PRINCETON RACING ELECTRIC

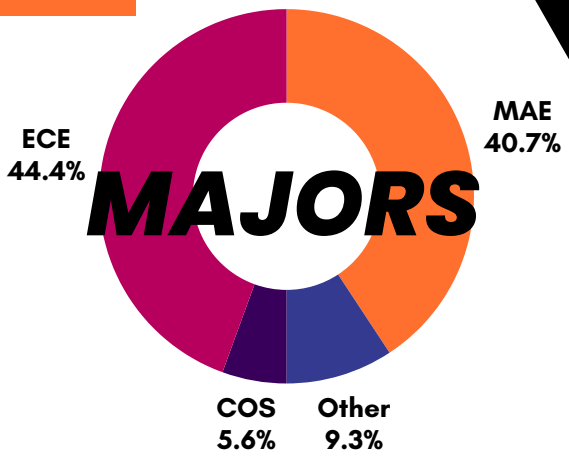
DONOR PACKET

2025-2026

PrincetonRacingElectric.com
pre@princeton.edu
@princetonracingelectric linkedin.com/company/princeton-racing-electric/

MEET THE TEAM

Princeton Racing Electric is dedicated to **advancing sustainable drive systems** and building **efficient, high-performance** racing vehicles. We are a group of 100+ undergraduate and graduate students across **9 majors** at Princeton University. We build a **fully electric vehicle in-house** to race at the annual international Formula Hybrid + Electric (FH+E) Competition at the New Hampshire Motor Speedway. Across **7 project teams**, our **hands-on** teamwork teaches all of us to be better project managers, engineers, and leaders.



For the 2026 FH+E Competition, we aim to (1) pass an **exhaustive technical and safety inspection** conducted by industry experts, (2) present our engineering **design goals and project management** plan, (3) race against other universities in an **acceleration** test, **autocross** race, and a 44-kilometer **endurance** event, and (4) place in the **top 5**.

FROM OUR TEAM PRINCIPAL

Dear friends,

Welcome to Princeton Racing Electric! It is my absolute pleasure to work with such a dedicated, talented, and enthusiastic team of students every single day, and I'd like to ask you to join our team by supporting Princeton Racing Electric in the 2025-26 season.

25-26 represents a very **exciting step forward** for our team. After overcoming many challenges with our old MK2C vehicle and placing 10th at the 2025 competition, we are retiring it and fully committing to our next-generation racecar: MK3. MK3 features a **powertrain upgraded from 120V to 600V**, carbon-fiber bodywork manufactured in-house, a unique suspension design with adjustable pickup points, a new vehicle control unit processing over 100 unique signals in real-time, and more! This year we are bringing MK3 to life by moving from design to manufacturing and that's where you come in.

Creating a high-performance racecar from scratch would not be possible without the generous support of our donors and supporters. Only with your support are we able to acquire the funds and materials necessary to build our car and travel to competitions. For us, your support fosters our intellectual growth as **engineers and leaders**. For you, it creates an opportunity to be represented by an outstanding team and to connect with Princeton's finest engineers when it comes time for us to take the next step in our careers. We are looking forward to you joining our team!

Charging forward,
William Li
Team Principal, Princeton Racing Electric

HISTORY

MK0
2012-2016

2012
Team **founded** by 3 engineering students. **First applied engineering student project team** at Princeton.

2015
Team brought our first car to FH+E. Although the car did not pass technical inspections, the experience gained provided the framework for PRE's future success.

2016
First car to **pass inspection** and drive under its own power at FH+E. **Eighth place** in dynamic events.

2017
New AC motors and a total **weight decrease** of 126 pounds.

2018
New altered chassis and redesigned planetary gearboxes for durability and efficiency.

2019
New drivetrain, increased motor power, and doubled accumulator energy density.

MK1
2017-2019
3x Second Place Overall
2x IEEE Excellence in EV Engineering

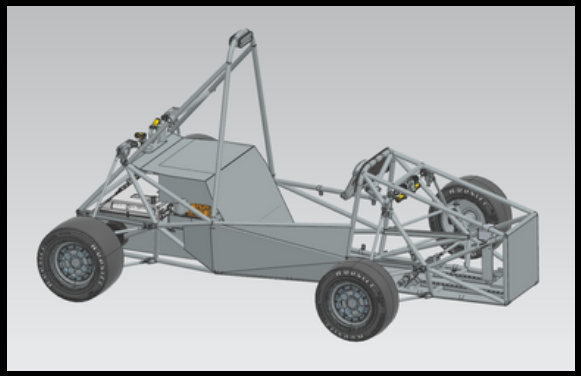
MK2
2021-2024
Top 10 Finish Overall

2021
Team resumed in-person meetings and manufacturing after COVID-19.

2022
Manufactured and **tested** vehicle. Attended FH+E to learn as a group.

2023
Fully integrated water-cooled RWD powertrain with redesigned chassis.

2024
Implemented **carbon fiber** aerodynamic package and **live telemetry.**



2024-Present
Redesigning the vehicle to have a **high-performance lightweight** chassis, **dynamic suspension**, new **600V** battery architecture, live data acquisition, robust **integrated safety control**, enhanced driver ergonomics and cutting-edge vehicle control unit technology.

MK3
2024-Present

YEAR IN REVIEW 2024–2025

ENGINEERING

MK2 HIGHLIGHTS

SUSPENSION
We redesigned and rewelded the front left suspension to reduce the camber. This improved stability and cornering performance — a key factor in our stronger competition results in 2025.

ACCUMULATOR & POWER SYSTEMS
Our most impactful electrical upgrade this season was **refining the accumulator internal components.** We replaced the AIRs and reworked the main PCB to improve the reliability of both the IMD (Insulation Monitoring Device) and the AMS (Accumulator Monitoring System).

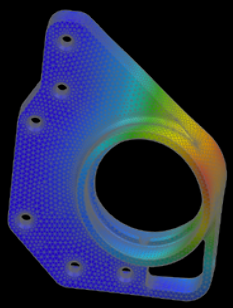
EMBEDDED SYSTEMS
Revamped our dashboard and visualization software. Designed **custom printed circuit boards** to collect sensor data such as suspension travel from linear potentiometers, accumulator state of charge, motor speed and temperatures, GPS, IMU, etc.

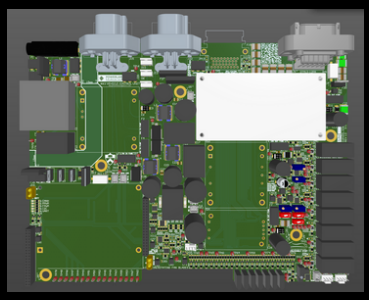
MK3 HIGHLIGHTS

CHASSIS
This year, the team successfully finalized the design of and received the new physical chassis — a **lightweight, high-performance, adjustable** foundation — built to meet the demands of MK3's **streamlined and tuneable** suspension dynamics, powerful rear-wheel drive, and driver-friendly steering.

VEHICLE CONTROL UNIT (VCU)
We completed a **full redesign of the VCU**, producing version two of our custom PCBs. This upgrade **enhances vehicle control, system integration, and future development flexibility.**

POWERTRAIN AND HIGH VOLTAGE ARCHITECTURE
We continued to design our new 600V architecture, finishing key safety circuits— such as pre-charge and cell monitoring— and settled on a mechanical enclosure concept.





COMPETITION

INSPECTION
For the first time in six years, Princeton Racing Electric successfully **passed all components of technical inspection** - mechanical, electrical, tilt, and brakes - at competition, a turning point in our history.

PERFORMANCE
Despite a failure in one of our two rear motors just months before competition, thanks to creative problem solving, we placed **3rd in Project Management** and **10th Overall** out of more than 21 teams.

HOW TO SUPPORT US

Princeton Racing Electric relies heavily on donations from both **individuals** and **businesses** to sustain our work. If you want to make motorsports part of your business plan, please contact us at pre@princeton.edu.

We are a 501(c)(3) non-profit organization, so all monetary donations made towards Princeton Racing Electric are fully tax-deductible.

All resources are appreciated!

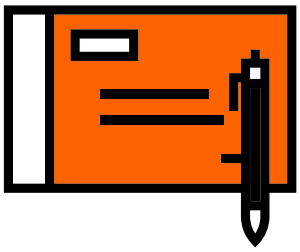
Our team uses **monetary donations** to purchase materials and components, maintain and replace garage equipment, and cover competition expenses.

Better **tools** help us work more efficiently and safely during fabrication and manufacturing.

We always appreciate **material, software,** and **product donations** or discounts.

Machining and PCB **fabrication partnerships** allow us exponentiate our capabilities.

WAYS TO DONATE



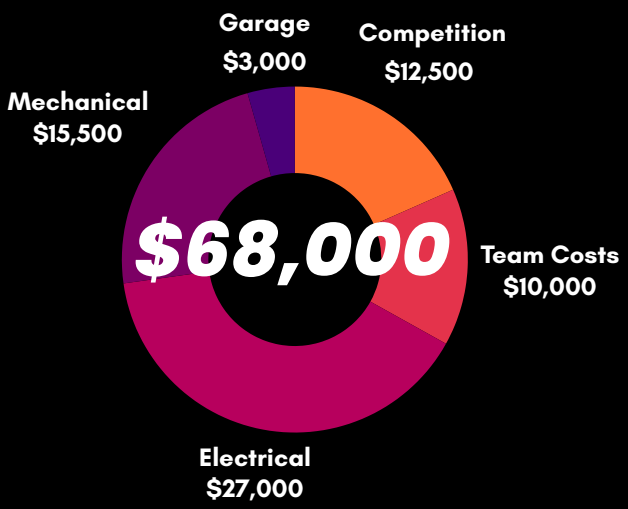
Check: Mail check payable to "Princeton University" to

Gift Records
PO Box 5357
Princeton, NJ 08540-5357

Include **"Princeton Racing Electric 15149"** in the memo line.

Wire Transfer: Transfer electronically via wire transfer payable in U.S. dollars. Please contact Karen Ehee (kehee@princeton.edu), the Office of Dean of Undergraduate Students' Financial Coordinator, and mention "**Princeton Racing Electric"** in the subject line.

2025–2026 BUDGET



By supporting Princeton Racing Electric, donors **create future engineering and business leaders** by bolstering an organization that provides its members with valuable practical experience.

This prepares students for **future careers** ranging from EV powertrain design to spacecraft manufacturing to entrepreneurship.

We seek to build lasting relationships between our members and sponsors, all while **inspiring passion** for motorsports, hard work, and innovation!

HOW TO SUPPORT US

continued

DONOR TIERS

BENEFITS	SUPPORTER ($500)	BRONZE ($1,000)	SILVER ($2,000)	GOLD ($5,000)	PLATINUM ($10,000)	TITLE ($15,000)
Name & Logo on Website	✓	✓	✓	✓	✓	✓
Team Newsletter	✓	✓	✓	✓	✓	✓
Company Name & Logo on Car		Small	Small	Medium	Large	Extra Large
Recognition on Team Apparel		✓	✓	✓	✓	✓
Social Media Content			✓	✓	✓	✓
Resume Book Access				✓	✓	✓
Organizing Recruitment Events					✓	✓
Vehicle & Facility Tour					✓	✓
Custom Benefits						✓

2024 – 2025 DONORS

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THANK YOU

Thank you to all of our incredible donors for their generous support of Princeton Racing Electric. Your contributions have not only fueled our electric race car's development but also empowered a team of students to push the boundaries of **innovation, sustainability, and teamwork.** Thanks to you, we're racing toward a cleaner, faster future — and we couldn't do it without you.

With gratitude,
The Princeton Racing Electric Leadership Team

WILLIAM LI
MAE '27
Team Principal

ALEX CHANG
MAE '27
Chief Engineer

DANIEL VERGARA
ECE '26
Chief Engineer

ELLA SIMMONS
MAE '27
Chief Engineer

RISHABH JAIN
ECE '26
Chief Engineer

JASON FAN
UNDECIDED '28
Treasurer

KAILEY HUANG
COS '27
Business Manager

MIYU YAMANE
MAE '27
Tech Chair

VIVIAN CHEN
ECE '26
Social & Recruitment Chair

SERGEI KUDRIAVTCEV
ECE '28
Pit Crew Chief

NADULA GARDIYEHEWA
COS '28
Pit Crew Chief