The ME Connection

UE Mechanical Engineering Newsletter

November 2023

"By stretching yourself beyond your perceived level of confidence you accelerate your development of competence."

- Michael J. Gelb

Accelerated Degree Pathways

Earlier this semester, the University of Evansville launched **Degrees in 3**, a new program offering accelerated paths to degree attainment. The ME program is excited to be part of this new effort. With the accelerated degree plans, students can complete the same required coursework in just 3 years. For mechanical engineering students, the 3-year degree path makes it possible to graduate in 4 years with one continuous year of employment in an engineering co-op position. The 3-year path is best suited for motivated students entering UE with college or AP credits. Please share this new opportunity with your networks: <u>https://www.evansville.edu/Degreesin3/</u>



UE Students Attend ASME Event

Freshmen Nate Bingham and Chris Martin attended the ASME Student Leader Weekend in Chicago last month, where they heard from ASME chapters at other universities and discussed student chapter activities that could be introduced at UE. The weekend also included guest speakers from NASA and Argonne National Laboratory. *"Our leadership skills were enhanced through the tips we received and ideas that were spoken during the conference. The event was very helpful and we cannot wait to be back next year!"*



Congratulations Corner

Congratulations to juniors Kaleb Werner, Gracie Davidson, and Kaylee Ivy on their recent initiation to the UE Phi Rho Chapter of Pi Tau Sigma! The new initiates are pictured here (left to right) with faculty advisor, Dr. John Layer.

The International Honor Society of Mechanical Engineers, "Pi Tau Sigma prides itself in the core values: Integrity (soundness of character and moral conduct), Service (serving the mechanical engineering profession and the community), and Leadership (fostering initiative through example in a professional



manner). Initiates are selected based on sound engineering ability, scholarship, service, leadership, and integrity." [pitausigma.org]

Save the Date: Winter on Walnut

UE's Winter on Walnut will be held on December 1, 2023. The event includes festive activities for the whole family. Registration information will be sent by the Alumni Assoc.





We want to celebrate our alumni! Please submit a photo and short blurb to:

mechanicalengineering@evansville.edu



Alumni Spotlight: David Eilken, Class of 2017

David is a Senior Design Engineer currently living in Japan while developing next generation battery technology for Toyota's upcoming all-electric fleet. David and his wife Riley (UE DPT '19) live with their 1-year old son Berkley and therapy dog Bentley just outside of Nagoya, Japan. All four of them share a strong passion for travel, citing an immersion in new cultures as an incredible learning opportunity. Even out of working hours, David finds himself influenced by the Morgan Freeman quote: "Challenge yourself; it is the only path that leads to growth."

After graduating from UE with honors in Mechanical Engineering in 2017, David joined Toyota's Indiana location in the capital projects engineering group. In this role, he managed large-scale equipment design and installation to support the introduction of competitive new vehicles. Two years later, he transitioned to the new technology development group where he focused on creating innovative joining technologies. In this group, David leveraged the strong theoretical background obtained at UE to introduce new methods of high-intensity laser welding.





During his time at Toyota Indiana, David earned a Masters in Aerospace Engineering from Purdue and an MBA from IU's Kelley School of Business. In 2021, a new position at Toyota's North American R&D Headquarters moved him to Ann Arbor, Michigan. Here he became one of the founding members of the newly formed North American battery design team, serving as the lead for battery pack structures, high voltage system layout, and vehicle integration – areas in which he holds multiple patents. From

2023, David embarked on a two-year assignment to the global design headquarters in Toyota City, Japan. In this assignment, he will draw from Japan's rich battery development history while infusing the fast-paced innovation mindset found in America to develop multiple battery platforms. After this assignment, David will utilize the holistic knowledge gained to rapidly expand the US battery design team. David attributes his successes in engineering to the education he received at the University of Evansville.

"Currently, battery design is a new frontier. From chemistry to structures to business cases and everything in-between, there are few lines of work as interdisciplinary. Engineers in this field must understand the system as a whole and how design choices incur tradeoffs. They must balance the demands of customer expectations, regulations, profitability, durability requirements, and so much more. The well-rounded education from UE's Mechanical Engineering department is second to none, and there are no engineers better suited to my line of work than those with this type of background."



Q: What sound does a mechanical frog make?

A: rrrrrrrivet!