

Bits & BYTES

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Mechanical and Civil Engineering Seniors Inducted into Order of the Engineer

Thirteen students and two alumni took part in Order of the Engineer ceremonies last month. The Order of the Engineer was initiated in the United States to foster a spirit of pride and responsibility in the engineering profession, to bridge the gap between training and experience, and to present to the public a visible symbol identifying the engineer. At the induction ceremony, engineers are invited to accept the Obligation of the Engineer and a stainless steel ring. The Obligation is a creed similar to the oath attributed to Hippocrates (460-377 B.C.) that is generally taken by medical graduates and which sets forth an ethical code. The Obligation likewise, contains parts of the Canon of Ethics of major engineering societies. Initiates, as they accept it voluntarily, pledge to uphold the standards and dignity of the engineering profession and to serve humanity by making the best use of Earth's precious wealth.

On April 18, seven Mechanical Engineering Seniors and two members of the Mechanical Engineering Advisory Committee were inducted. Pictured left: Braden Bruce, Samuel Kluemper, Mary Miller, Paul Simms, Jakob Barlow, Wade Dixon, Allen Hungate, Zachary Eagan, and Matthew Ford.



On April 26, six Civil Engineering Seniors were inducted. Pictured Right: Samantha Elkins, Nick Gushrowski, Emily Wiebe, Breanna Burke, Wesley Fleischmann, and Zach Worley.

After accepting the Obligation of the Engineer, new members of the Order received a certificate and a stainless steel ring to be worn on the fifth finger of the working hand.



Alumni are eligible! Are you an Engineering Alumni that has not joined the Order of the Engineer? We will be conducting our next induction ceremony in April 2025 and are extending an invitation to alumni to join us. Contact the SECS office for more details.

Three students with the 2024 School of Engineering and Computer Science Awards.

Zach Worley, a Senior Civil Engineering Student, was awarded the Paul "PR" Brown Spirit Award - This award is presented to a student who has created camaraderie in the School of Engineering and Computer Science and has encouraged fellow students by exhibiting a positive attitude that is inspiring to others.

Swarup "Sam" Bhatta, a Junior Mechanical Engineering Student, was awarded the James M Hall, Jr. Outstanding Engineering Student Award - This award is presented to an outstanding student majoring in Engineering at Junior class standing, based on scholastic achievement, extra-curricular activities, character, responsibility, attitude, and potential for professional growth.

Clay Dempsey, a Junior Electrical Engineering Student, was awarded the Dick Blandford Memorial Scholarship - This award is presented to a Junior level Electrical Engineering or Computer Science student who demonstrates excellence in scholarship, service, and leadership in memory of former Associate Professor of Electrical Engineering, Dick Blandford. Dr. Immanuel presented the awards in a private ceremony on April 18, 2024. Congratulations Zach, Sam, and Clay!



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Summer Refresh

CAREER DEVELOPMENT CORNER

Attention Engineering Alumni The UE School of Engineering and Computer Science is seeking Alumni to assist in various areas in support of the school:

- Guest Lectures
- Recruitment
- Adjunct Professors
- Serve on Advisory Councils

If you are interested in supporting SECS in any of the areas listed, please contact Dr. Suresh Immanuel via e-mail (ss476@evansville.edu).



Associate Dean's Corner

Dear Members of the School of Engineering and Computer Science (SECS) Community, Thank you all for your hard work, dedication, and the contributions you have made to our school. Together, we have navigated a challenging year due to the unexpected passing of our beloved dean and I believe that we have emerged stronger.

I would like to congratulate our students on completing another academic year successfully. As you transition into summer, I encourage you to make the most of the opportunities that this summer season offers. Whether you are participating in an internship, engaging in a research project, taking summer courses, or simply taking time to relax and recharge, each experience will contribute to your personal and professional growth. Please share your summer experiences with Tonya as we would like to highlight them in our upcoming newsletters.

Congratulations to our graduates on reaching this significant milestone. Your journey has been marked by challenges posed by Covid and your persistence has paid off. As you transition from students to alumni, please know that you will always be a valued part of SECS. We look forward to seeing the many incredible contributions you will make in the professional world.

I wish you all a productive, enjoyable, and restful summer.

Sincerely,

Suresh Immanuel, Ph.D., P.E.

Associate Dean and Professor

School of Engineering and Computer Science

IMPORTANT DATES

May

2

Last day of Final Exams

4

Commencement

13

Summer Session I Begins

27

Memorial Day (Campus Closed)

June

7

Last Day to drop Summer Session I course with a "W"

14

Summer Session I classes end

17

Summer Session II begins

28

SOAR I

July

4-5

Independence Day Holiday (campus closed)

12

Last Day to drop Summer Session II course with a

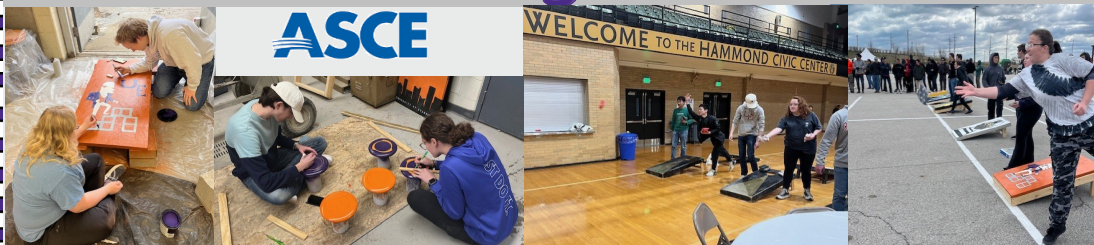
12

SOAR II

19

Summer Session II classes end

Student Organizations



April started off with us preparing for the IN-KY Student Symposium at PU Northwest. We finished painting our new cornhole board and put the final touches on the concrete frisbees. April 11-14, fourteen students along with Dr. Voss and Dr. Park participated in Symposium.



Symposium 2024 was a great experience, showing everyone from UE how much we could do if we put our minds together. We were all able to grow closer as friends and classmates, really hyping up the next few years for all of us as CE majors. We're all very eager to begin projects for next year's symposium where we hope to make bigger and better things for next year!

To finish out the semester, ASCE joined with ASME to co-host a picnic for all Engineering and Computer Science students, faculty and staff.



To finish off the year, ASME held a cookout co-joined by ASCE. We had a great time and

hope to have it again next year. We hope that everyone has a great summer!

acm ACM will continue our efforts to restart the student chapter in Fall 2024. Students interested in being a part of ACM should speak to Dr. Mabis.



Society of Women Engineers Student Chapter has spent most of this academic year getting re-established. Our activities consisted mainly of social activities for the members to get to know & support each other. In April, we had a painting night, which 8 students attended. Anyone who is interested in getting involved, please talk to one of the SWE leaders: Jillian Tretter, Ashlyn Koutsos, Astrid Miranda, and Baylee Essert!



2023-24 Senior Design Projects

CE 495 SENIOR DESIGN TEAM

On April 26, 2024, the UE senior civil engineering team completed their year long capstone design project. The Granted House of Hope project encompassed many analytical, design, and management tasks including advanced Revit and Civil 3D work, WaterCAD modeling, utility design, geotechnical testing, site layout, communication with several external contractors, and preparation of permit applications for construction. These tasks required many long hours and late nights to reach completion but the end product was well worth it.

The team provided the project sponsor, the Granted board members, with an engineering report, design drawings, computer files, and a list of tasks needed to obtain permits to begin construction in June 2024. These files included the Granted House of Hope (HOH) floor plan, site plan for the 3+ acre site, plan and profile drawings for site utilities, and other documents prepared by external contractors. Granted was grateful and is eager to begin construction of the 5000 square foot structure.

On Friday morning, April 26, some of the UE design team members attended a groundbreaking ceremony for the House of Hope, located on the southwest corner of the Oak Hill Road and Maxx Road intersection. Following the ceremony, the team made a presentation to Granted and UE's Civil Engineering Advisory Council highlighting the major components of the project. The presentation concluded with a lengthy Q&A and the presentation of a project poster to some of the Granted board members.

Overall, this was a very unique project that exposed the team to the many challenges engineer's face in the real world. The team was incredibly grateful to be a part of a project that will forever have a lasting impact on our engineering careers and the Evansville community.

Read the UE Press Release about this project [here](#).

UE RACING TEAM

The UE Baja team has recently completed the fabrication and assembly of the vehicle. The team conducted spring testing validation events where the car was put through multiple rounds of testing including suspension impact, frame torsion, acceleration, cornering, and braking. Moving forward, the team will begin the teardown of the vehicle and prepare for the painting stages. In addition to this, the final reports and presentations are underway as the team prepares for the final stretch where we will present to the Mechanical Engineering Advisory Council (MEAC) and faculty on April 18th. We would like to once again thank all of those who have helped us get to this point.

THERMOSIPHON TEAM

Bradán Bruce, a mechanical engineering senior, presented thermosiphon research at the National Conference on Undergraduate Research (NCUR) held in Long Beach, CA. NCUR is the largest undergraduate research conference in the country with around 4000 participants. A thermosiphon is a solar-powered green-energy hot water heater. Mechanical engineering students who helped with the research project include Sam Kluemper, Essa Ahmed, Swarup Bhatta, Jakob Grundbacher, Kaylee Ivy, Dani Santos, Mohammed Rashed, Dylan Weyer, and Preston Brinkman with research adviser Douglas Stamps.

SENIOR SPOTLIGHT



Breanna Burke

Civil Engineering, Class of 2024
Hometown: Dillsboro, IN

Why I Chose UE: *I chose UE because the financial aid package and proximity to my hometown.*

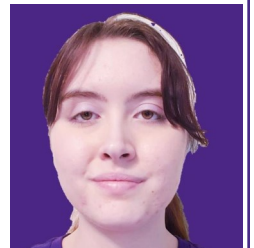
Clubs or Organizations Involved in At UE: *ASCE, International Club, Archery, SAB, Pep Band, and SWE.*

Internships or Co-op Experience: *I did not participate in a co-op or internship experience.*

Favorite UE memory: *I will always remember the friends I made at UE*

Where do you go from here?

I am considering a couple of job offers. I'm not sure where I'll end up yet.



School of Engineering and Computer Science

Electrical Engineering Program Update

The Electrical Engineering (EE) program at UE is undergoing an exciting transformation, designed to equip students with the skills and knowledge required to excel in the rapidly evolving technological landscape. Despite the challenges faced during the past academic year, our resilience has been evident, and we are now poised for substantial growth and progress.

A hallmark of our program is its emphasis on hands-on learning and practical application. Our goal is to empower students with the ability to design and implement innovative solutions to real-world societal problems using cutting-edge technologies. Mastering mobile microcontrollers, which have become indispensable in modern manufacturing and technology, is central to this vision.

To achieve this goal, we are implementing substantial changes to our instructional approach. First and second-year courses are undergoing a comprehensive overhaul, emphasizing hands-on activities through physical and virtual labs. These labs provide students with practical experience in measuring electrical variables, designing circuits, and mastering soldering techniques – skills that are essential for success in the field. Third-year courses like Systems and Signals, Embedded Systems, and Analog Electronics II are being revamped to be more project-based.

Looking ahead, our aim is to continuously update the program to align with the latest technological advancements. We plan to integrate Robotics and Programmable Logic Controller (PLC) technologies into our curriculum, empowering students to tackle real-life societal challenges using cutting-edge solutions. These enhancements signify exciting times for the EE program here at UE, as we prepare our students to become innovators and leaders in the field of Electrical Engineering.

Through our commitment to hands-on learning, practical application, and continuous innovation, we are dedicated to fostering a new generation of Electrical Engineers who are not only technically proficient but also equipped with the creativity and problem-solving skills needed to drive technological progress and address some of our society's pressing challenges.

TIPS FOR ACADEMIC SUCCESS

Take Time For Yourself This Summer

As the Academic Year comes to an end, it's important for students to take some time to reflect, not only on how the year went academically, but how you took on new responsibilities, faced challenges, and adapted socially to your new environment. Many students spent time this academic year stressing over grades or struggling with time management while completing large assignments or projects.

Ways to use your Summer Break:

1. **Gain valuable work experience.** Use your summer off from classes to learn more about the industry you plan to work in by taking on an internship or part-time job working in your field of study. Not only will this give you valuable work-experience to put on your updated resume come Fall, it will add to your network of professionals in the industry.
2. **Take time for yourself.** Take a long weekend or even a week-long holiday for yourself. Do something that you enjoy, hang out with friends, relax. Celebrate you and all you have accomplished this academic year, but don't use this time to start planning ahead—just have some fun.
3. **Experiment with time-management tools.** If you struggled with time management or know that you face greater time management challenges moving forward, now is the time to experiment with different time management tools to find the one that works for you. Get used to using the tool that you choose rather than waiting until Fall to start using it.
4. **Consider textbook options early.** Research your textbook options early in the summer so you can plan your purchases. The bookstore is implementing the new Purple Pack for Fall 2024, know your options and how to "opt-out" if you want to purchase your textbooks rather than rent. If you are planning to "opt-out" be sure you don't miss the deadline. Allow enough time for your textbooks to be delivered if you are ordering them.
5. **Review your Financial Aid package.** Take some time to review your Financial Aid package, be sure you are receiving the awards you are expecting. Now is the time to contact Student Financial Service to set up a payment plan or request additional aid.
6. **Research Scholarship Opportunities.** Start with professional organizations in your field of study and work from there to find out about scholarship opportunities available only to undergraduate students in your field. ASCE, ASME, SPE, IEEE, and more offer scholarships with deadlines in the Fall Semester.
7. **Update your Resume.** Take some time before classes start in the Fall to add skills or work experience to your resume. Need help? Contact the Center for Career Development.

We look forward to seeing our students in August!

CAREER DEVELOPMENT CORNER

University of Evansville Center for Career Development

The University of Evansville Center for Career Development offers service to students and alumni. They also work with employers throughout the year to identify potential candidates for positions they are looking to fill. It's a full service office.

Internship and Co-Op Opportunities

The Center for Career Development provides tailored courses that seamlessly integrate your academic studies with real-world work experience. ENGR 071-089 and COOP 091-095 are specially designed for students undertaking full-time or part-time internships and co-ops. By enrolling in these courses, you can formally document your internship experiences on your transcript, ensuring they align closely with your chosen major. Additionally, our EXED 090 course, "Building your Professional Image," equips you with essential professional skills to secure your first internship or full-time job. This comprehensive seminar covers a range of topics including job search techniques, resume development, networking strategies, and effective interview skills.

Save the Date!

Engineering, Business, and Technology Career Fair

Tuesday, September 24, 2024; 12:30-3:00 PM; Eykamp Hall, Ridgway University Center

Career Day

Tuesday, February 4, 2025; 1:00-3:00 PM; Eykamp Hall, Ridgway University Center

Engineering, Computer Science and Construction Management Career Forum

Tuesday, February 18, 2025; 6:00-8:30 PM; Eykamp Hall, Ridgway University Center

Center for Career Development

Are you seeking full time employment? A part time job? Summer Internship or Co-Op? Need to update your resume? **We can help!!** Appointments can be made online through Handshake, or by calling our office at 812-488-1083.

Services are available to students and alumni all summer.