



About The Battery Workforce Challenge:

The Battery Workforce Challenge (BattChallenge) is a collegiate engineering competition sponsored by the [U.S. Department of Energy](#) (DOE) and [Stellantis](#) and is managed by Argonne National Laboratory. BattChallenge is part of the 35+ year Advanced Vehicle Technology Competitions (AVTCs). AVTCs are DOE's series of multi-year automotive engineering competitions and DOE's flagship workforce development program for future automotive engineers and industry leaders. Their newest competition, Battery Workforce Challenge is a comprehensive EV and battery workforce development program that fosters a diverse talent pipeline by building an educational ecosystem that delivers training and education for high school graduates, vocational and transitional workers, and technicians who can charge North America's battery industry forward.

The Battery Workforce Challenge is a first-of-its-kind three-year competition that launched in October 2023. BattChallenge is an advanced battery design and development student competition series that tasks 12 North American universities and vocational schools to design, build, test, and integrate an advanced EV battery into a Stellantis vehicle. Each team is given the chosen Stellantis vehicle to use for the duration of the three-year competition.

Mission:

Inspire a robust workforce within the EV battery sector to help DOE achieve net-zero emissions across industries by 2050 and advance the Stellantis goal of becoming a carbon net-zero corporation by 2038.

Create a pipeline for workforce development and future automotive engineers to help maintain a competitive edge for the United States in the global automotive marketplace.

Vision:

The Battery Workforce Challenge is one piece of the 35+ year Advanced Vehicle Technology Competitions (AVTCs), an immersive, hands-on learning experience for all students to gain valuable multi-disciplinary skills that transcend the classroom environment.

Goals:

1. Develop partnerships:

- a. Participants must develop mutually beneficial and reciprocal partnerships with community colleges, trade schools, apprenticeship schools or other vocational partners to collaborate and solve complex battery engineering and manufacturing challenges.

2. Follow real-world industry milestones:

- a. Teams must follow real-world industry milestones focused on battery design, simulation, controls development, testing, and vehicle integration and demonstration.

- b. Students will learn valuable project management, communications, teamwork and problem-solving skills.

3. Follow industry design and development processes:

- a. Schools will follow industry design and development processes focused on battery design, simulation, controls development, testing, vehicle integration and demonstration throughout the three-year competition.

4. Design a custom battery pack:

- a. Students will design a custom battery pack utilizing production battery cells and complete a professional battery design review with the competition's subject matter experts.

Participating universities and vocational schools:

- California State University, Los Angeles (Los Angeles, California) and Cerritos College (Norwalk, California)
- Clemson University (Clemson, South Carolina) and Greenville Technical College (Greenville, South Carolina)
- Colorado School of Mines (Golden, Colorado) and Arapahoe Community College (Littleton, Colorado)
- Jackson State University (Jackson, Mississippi) and Hinds Community College (Utica, Mississippi)
- McMaster University and Mohawk College (Ontario, Canada)
- The Ohio State University and Columbus State Community College (Columbus, Ohio)
- Rose-Hulman Institute of Technology and Ivy Tech Community College (Terre Haute, Indiana)
- University of Alabama and Shelton State Community College (Tuscaloosa, Alabama)
- University of California, Merced and Merced College (Merced, California)
- University of Michigan-Dearborn and Henry Ford College (Dearborn, Michigan)
- University of Nevada, Las Vegas (Las Vegas, Nevada) and College of Southern Nevada (Clark County, Nevada)
- University of Waterloo (Waterloo, Ontario, Canada) and Lambton College: Lambton Energy Research Centre (Sarnia, Ontario, Canada)

About Advanced Vehicle Technology Competitions (AVTCs):

Established in 1988 by the U.S. Department of Energy and Argonne National Laboratory in partnership with North America's automotive industry, Advanced Vehicle Technology Competitions (AVTCs) are a series of multi-year automotive engineering competitions and DOE's flagship workforce development program for future automotive engineers.

AVTCs engage students from kindergarten through higher education, creating a pipeline that both encourages students to pursue careers in science, technology, engineering, and math (STEM) and has seeded more than 30,000 graduates into industry, helping to build the diverse workforce needed for the U.S. to be competitive in the global marketplace.

Media Contacts:

Kimberly DeClark, Argonne National Laboratory, kdeclark@anl.gov, 202.441.0096
Dan Reid, Stellantis, dan.reid@stellantis.com, 248.202.7697