SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE

SCHOOL OF ENGINEERING

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MESSAGE FROM

As we embark on another exciting year, I am thrilled to share some remarkable milestones and initiatives shaping the future of the School of Engineering. Our commitment to academic excellence, innovation, and student success continues to drive us forward. I am proud of the progress we have made together.

Undergraduate enrollment is rising, reflecting the growing demand for engineering education and the trust placed in our programs. This surge is a testament to our dedicated faculty, cutting-edge curriculum, and strong industry partnerships that prepare students for impactful careers. We remain committed to fostering collaboration and hands-on learning as we continue to expand.

Our students and faculty continue to make outstanding contributions to the field of engineering. This past year, their hard work, ingenuity, and dedication have resulted in numerous awards and recognitions. From student competitions to faculty honors, these achievements enhance our reputation and inspire the next generation of engineers to push boundaries and pursue excellence.

We proudly celebrate 35 years of transformative education and research in the Department of Mechanical and Mechatronics Engineering. This milestone is a moment to reflect on our journey and look forward to the future, embracing emerging technologies and interdisciplinary collaboration.

Recognizing the critical role of Surveying and Geomatics in infrastructure and development, we are launching new initiatives to attract and inspire future professionals in this field. Through enhanced academic programs, outreach activities, and partnerships with industry leaders, we are shaping a dynamic learning environment that equips students with the skills and knowledge needed to excel in surveying and geomatics.

We are excited to introduce a new dual civil engineering degree program in collaboration with our German partners. This initiative allows students to gain a global perspective, develop cross-cultural competencies, and expand their professional networks. We are preparing our graduates to thrive in an increasingly interconnected world by embracing international collaboration.

As we continue to innovate and grow, I extend my gratitude to our faculty, students, alumni, and industry partners for their invaluable contributions. Together, we are shaping the future of engineering and empowering the next generation of leaders.

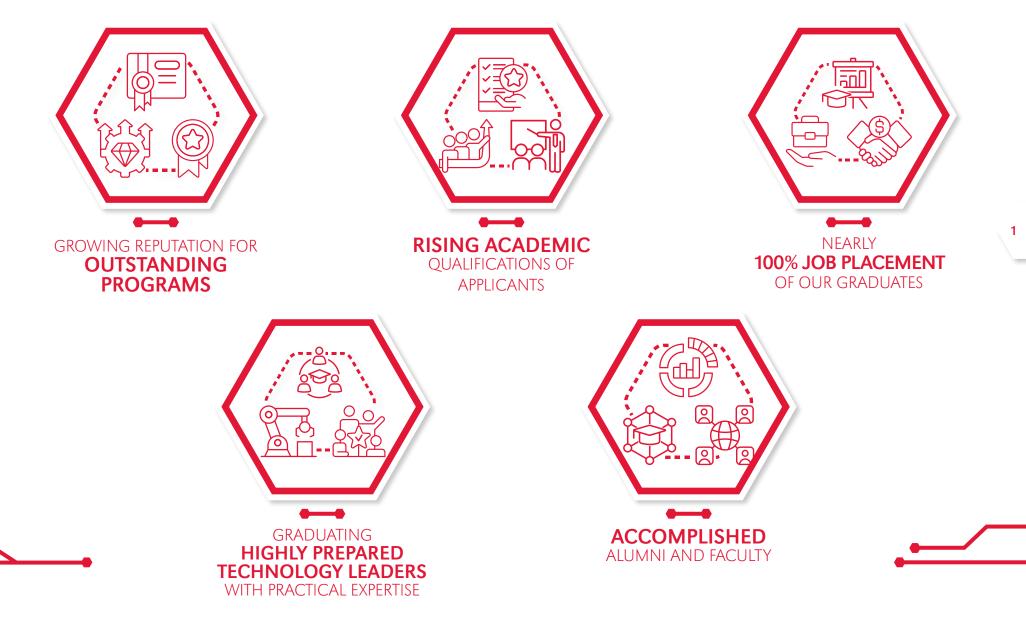
With best regards,

Cem Karacal, PhD Dean



ABOUT THE **SCHOOL**

Since 1983, the School of Engineering has prepared students to meet our region's and nation's growing needs for more engineers, computer scientists, and construction managers. Our efforts fuel the prosperity of our region.



ENGINEERING STUDENTS DOMINATE IEEE ST. LOUIS COMPETITION

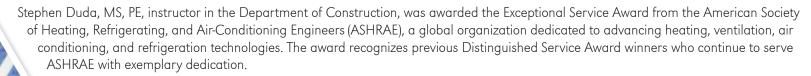
Six SIUE School of Engineering students celebrated an outstanding performance at the Institute of Electrical and Electronics Engineers' (IEEE) St. Louis Section Blackbox competition held in October at Washington University in St. Louis.

There were two categories in competition: digital circuit analysis and analog circuit analysis. The competition involved analyzing the details of a mystery circuit within three hours by taking input and output measurements. SIUE students claimed first place in both categories, marking it as the school's most successful outcome in the competition to date. Washington University in St. Louis and Missouri University of Science and Technology were the other participating universities.

As the first-place winner in both categories, SIUE will host the 2025 Blackbox competition.

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STEPHEN DUDA RECEIVES EXCEPTIONAL SERVICE AWARD FROM ASHRAE



Duda received the Distinguished Service Award from ASHRAE in 2009 for his contributions to Standard 15, "Safety Standard for Refrigerating Machinery Rooms," and his leadership as chair of Technical Committee 9.01, which focused on large building air-conditioning systems.

"My ASHRAE membership has been invaluable throughout my 35 years as a practicing engineer," said Duda. "It allowed me to learn from leading experts. Now as an educator, I aim to pass on that knowledge to the next generation of engineers."

Since transitioning to academia at SIUE in 2020, Duda's engagement with ASHRAE has evolved, giving him a renewed perspective.

"I seek out fellow educators within ASHRAE to exchange insights and stay current with the best teaching practices," he said. "I am excited about continuing my role as an engineering and construction instructor. I plan to use my ASHRAE membership to stay updated on educational strategies and contribute meaningfully to the field."

Duda's career and service to ASHRAE highlight the impact of dedicated volunteer work and the importance of mentoring future professionals at SIUE.

CELEBRATING 35 YEARS OF EXCELLENCE

The Department of Mechanical and Mechatronics Engineering celebrated its 35th anniversary in October with a memorable gathering of alumni, faculty, students, and supporters. Held in the Enterprise Mobility Atrium of the Engineering Building, the event honored the department's legacy, recognized achievements, and cast an optimistic future in engineering education and innovation.

"We honor our past, celebrate the present, and look forward to the future," said Terry Yan, professor and chair of the department. "We are celebrating 35 years of achievement, and we look forward with help from alumni, faculty, and students to a successful future."

During the reception, Jason Hill '93, accomplished patent and managing engineer, shared his journey from SIUE student to global engineering leader. He reflected on the invaluable mentorship of faculty and the strength of the SIUE engineering community, noting the lasting skills and connections gained from an SIUE education.

A lot has changed in engineering in the last three decades, but I've been able to mostly keep up because I learned how to learn. I thank SIUE for giving me that.

- Jason Hill '93

"One of the greatest advantages of this program is the faculty," Hill continued. "They are mentors who genuinely care about success and that goes up and down the staff here. I've been able to come back and spend a lot of time with the School over the last several years. They encourage curiosity, push us to ask the right questions, and challenge us. I think that's where the School really excels."

With a strong foundation of mentorship and innovation, the Department of Mechanical and Mechatronics Engineering looks forward to continuing to build a legacy of engineering excellence for many years to come.

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 - Keqin Gu, PhD, Distinguished Research Professor, Department of Mechanical and Mechatronics Engineering, and Mrs. Xinxin Zhu









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BUILDING TOMORROW'S SURVEYING WORKFORCE

SIUE's bachelor's in surveying and geomatics is a one-of-a-kind program within a 400mile radius of St. Louis. The program has garnered great support, raising \$545,000 in just six months from industry partners to help SIUE attract high school students to the field of surveying,

"We worked with professional partners and listened to what their needs are when we created this program," said Lisa Smith, director of development for the School of Engineering. "The program launch campaign is a professional sponsorship campaign. Sponsorships provided the money we needed to market and recruit new students into our surveying and geomatics degree program through 2029."

To broaden its reach, the program is collaborating with various marketing firms, working to attract potential students in the Greater St. Louis, Chicago, and across the region. The program aims to appeal to students who enjoy both office and field work, possess entrepreneurial skills, and thrive in a team setting.

As part of the program's launch fundraising campaign, more than \$24,000 was raised to develop 18 scholarships each year for the next five years to be awarded to enrolled first-year, sophomore, and transfer students accepted to the program. In addition, several sponsoring companies are offering students internships and job opportunities in their field as early as their first year of study, fostering strong professional relationships long before graduation.

"One of our long-term goals is to establish SIUE's program as the premier surveying and geomatics program," said John Cabage, PhD, associate professor and chair, Department of Construction. "The support from industry partners has been vital, and the future looks promising."

Learn more at siue.edu/surveying-geomatics

Founding Partners

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- Cage Civil Engineering
- CEMCON
- Hampton, Lenzini and Renwick (HLR)

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- TWM
- Volkert
- TWiG Technologies
- V3 Companies
- Willett Hofmann & Associates



SIUE PARTNERS WITH GERMANY'S HOCHSULE MAINZ FOR **CIVIL ENGINEERING DUAL DEGREE**

The School of Engineering is proud have launched a dual civil engineering degree with Hochschule Mainz - University of Applied Sciences of Germany (HS-Mainz) offering students a unique educational opportunity and cultural exchange.

"SIUE students can earn a second bachelor's in civil engineering from one of the top technical schools in Germany, with only one extra semester of study," said Nader Panahshahi, PhD, professor and chair of the Department of Civil Engineering. "Students can also obtain an international perspectivefor their engineering career."

Likewise, HS-Mainz students can earn a second bachelor's in civil engineering from SIUE's ABET-accredited program.

SIUE's Ryan Fries, PhD, professor and director of the dual degree program, and HS-Mainz professor Alfons Buchman, PhD, spearheaded the collaboration between the two universities. After four years of working on the agreement, the program officially began in the fall of 2024.

— Jianpeng Zhou, PhD, professor of civil engineering, conducted a sustainable engineering seminar at HS-Mainz in June 2024. HS-Mainz students attend an informational session about SIUE.



By studying in Germany, students can immerse themselves in another culture and develop new perspectives. They will have experience with a broader array of design methods, materials, and solutions, leading to more creative design solutions.

> - Ryan Fries, PhD Professor, Department of Civil Engineering

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Your Support Drives Our Success!

The common theme in each of these featured articles is the critical role that donations made to the School, received from companies and individuals, played in helping our students and faculty achieve success. Donations can be made to support student competition and international travel, faculty conference attendance for professional development, program marketing to increase enrollment, student scholarships, and so much more. Every donation, large and small, to the School of Engineering helps us to provide high impact experiences that enrich the education of our faculty and students every single day. **Please contact Lisa Smith, director of development, to learn how you can make an impact at lsmitag@siue.edu**.



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Printed by authority of the State of Illinois, 4/25, 25100200