamics
  - ME481: Aircraft Performance and Stability
  - ME388: Helicopter Aeronautics
- Select 2 of 7
  - XE472: Dynamic Modeling and Control
  - ME389/489*: Advanced Studies in ME
  - EE489*: Individual Studies in EE
  - EE360: Digital Computer Logic
  - EE477: Communication Systems
  - MC312: Thermal-Fluid Systems I

  * Required to have aeronautical focus

Motivation:

- Aircraft are increasingly important to Army
  - Largest operator of rotorcraft
  - Largest operator of UAS
- Consistently strong interest in Aeronautical courses
- Augment Mechanical Engineering courses with an Aeronautical minor on your transcript

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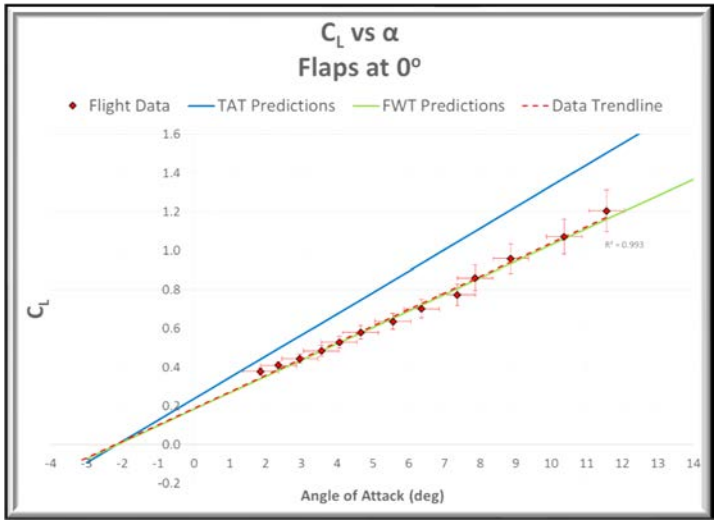
ME387: Introduction to Applied Aerodynamics

- Highlights:
  - Airplane aerodynamics
  - Airfoil design and testing in a wind tunnel
  - Cessna 182 Flight Lab
- Why take this?
  - Learn how/why objects fly…and more
  - Apply concepts from multiple courses
  - Combine theory, simulation, experimentation
- Admin:
  - *Prerequisites: MC300 and MC311*
  - *Co-requisite: MC312*
  - *Offered: Every Spring semester*



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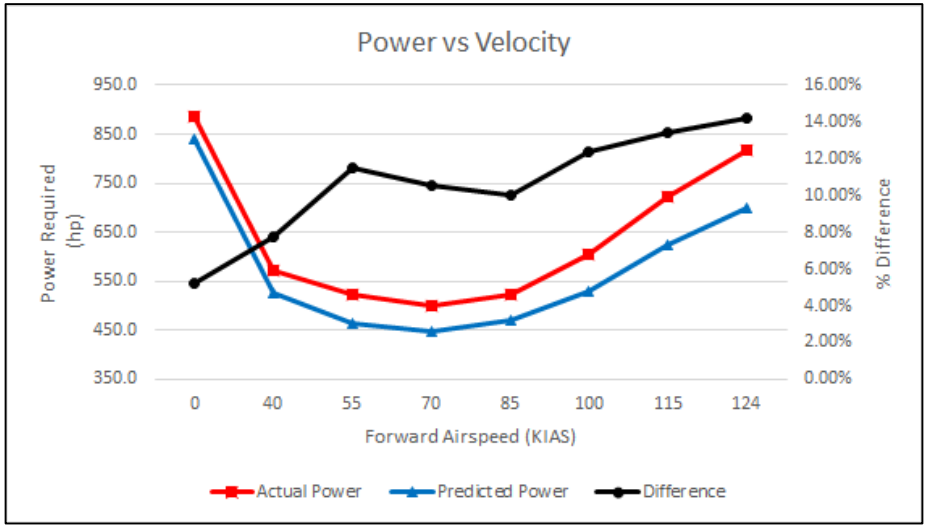
ME388: Helicopter Aeronautics

- Highlights:
  - Lakota Flight Lab
  - Trip to Sikorsky
- Why take this?
  - Learn more about helicopters
  - Apply concepts from many ME courses
- Admin:
  - Prerequisite: ME370 or equivalent
  - Offered every Spring semester



ME481: Performance and Stability

- Highlights:
  - Airplane performance
  - Two Cessna 182 Flight Lab
  - Trip to the USS Intrepid
  - Glider design and competition
- Why take this?
  - Learn about fixed wing aircraft performance
  - Discover static and dynamic stability of aircraft
  - Design, experiment, theorize, explore
- Admin:
  - *Prerequisites: ME387*
  - *Offered: Every Fall semester*