

AE 543 - Aerospace Systems Engineering II

Tuesday – Thursday - 9:30-10:50

This course addresses the fundamental aerospace industry methods for control of an engineering development effort of a complex aerospace system typical in development of spacecraft, launch vehicles, aircraft, remotely controlled vehicles, and associated supporting infrastructure systems in the current acquisition environments. Standards and techniques to control risk, integration of technologies, and exploration of “design-to” process tailoring and systematically make design decisions. The student is exposed to the accepted documentation standards and verification practices for the System Engineering.

SE Concept Review

- Interface Identification and management
- Modeling and Simulation
- Maintaining Design Integrity
- “Design-To” Requirements
- Solution Selection and Decision
- System Robustness
- Integration and Verification

Grading

- Homework exercises
- Group project assignments & presentations
- Individual project assignments & presentations

Prerequisites

- Graduate level standing
- Degree in Engineering
- AE 542 - Aerospace Systems Engineering I
- Consent of Instructor