

AAE490 – Aircraft Conceptual Design

Instructor:

Thiago Guimaraes

Description:

The class is designed to provide a structured framework for students to engage in aerospace engineering design competitions. Throughout the course, students will receive continuous support and mentorship from experienced faculty and staff, ensuring they have the guidance to succeed in their design competitions.

Emphasis is placed on developing and utilizing advanced engineering tools, focusing on meeting deadlines, and maintaining the highest technical quality for competition deliverables.

Students will work on Request for Proposals (RFPs) for their team's competition, including PART, SAE, DBF, or GoAero 3rd stage. In the spring semester, seniors enrolled in AAE490 must take the Design-Build-Fly version of AAE 451, which focuses on detailed analysis, building parts, and flight tests.

Prerequisites:

Junior standing in AAE, being part of an AAE design competition student organization, and getting instructor approval. This class serves as a precursor to AAE451 in Spring.

The logo for PART (Purdue Aircraft Research Team) features the letters 'P', 'A', 'R', and 'T' in a bold, black, sans-serif font. The letter 'A' is replaced by a yellow triangle pointing upwards.