

FLIGHT VEHICLE DESIGN AND FLIGHT TESTING

Faculty Advisor:

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Overview:

Student teams work on design, manufacture and flight testing of Aeronautical and Space Vehicles and Subsystems. Flight vehicle term describes a broad class of crafts for transporting payloads through the atmosphere and space. Students can receive design credits by signing up for 184 A/B and/or 199 units or work on more advanced aspects for MS thesis research with Dr. Sarigul-Klijn.

Aircraft Design Project: “AEROBRICK” design project was established by Professor Sarigul-Klijn in September 1994 and since then it has become a yearly event for Mechanical and Aeronautical Engineering students. Each year students participate in the national Aero Design Collegiate Competition, in which the students design, manufacture and flight test a fully composite, radio controlled airplane.

This yearlong project allows students to get hands on experience in designing light weight structures, aeroelasticity; aerodynamics; propulsion; stability and control; performance and flight testing. Each year Professor Sarigul-Klijn forms the team during the fall quarter and design, manufacturing and flight-testing take place during the winter and spring quarters



1998 AEROBRICK TEAM and THEIR AIRPLANE

Placed second in the nation by lifting 27.5 pounds—just a fraction less than the 27.7 pounds carried by the first place. The airplane empty weight was 6 pounds.

Rocket Project:



Soft Landing System:

Vibration Isolator for Satellite Systems: