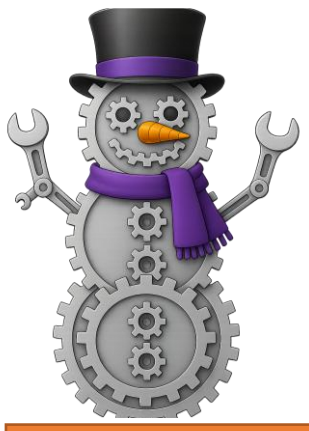
The ME Connection

UE Mechanical Engineering Newsletter

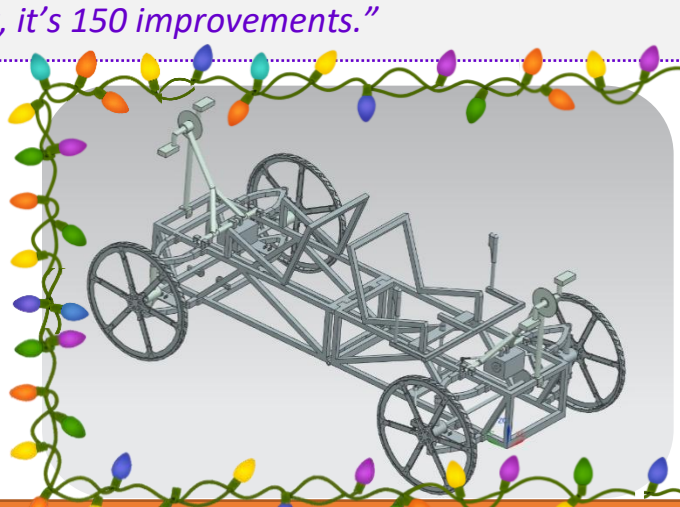
December 2025

"I've become fascinated by the idea that it's really achievable to make two or three small improvements in a week and by the end of the year, it's 150 improvements." *- Darrell Hammond*



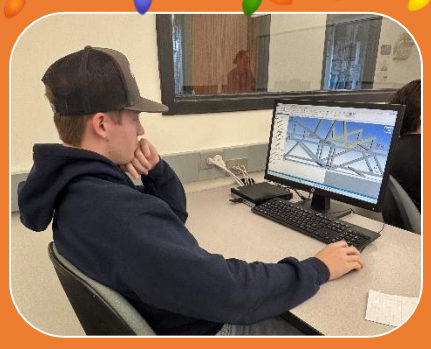
Happy Holidays

Another semester is in the books! As we look forward to 2026, what have been your highlights of 2025? Did you work on an exciting project, earn a new credential, or take on a new role? Tell us about it! Keep reading for updates from our senior-led design teams and see photos from the ME 101 teams.



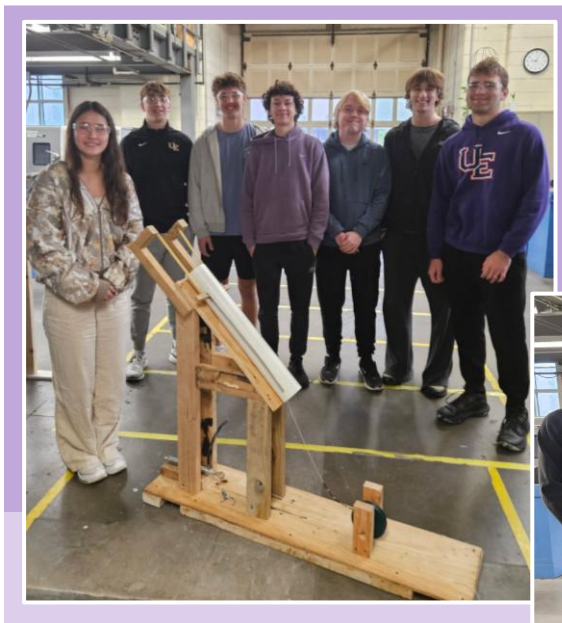
Spotlight: Senior Project Teams

NASA Rover The University of Evansville Rover Team is designing and building a human-powered rover that follows the engineering standards of NASA's Human Exploration Rover Challenge. Although the team will not be traveling to competition this year, the full design and development process is still being carried out on campus. This semester, the team made significant progress across all major subsystems. The frame group finalized a foldable aluminum chassis, and the drivetrain team designed and prototyped a variable speed impulse drive, a new transmission concept that has never been used on a UE rover before. The suspension team completed the layout for a double A-arm system, while the wheels, rims, and steering groups advanced their custom components. Many of these designs have already been validated using FEA, and several subsystems have begun purchasing materials and starting early fabrication. With design work nearing completion, the team is preparing to transition into full manufacturing and testing next semester.



Formula SAE The UE Aces Racing Formula team has been working diligently to finalize the design work for this year's high-performance single seater vehicle. This year's vehicle will include a more in-depth aerodynamics section which will allow for an increase in downforce and give the team a competitive edge. The drivetrain of the vehicle is also being converted from a chain-driven system to a shaft-driven system to decrease vibration within the system. The team is excited to begin fabrication and are expecting to have a successful year!

We want to celebrate our alumni!
Please submit a photo and short blurb to: mechanicalengineering@evansville.edu



ME 101 Tennis Ball Launcher Teams

"Working with my team this past semester has been an absolute joy. The fact we got to participate in a project that actually involved us building what we designed was cool. And having the launcher work was a plus!" —*Gabriela Williams, Class of 2029, team leader*

First year ME students put their designs to the test as the semester came to an end. Teams designed and built tennis ball launchers powered by an air cylinder and triggered with a unique mechanism. The launchers were tested for both accuracy and efficiency, with each team demonstrating successful throws.

Are you hiring? We can help!

If your place of employment has openings for internships, co-ops, or entry-level positions, we are happy to share those opportunities with current students. If you would like to connect with students in 2026, let us know!

The ME Connection will return in February – Happy New Year!