



**North America's
Premier Collegiate
Automotive Engineering
Competition**

**One of 11
Participating
Universities**

ECOCAR COMPETITION

Competition Overview

- McMaster University is proud to be one of 11 universities (one of two Canadian universities) participating in the **EcoCAR Challenge: North America's Premier Collegiate Automotive Engineering Competition**
- EcoCAR is the latest in the U.S. Department of Energy (DOE) Advanced Vehicle Technology Competition (AVTC) series.
- The competition will challenge teams to **apply advanced propulsion systems, as well as connected & automated vehicle technology** to improve the energy efficiency, safety, & consumer appeal of the 2019 Chevrolet Blazer—specifically for the carsharing market.



4 Year Challenge

Y1

Customer identification & architecture selection. Designing, evaluating, & refining the propulsion systems components needed to ensure the vehicle functions while maintaining safety.

Y2

Y3

Test, validate, & fully integrate the propulsion components into the car to enable dynamic testing. Vehicle testing includes chassis dynamometer testing & on-road testing.

Y4

More vehicle testing, model refinement, & system modeling optimization to improve energy consumption & functionality.

FAST FACTS

- **One of two Canadian** universities
- **Goal:** Turn a 2019 Chevrolet Blazer into a hybrid vehicle & add autonomous features
- **4-year challenge:** 2018-2022

The Team

- **100 team members:** including mostly undergraduate students & five graduate students
- **Diverse program background:** students from Engineering, B-Tech, Health Sciences, Computing & Software, Social Sciences, MBA, Psychology, etc.
- **Actively engaged** with student groups on & off campus

Sponsorship & Management

- The main sponsors of this competition are **General Motors (GM) & MathWorks**
- The competition is managed by **Argonne National Laboratory**