



**AERODESIGN**

**2021-2022**

**SPONSORSHIP  
PACKAGE**





# ABOUT SAE AERODESIGN

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Being part of the Concordia AeroDesign is an incredible opportunity for students of all disciplines to explore and experience the world of aircraft design and the manufacturing of a remote-controlled aircraft, by tying together students from various undergraduate degrees from electrical and computer engineering to aerospace and mechanical engineering. It provides future engineers the opportunity to work on a project that closely mimics what they might see in the industry later in their careers.

This project encompasses every step of the process from conceptualization to realization including the roadblocks and problems that might arise throughout the project that engineers must overcome. At the end, the team participates in the official SAE AeroDesign competition hosted by SAE International, along with over 60 other teams from around the world. However, please keep in mind that the work done for the AeroDesign team is strictly extra-curricular with no in-class credit.



# PROJECT OVERVIEW

Our team is competing in the Regular Class category this year, where in this category, aircrafts are required to operate from a short runway, more specifically within a 100 ft. runway limit, while flying and carrying oversized cargo in the form of soccer balls as well as metal plates. Other constraints are a 1000 watts limiter as well as a 120-inch wingspan limit.

Rules are changed and updated every three years, making this year the team's third and final year of the design cycle. A design report and presentation equally tie in the project, which tests our engineering knowledge as well as the team's decision-making.



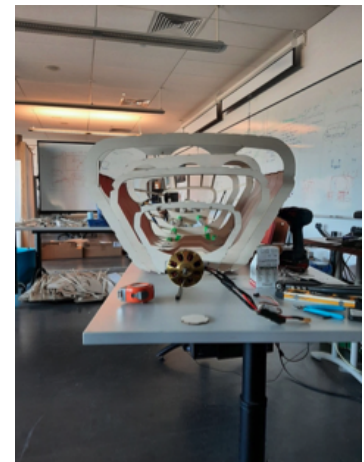
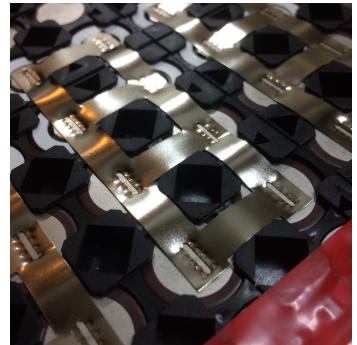


# MESSAGE FROM THE COORDINATOR

Last year the team was not able to attend the SAE competition due to the pandemic situation which on a positive note, gave the team more time to design and manufacture the RC plane. This extra-time given helped us come up with a very solid design that, in theory, would have placed First place by far at the competition compared to previous years. The most exciting part is that from here onwards, we are just working to better this design in every aspect possible for the 2021-2022 term and come up with an unbeatable design. Our expectations are looking very promising, and the team is more ambitious and dedicated than ever!

Thank you for your time and consideration, as it is through the generosity of companies such as yours that we can compete and set the bar higher and higher every time.

- Christopher Khoury, AeroDesign Coordinator





# WHY SPONSOR US?

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Sponsoring SAE AeroDesign is a mutually beneficial arrangement for both parties involved.

While the team is partially funded by Concordia University, this project would not be possible without the generosity of our incredible sponsors, as most of our funding comes from sponsorship agreements that are sought out by the team. The sponsoring organization benefits from an increased marketing reach thanks to the AeroDesign team platforms. Once a sponsorship deal is reached, the AeroDesign team uses social media such as Facebook and Instagram to announce the sponsorship. Furthermore, the team prints t-shirts with logos of all major sponsors for members to wear during competition. In addition, the logos are printed onto the skin of our plane, giving your organization clear visibility even high in the skies.

By sponsoring our team, the sponsoring organization is encouraging the development of future engineers and other future professionals and motivating them to become both qualified engineers as well as well-rounded individuals. This project encourages creativity and passion but also gives students unforgettable experiences.



# GOALS FOR 2021-2022

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- Re-visit every potential flaw from last year's design and re-work them/better them.
- Work faster and set stricter deadlines in order to keep up with progress and be done on time.

## WORKLOAD DISTRIBUTION: SUBTEAMS

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- **AERODYNAMICS:** This team is responsible for the selection of the airfoils, the sizing of the lift-creating and control surfaces as well as their respective actuators. The overall aerodynamic limits of the aircraft are equally outlined for the structural design.
- **STRUCTURES:** This team is responsible for the design of the aircraft's structural components. This includes the selection of the materials, the design and validation process, the manufacturing process and the testing process.
- **SYSTEMS:** This team is responsible for the analysis and study of thrust and electrical power as well as data acquisition. The components that fall under this section include: the propeller, the electrical engine, the battery selection and wiring.





# TEAM TESTIMONIALS

"Two years after starting university, I joined the SAE chapter at Concordia. The group that I joined was filled with passionate students, who strove to develop their interest and skill in the engineering profession. Their environment allowed me to pursue my passion for design in a way that permitted me to apply knowledge I had learned for traditional schooling, as well as skills that are hard to learn elsewhere such as solving unique issues within a design process and applying CAD with other simulation software to build and verify a prototype's performance. I have learned a lot from my time at SAE."

-Leopold Bourque, 4th year Mechanical Engineering



"On behalf of Concordia University's Gina Cody School of Engineering and Computer Science, it is with great pleasure that I endorse our new teams of dedicated students in SAE AeroDesign."

SAE AeroDesign is a platform which allows our undergraduate students to gain experiences that go beyond the classroom and become better engineers. Over the past years, our SAE Aero teams have made great strides in international competitions and that is in large thanks to the support from our sponsors.

We hope that you will be a part of our success story."

-Amir Jalini, Aerospace Engineer in Residence



# SPONSORSHIP LEVELS

We offer many forms of visibility and promotion to our industry partners. Sponsorship levels may be customized per a sponsor's specific needs. Donations are also equally welcome, for which tax receipts can be issued. Donations differ in that donors do not receive any marketing advantage. In fact, our sponsors benefit from a bright and vast audience: engineering students and faculty members, both from Concordia University and many others from universities who we meet during our international competition. We promote and mention our sponsors on social media and on the Concordia SAE website as well as on printed promotional material, from competition apparel to banners. All our industry partners are invited to our networking events to meet with the students. Finally, we are ALWAYS open for new ways to promote our supporters.

- For the duration of one year: August-August.
- Logos sized proportionally as per number of sponsors and their respective levels.

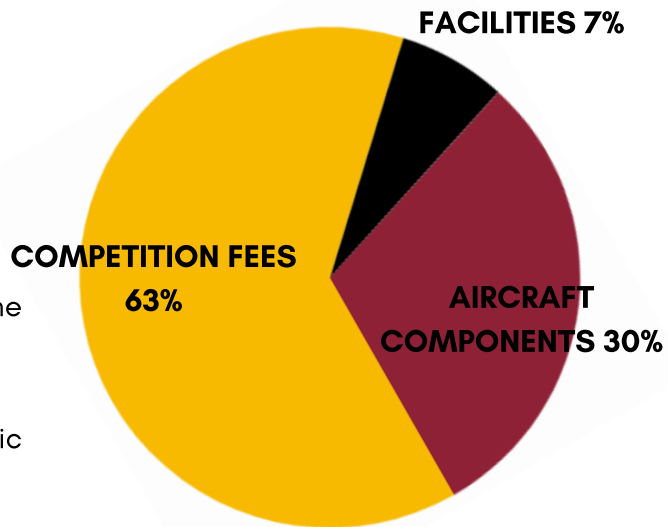
<b>Sponsorship Levels</b>	<b>Logo size on team aircraft</b>	<b>Logo in media publications</b>	<b>Social media publication</b>	<b>Website</b>
Platinum \$1,750+	Two Logos: Most Visible	Extra Large	✓	Logo
Gold \$1,250-1,750	Large	Large	✓	Logo
Silver \$750-1,250	Medium	Medium	✓	Log
Bronze \$250-750	Small	Small	✓	Logo
Sponsor <\$250	Text	Text	✓	Logo





## BUDGET

The team's main expenses are building materials, competition expenses and travel. We emphasize on tools and materials as we consider them a long-term investment both for the team and sponsors. The team gets to accomplish tasks more efficiently with quality tools and the sponsor gets their equipment promoted via team exposure and social media. The building materials for the plane include balsa wood, plywood and aluminium. We also require electronic components such as motors, servos and batteries. As for the competition, we have registration fees and team apparel with all the sponsor's logos on it. Finally, to avoid charging its members for participation, the team pays for the gas, hotels and vehicle rentals during the competition in the United States.



# AERODESIGN

## 2021-2022



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