

Bits & BYTES

ISSUE 5 | JANUARY 2025 | VOLUME 2

UE Launches Bachelor of Science in Cybersecurity Starting Fall 2025!

The University of Evansville is thrilled to announce the launch of our **Bachelor of Science in Cybersecurity**, scheduled to begin in **Fall 2025!** This cutting-edge program establishes UE as a **leader in cybersecurity education** in Southern Indiana, addressing the growing demand for skilled professionals to safeguard digital infrastructures in an ever-evolving technological landscape.



In the August 2024 issue, Forbes Magazine reported *“The demand for cybersecurity jobs is expected to grow significantly in the near future, making this career path appealing. The United States Bureau of Labor Statistics forecasts a 32% increase in cybersecurity jobs from 2022 to 2032, which is substantially higher than the 3% average growth rate for all U.S. jobs.”*

Students enrolled in this program will gain hands-on experience in areas such as ethical hacking, network security, and cyber forensics, preparing them for high-impact careers in one of the fastest-growing fields of the 21st century. With a focus on **experiential learning, small class sizes, and state-of-the-art labs**, UE’s Cybersecurity program offers an unparalleled education that sets our graduates apart.

We extend our heartfelt thanks to the visionaries behind this groundbreaking program, **Dr. Bruce Mabis, Dr. Ying Ying Seah, Dr. Maxwell Omwenga, and Dr. Suresh Immanuel**. Their dedication and expertise were instrumental in crafting the proposal and curriculum that will drive this program’s success.

Stay tuned for more updates as we prepare to welcome the first class of future cybersecurity professionals! For more information contact Dr. Ying Ying Seah , Program Director for Cybersecurity , ys55@evansville.edu. The future of cybersecurity starts here—**at the University of Evansville!**

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Associate Dean's Corner

Dear Members of the School of Engineering and Computer Science (SECS) Community,

In this edition, we are delighted to highlight the launch of our Bachelor of Science in Cybersecurity degree program, starting in Fall 2025. This cutting-edge program, developed by our dedicated faculty, aims to equip students with the skills needed to tackle the ever-growing challenges in cybersecurity. This initiative reaffirms our commitment to staying ahead in technological advancements and providing students with high-demand career opportunities. Dr. Ying Ying Seah has agreed to serve as the Program Director of Cybersecurity.

One of the most anticipated events of this semester is National Engineers Week, taking place from February 16 to 22. This annual celebration is an opportunity for us to recognize the incredible contributions engineers make to society and inspire the next generation of problem solvers. To celebrate this week, we will have a special guest lecture by UE alumnus Robert Reifenberg, who will share insights from his distinguished career. We also have networking opportunities organized by our Center for Career Development colleagues that I encourage all students to participate in. Engineers Week is not only a time for celebration but also a chance to expand your professional network and gain valuable industry insights.

I continue to receive valuable feedback from many of you regarding this newsletter. Thank you for taking the time to read and sending suggestions. As we enter this new semester and you work towards your academic and professional goals, I encourage you to maintain a healthy balance between work and personal life. Take time to recharge, seek support when needed, and continue striving for excellence. Let's make this semester a memorable and productive one, filled with growth, learning, and success.

Sincerely,

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

Associate Dean and Professor

School of Engineering and Computer Science

Senior Design Teams

CE 497 SENIOR DESIGN TEAM

At the end of last semester, the civil engineering design team (5 Star Engineering) was able to present our findings to the Lake Talahi Dam homeowner's association with a presentation, drawings of the site, and a preliminary engineering report.

The dam itself, if left as is, will eventually fail and lead to a collapse of the existing spillway.

This semester we will continue to gather data from the site- more surveying of the existing spillway and drainage area and geotechnical testing. With these findings, we plan to design a solution to solve the problems with the spillway and drainage area.

The team is meeting with the Lake Talahi homeowner's at the end of February to update the entire community about our progress and what we will be doing in the future.

UE ACES RACING TEAM

Ace's Racing is participating in FSAE Formula this year. We have been hard at work designing and building our vehicle. Later this semester, we will be testing and tuning the vehicle for optimal performance.

The team is hopeful to have a running and driving vehicle by the first week of April.

THERMOSIPHON TEAM

Thermosiphon team continues our research on the effect of hot-leg height on the system's efficiency while varying collector angle. We have completed Base Case tests and the CHVA High Power tests at 0-inch hot-leg elevation. These findings will provide new insights into thermosiphon optimization, with plans to present our results at the National Conference for Undergraduate Research (N.C.U.R.).

ChangeLab for Campus Improvement

Dr. Park is leading a ChangeLab this semester entitled Campus Improvements. Students will work with University personnel and local community resources to make improvements around the UE Campus. Some of the projects the students are working on include Creating a Study Space in the Engineering Department for students to use, partnering with Evansville Trails Coalition to bring Bikeshare to our campus, creating a student discount website listing local businesses who offer discounts to students. And developing a Campus Master Plan to identify potential future projects.

We will continue to provide updates on this as projects are brought to life.

IMPORTANT DATES

January

30 Harlaxton Information Meeting KC133 5:15 pm

February

4 Career Day, Eykamp Hall 1-3 PM

7 Wellness Day (no classes)

8 MATHCOUNTS Southwestern Indiana Regional Competition hosted by SECS Koch Center 100

17 Purple Visit Day

18 Engineering, Computer Science, & Construction Management Career Forum Eykamp Hall 6-8 pm

21-23 Road Trip

March

8-16 Spring Break (no classes)

14 Midterm Grades Due

20 Martin Luther King, Jr. Day Celebration

Student Organizations

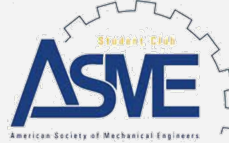
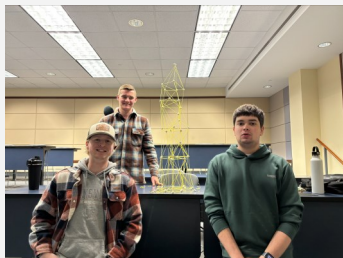
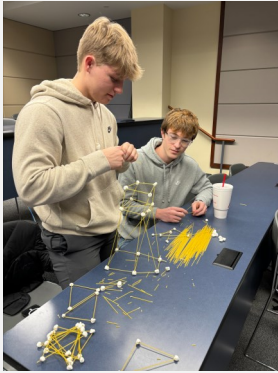
SECS students are welcome to join any of the professional student organizations that relate to their major. Here at University of Evansville, SECS has established student organizations for ACM, ASHRAE, ASCE, ASME, IEEE, and SWE.



President: Jillian Tretter, class of 2027

ASCE has been working on projects for this year's Indiana-Kentucky Symposium hosted by Notre Dame. The Symposium will take place from April 3-5. The group has been working on structural analysis for the Timber Strong competition and the 3D printed bridge competition.

At our last meeting, the members constructed spaghetti and marshmallow towers as a team-building activity. Below are some photos of our members participating in this activity.



Chairman: Nate Bingham, Class of 2027

ASME is having a meeting on January 29th with guest speaker Kyle Ramey. He is a TMMI engineer from their East Weld department who will be sharing his career experiences with us. Other exciting activities are planned for our February meeting. We hope everyone is having a great spring semester!



ASHRAE student chapter is looking for more members. Any ME student interested in refrigeration, heating & Air Conditioning should reach out to the Faculty advisor, Dr. Lofton, for more information.



IEEE student chapter is looking for more members. Any Electrical Engineering, Computer Engineering, or Computer Science student is invited to participate. For more information, reach out to the Faculty advisor, Dr. Will.



ACM Student chapter is looking for more members. Any Computer Engineering or Computer Science student is invited to participate. Students interested in ACM should reach out to the Faculty Advisor, Dr. Mabis, for more information.



President: Baylee Essert, Civil Engineering Class of 2025

SWE did not have any activities to report this month. If you'd like to learn more about membership in SWE, reach out to Baylee Essert or the faculty advisor, Dr. Lofton.



SECS Celebrates National Engineers Week

Engineers Week begins Sunday, February 16 and continues through the week. SECS has some events planned to help our students and faculty celebrate the week. **ENGINEERS WEEK®**

FEBRUARY 16–22, 2025

Engineering, Computer Science, & Construction Management Forum

On Tuesday, February 18, the annual Engineering, Computer Science, and Construction Management Forum will be held in Eykamp Hall beginning at 6:00 PM. Several employers will be participating, including:

VS Engineering, Kapur & Associates
BWX Technologies, Inc
Wessler Engineering
American Structurepoint
Jasper Engines & Transmissions
Garmong Construction
Southern Star Central Gas Pipeline

Mark Silen
Powers Engineering
Endress+Hauser
Barton Malow
TOYOTA
Metronet

The event begins with a Q&A session where employers sit as panelists to answer student questions. After the Q&A session, there is a networking reception where students can interact with all employers **Register in Handshake to attend.**

Engineers Week Guest Lecture

Wednesday, February 19th

12:00 – 1:15 PM

Koch Center, Room 100

Join us as we welcome UE Alumnus Robert Reifenberg to campus on Wednesday, February 19th at Noon in KC 100. Reifenberg earned a B.S. in Industrial Engineering from the University of Evansville and an MBA from California State University. He is a retired Director of Quality for the F-35 Joint Program, with the United States Air Force. Learn more about Reifenberg's experiences as an industrial engineer and his journey across several states as a civilian employee serving the US government.

TIPS FOR ACADEMIC SUCCESS

- 1 DEFINE WHAT ACADEMIC SUCCESS MEANS TO YOU.**
Is it getting a specific GPA for the semester? Is it receiving a grade in a specific class? Is it having an article or paper published? Is it getting a teaching assistantship? What is it you want to achieve? Create a short-term goal for the semester, and a long-term goal for what you want to achieve by graduation. Once you've written down your goals, read them, or look at them every day.
- 2 EVALUATE YOURSELF. PLAN HOW YOU CAN BEST USE YOUR STRENGTHS AND HOW YOU WILL IMPROVE YOUR WEAKNESSES**
Look at what your strengths are. What skills are you good at? What subjects and areas do you well in? List those. Look at your weaknesses. What don't you do well? Are there skills you are weak in? What subjects are hard for you? List those things too. Also, consider how you learn best. Do you learn by writing things down? Are you a visual learner? Are you an auditory learner? Every student has weaknesses. Excellent students persist and keep improving.
- 3 READ YOUR SYLLABI.**
It sounds obvious, but you would be amazed at how many students don't read a course syllabus. You need to know an instructor's policies, how your grade is calculated, and have a solid overview of what is covered in the class. If your grade is affected by attendance and effort those are two easy things you can control. Know your instructor's office hours and how you can reach him/her if you need help. Mark all this important information in a planner.
- 4 READ AND STUDY ONE CLASS AHEAD OF WHAT IS DUE FOR THAT DAY.**
If you read ahead of what is due, you'll know how what you learn in one class period relates to what comes next. When you understand what comes next it deepens your knowledge of what you cover that day. Plus, you're always ahead in class, so you'll have more time at the end to study for finals.
- 5 GET HELP IN YOUR CLASSES. CREATE A STUDY GROUP.**
If you struggle with a subject, don't be afraid to ask for help. You may need more help than what you can learn in class, so find a tutor or a classmate who can help you. Get feedback on your work - from other students, a tutor or try going to the college writing center. **Even if you are a great student, you'll benefit from asking questions and getting feedback on your work.** Visit a professor during office hours, see a classmate who excels in that class or find a tutor to help you. Getting comments and suggestions for how to improve your work boosts your academic progress.
Study groups are a powerful way to increase your learning. In a study group, you prepare for each meeting and work through questions. Every member of the group teaches and learns the course material together. You'll also encourage each other to keep going even when a subject is difficult.

INTERNSHIP & SCHOLARSHIP OPPORTUNITY

The North American Die Casting Association (NADCA) offers internship and scholarship opportunities to college engineering students.

Die castings are a vital, though usually invisible component to so many products that surround us in our everyday lives. NADCA would like to share the opportunities of this continually emerging technology by informing students about the David Laine Internship & Scholarship Program. The program provides scholarships to college students who have interned with die casting companies/companies that are suppliers to the die casting industry.

This past fall, the David Laine Intern and Scholarship Program awarded 10 students scholarships ranging from \$1,000-\$4,500, totaling over \$25,000. Our Board hopes to recognize even more this year and will award up to \$10,000 per scholarship depending on the application!

NADCA is also seeking applicants for its Intern Program, which will be promoted to die casting industry executives and HR departments across North America. Materials are due Friday, January 31, but we will continue to post applicants as they are received. Interested companies will contact students directly. Students can visit: [Die Casting Internships](#) to learn more.

Graduate students may be interested to learn about the Steven J. Harmon Memorial Scholarship Program. The purpose of this scholarship is to raise an awareness and interest in the die casting industry, as well as to promote die cast technology through engineering education while honoring Mr. Harmon, who was a leader in the die casting industry.

For more information, contact:

Donna Hutchins
 NADCA Membership Services
 847.808.3154
hutchins@diecasting.org

To learn more about Die Casting, please follow the links below:

- [What IS Die Casting?](#)
- [What does a career in Die Casting look like?](#)
- [What is the future of Die Casting?](#)