

SAE Aero uOttawa

SAE Aerospace University of Ottawa

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The Beginning



SAE Aero Design, also known as the SAE Aero Design Collegiate Design Series, is a series of competitive mechanical engineering events held in the United States and Brazil every year. It is conducted by the SAE International.

SAE Aero Design competition has three categories as follows; Regular class, Advanced class, and Micro class. The SAE Aero Design competition is intended to provide undergraduate and graduate engineering students with a real-life engineering challenges. Namely, being in a design competition, students will find themselves performing trade studies and making compromises to arrive at an effective solution that will optimally meet the mission requirements while still conforming to the configuration limitations.

The importance of interpersonal communication skills is sometimes overlooked, yet both written and oral communication skills are vital in the engineering workplace. To help teams develop these skills, a high percentage of a team's score is devoted to the design report and the oral presentation required in the competition.

Regular Class: requires teams to construct a plane within specified parameters annually updated on the SAE Aero Design website. Each team is judged on three categories: Oral presentation, written report, and flight. The objective of the regular class is to design and construct a radio-controlled model aircraft that will lift the largest payload while still maintaining structural integrity.

The picture below is our design for this years competition. This design takes into consideration for passenger placing, cargo compartment, and engine and battery placement. We will start doing the analysis for the next few weeks on aspects such as airflow, stress on wings, the fuselage on lift off landing, and center of gravity. Then move on to purchasing equipment to make the plane with the generous help of the sponsors. Each sub team will start working on their parts using a timeline. There will be meetings to keep everyone up to date in order to get everything done one month before competition starts in order for testing and checking for remote control errors and flight errors.

