What is an AVTC?

Since 1988, the U.S. Department of Energy has sponsored a series of Advanced Vehicle Technology Competitions (AVTCs). Each competition challenges university students to re-engineer conventional consumer vehicles into advanced hybrid vehicles. Undergraduate freshmen through Ph.D. students are given the opportunity to enhance their skills through hands-on experiential learning.

What is the EcoCAR Mobility Challenge?

The EcoCAR Mobility Challenge is the latest AVTC sponsored by the U.S. Department of Energy, General Motors and Mathworks that challenges 12 universities across North America to re-engineer a 2019 Chevrolet Blazer into an SAE Level 2 autonomous hybrid vehicle. Teams will solve complex engineering challenges and incorporate advanced propulsion systems, electrification and connected and automated vehicle technologies. Over the four-year competition, the Buckeyes will center their efforts around energy efficiency, safety, consumer appeal and the car-sharing market.
Fueling Innovation

It takes a great team to build a great car. With the EcoCAR Mobility Challenge, the team will re-engineer a 2019 Chevrolet Blazer into an SAE Level 2 autonomous hybrid vehicle while maintaining the practicality, styling and performance of the original design. Students involved in the team gain substantial experience and transferable skills to pave the way for safer roads and a more sustainable world.

Key Performance Goals

Previous EcoCAR competitions focused primarily on the vehicle's efficiency, and while efficiency still plays an important role, the EcoCAR Mobility Challenge brings new competition goals to the table: autonomous and connected technologies.

Autonomous

The team will incorporate SAE Level 2 autonomy into the Blazer. This means the vehicle will have the ability to accelerate, brake and steer all by itself under certain conditions.

Connected

Car sharing, popularized by services like Maven and car2go, caters to consumers' evolving transportation needs. The team is revved up and ready to explore technology in this new market.

Efficient

We understand that how you get from place to place is just as important as getting there. Our team will use advanced propulsion systems and electrification to create an efficient, low-emission vehicle.
Experiential Learning

AVTCs and the EcoCAR program have proved to be valuable for Ohio State as a university and for students involved in the program. Thanks to the generous support from our donors, Ohio State’s research abilities have grown substantially. Donations allow us to access hardware and software used in the automotive industry, allowing students to gain real, transferable experience.

Alongside donations, the university has forged 88 industry partnerships as a result of AVTC involvement. These partnerships have led to an increased student interest in the automotive industry and have helped make Ohio State a premier location for automotive recruiting. Through a recent survey of Ohio State AVTC alumni, we’ve found that nearly two thirds of all AVTC alumni are still involved with the automotive industry. AVTCs develop the next generation of automotive professionals through experiential learning.

Innovators. Students. Buckeyes. Our engineers strive to mirror cutting-edge industry trends, pushing the envelope to redefine innovation and unleash ingenuity. We know that success is not measured by a win, but by championing others to reach their highest potential. That is why we are proud to advocate for diversity and youth-oriented STEM education.

The Ohio State EcoCAR 3 team represented 14 different countries. During the EcoCAR 3 competition, we received the NSF Diversity in Engineering Award and the General Motors Women in Engineering Rookie Award.
A History of Victory

Thanks to dedicated students and faculty and our sponsors’ continued commitment, the team has excelled in EcoCAR and other AVTCs. With 41 first-place awards earned throughout EcoCAR 3 Year One, Two, Three and Four, the team has proven more than capable in taking advantage of opportunity and hopes to continue a winning legacy.

First-Place Finishes from the 2018 EcoCAR 3 Competition

The Ohio State EcoCAR team builds upon a history of excellence supported by top-tier leadership and team-centered culture. With an ingrained work ethic and drive for innovation, the EcoCAR Buckeyes show no signs of slowing down.

- 1st Place: Overall
- 1st Place: Over-the-Road Event
- 1st Place: Consumer Appeal Event
- 1st Place: Vehicle Design Review
- 1st Place: Communications Program
- dSPACE Embedded Success Award
- NSF Diversity in Engineering Award
- NSF Innovation Award
Become a Sponsor

Ohio State EcoCAR depends on industry and the local community for financial and technological support. Become a crucial part of the Ohio State EcoCAR team by supporting students and helping Ohio State become a leading institution in national AVTCs. Sponsorship is an invaluable resource for our team’s success and provides the team with the information, products, services and facilities to produce the best vehicle.

Sponsorship Levels

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<th>Level</th>
<th>Minimum Contribution</th>
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| Scarlet | $10,000+ | Large Logo displayed on the vehicle  
| | | Receive framed team photo  
| | | Access to team promotional photos  
| | | Eligible for OSU President’s Club* |
| Gray | $5,000-$10,000 | Small Logo displayed on the vehicle  
| | | Receive framed team photo  
| | | Access to team promotional photos  
| | | Eligible for OSU President’s Club* |
| Green | <$5,000 | Small Logo displayed on the vehicle  
| | | Receive team photo |

All sponsors are displayed on our website, handouts, and sponsor poster**

*Eligible for OSU President’s Club, benefits include membership opportunities to the OSU Golf Club, the Faculty Club, recreational sports facilities, access to libraries, opportunity to purchase season football tickets, and many others. The program is only open to private donations, companies are ineligible. For more information about the President’s Club, please visit giveto.osu.edu/areas/pc/index.asp.

**Our sponsorship poster will be present at all outreach events and competition events where the car is not present.

Don’t want to be a recognized sponsor? You can donate to the team directly at give.osu.edu/ecocar
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CENTER FOR AUTOMOTIVE RESEARCH