



# PARTNERSHIP PROPOSAL 2022

Student Design Competition



BECOME A PARTNER!

#### ABOUT US

Formule ETS has been participating in Formula SAE competitions (Society of Automotive Engineers) since 1988. Our engineering powerhouse has produced award-winning cars that raced around the world for over 30 years. The cars coming out of our workshop are always intricately designed. We are known amongst our peers as a team that pushes the limits of performance and lightness. In 2020, we decided to switch from the combustion category to the electric



category, meaning a new challenge for challenge for the team.

The members had and will always have only one goal: TO WIN. At Formule ÉTS, we analyze, try to understand how things work, push the boundaries, test and validate over and over again, because we know there are no good answers in engineering; only good compromises. For these reasons, our team aims to be one of the leaders in the electric field, which ultimately will promote Canadian engineering excellence internationally.

#### ON THE ROAD FOR A SECOND ELECTRIC CAR, MANIC-22

Before COVID-19, we have decided to take on a new challenge; to compete in Formula SAE under the electric category. This new project will familiarize engineering students with cutting-edge technologies to better prepare them for the industry. The transition to an electric vehicle will also promote the development of technologies used by major car manufacturers, who actively take part in these competitions as sponsors. We learned a lot with the MANIC's first iteration, and we will take that knowledge into use by improving our next iteration, MANIC-22.



#### VISIBILITY

Our promise to prospective partners is unparalleled visibility. The name of your organization will be showcased within the university community, to business partners of ÉTS, at every outing that attract large crowds, in automotive enthusiast literature and at the many events that we attend during the season.

To ensure this level of visibility, the car's fit and finish are always exceptional. The team puts a lot of effort into making the car standing out as we are proud of this achievement that would not be possible without our partners.



#### FINANCIAL SUPPORT

A Formula SAE car is an ambitious project that requires a lot of material, financial and human investments. Our prototypes do not have a price tag, but we put a lot of effort to make them the best. Since the team is composed entirely of students, having technical and industrial partners becomes essential in order to achieve our goals. You will find below the benefits according to the sponsorship tiers.

	¥	¥	¥	¥	¥
	SPECIAL	DIAMOND	GOLD	SILVER	BRONZE
VALUE	\$ 18,000 +	\$ 12,000	\$ 7,000	\$ 2,000	UP TO \$2,000
LOGO ON WEBSITE AND BANNERS		ka	<b>FEE</b>	<b>KE</b>	<b>FEE</b>
LOGO ON CAR					
VISIBILITY SIZE (IN²)	CUSTOM	1 X 36 - 2 X 23	1 X 25 - 2 X 15	2 X 6	
LOGO ON UNIFORMS			<b>KE</b>		

#### **EVENTS**

Formula SAE is not only about racing, the cars are judged in a series of static and dynamic events that allow teams to score a maximum of 1000 points. Beforegoing on the track, the cars must go through scrutineering it the beginning of every competition in order to ensure that they respect the rules and that the vehicle is safe to drive.

#### **STATIC EVENTS (375 POINTS)**

**Business Presentation** – The team presents a business plan aiming at selling a large number of race cars and the judges act as potential investors.

**Engineering Design** – Engineers from the automotive industry evaluate the team's knowledge on numerous design aspects of the car.

**Cost Analysis** – Estimation of the car's total manufacturing cost by analyzing its manufacturing processes and costs of the in-house parts manifactured vs. off-the-shelf parts.



#### **DYNAMIC EVENTS (675 POINTS)**

Acceleration – The car accelerates from s standstill over a 75 m distance.

**Skidpad** – Evaluates the car's cornering ability on a flat surface while travelling on a constant radius path.

**Autocross** – The car aims to achieve the fastest lap around a defined course.

Endurance - Multiple laps, 22 km long race with one driver change at half distance.

**Efficiency** – Measures the energy usage after the endurance event to calculate the efficency.

### LOOKING BACK ON 2019 (COMBUSTION)

## Circuit of Barcelona-Catalunya, Spain (28 teams)

5<sup>th</sup> place overall

2<sup>nd</sup> place design

3rd place fuel efficiency

6<sup>th</sup> place endurance

6<sup>th</sup> place skidpad

(60 teams)

20<sup>th</sup> place overall

1<sup>st</sup> place skidpad

9<sup>th</sup> place autocross

# Michigan International Speedway, Michigan (108 teams)

3<sup>rd</sup> place overall

1<sup>st</sup> place skidpad

2<sup>nd</sup> place design

4th place autocross



## Barrie Molson Center, Ontario (22 teams)

1<sup>st</sup> place overall

1<sup>st</sup> place dynamic events

1<sup>st</sup> place design

1<sup>st</sup> place autocross

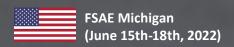
1st place skidpad

3<sup>rd</sup> place fuel effiency

5<sup>th</sup> place business presentation



#### **NEXT COMPETITION**



Hockenheimring Baden-Württemberg, Germany

### CONTACT US

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