

ENGINEERING EVOLUTION 2014 DEAN'S REPORT



MESSAGE FROM THE DEAN

Evolution is a process of continuous change to a higher, more complex state. It's not an unseen progression; it happens all around us, all the time.

When I assumed the dean's position in the SIUE School of Engineering the enrollment, graduation and placement rates were solid, and demand for our programs was on the rise.

However, we knew that we must constantly evaluate our needs and develop solutions to fulfill our mission and vision for the School.

The School is constantly evolving its educational offerings as it effectively responds to rapidly changing technologies and workforce demands.

- We created a collaborative doctoral program with our sister campus in Carbondale.
- We established a master of science program in industrial engineering.
- We are developing a bachelor of science program in mechatronics and robotics engineering.

Our faculty members bring additional resources and learning opportunities to students by engaging them in research relevant to modern-day challenges. A few examples are:

- Pioneering a highway incident management training program for incident responders throughout Illinois
- Bettering the environment through alternate energy research
- Revolutionizing the medical industry with the development of new treatment and early detection solutions

The School has expanded outreach activities in the region and worldwide by utilizing creativity and attention to detail to solve problems and raise awareness.

- Our students have lent their talents and strengths to provide solutions for problems involving accessibility, disaster recovery and sustainability issues.
- We have expanded collaborative efforts with industry in order to provide opportunities to work on real-world problems and showcase our students through internships, co-ops and full-time employment opportunities.

Twenty-five years ago, the World Wide Web was not common knowledge. Now, we can't imagine the world without it. From slide rules to tablets, engineering and technology continues to evolve, and we must evolve with it. We must reflect on the past and be mindful of the present in order to plan for the future.

This is where our engineering community benefits us the most. They teach our students, serve on boards, provide internships for our students, offer jobs to our graduates, and contribute financial support. We are grateful for their support.

I hope you get as much satisfaction as I do seeing the changes and contributions you and our graduates are making. I look forward to seeing what our future graduates will accomplish 10 years from now.

With gratitude,

Hasan Sevim, PhD
Dean and Professor

SCHOOL OF ENGINEERING VISION

The vision of the SIUE School of Engineering is to be a partnership of faculty, students, staff, alumni and other professionals who work together to provide the highest quality education and maintain innovative resources that support the technical growth and economic development of the region.

MESSAGE FROM THE CHANCELLOR

SIUE continues to be recognized nationally for excellence. For the first time, the University has been listed among *Washington Monthly's* Top 40 master's universities in the nation, achieving the distinction of being first among all master's institutions in Illinois on the national magazine's list. Unlike conventional college rankings, *Washington Monthly* evaluates an institution's "contribution to the public good" in three categories: social mobility, research and service. This is the fifth consecutive year SIUE has been recognized. Additionally, *U.S. News & World Report* Best Colleges of 2015 lists SIUE among the best Regional Universities Midwest for the 11th consecutive year and among the top 15 public universities in that category.

SIUE has also received the 2014 Higher Education Excellence in Diversity Award from *INSIGHT Into Diversity* magazine. The award is an important national honor recognizing outstanding commitment and efforts in supporting diversity and inclusion throughout campus.

As evidenced by these recognitions, SIUE is committed to providing the knowledge, experience and opportunities students need to be successful after college. Higher education in today's society requires innovative approaches to prepare graduates for the global stage. Partnerships with business and local government, and alliances with community members and other educational institutions, combine with a high-energy learning environment to position SIUE as a leader in maximizing student potential.

The School of Engineering is an excellent example of the University's proactive and leading-edge approach to higher education. As the methods for teaching and practicing engineering, construction and computer science evolve, so have the School's programs and curricula. With an increased commitment to internationalization and continued dedication to excellence in the classrooms and laboratories, our faculty, students and School are motivated in their pursuit of advancing technology, enhancing quality of life considerations and social justice.

SIUE is committed to enhancing curricular and co-curricular programming to provide students with a breadth of experience that will promote success upon graduation. Please join in supporting the School of Engineering as together, we fulfill the potential of future engineers, computer scientists and construction managers of our community, both locally and beyond.

Best wishes,



Julie Furst-Bowe, EdD
SIUE Chancellor



ABOUT SIUE

Beautifully situated on 2,660 acres, SIUE is a public university offering a broad choice of degrees and programs, ranging from liberal arts to professional studies. Undergraduate and graduate degrees are offered in the arts and sciences, business, education, engineering, and nursing. The Schools of Dental Medicine and Pharmacy award doctor's first professional degrees in dental medicine (DMD) and in pharmacy (PharmD). Nearly 14,000 students choose SIUE for its enlightening programs, engaging faculty and convenient location, just 25 minutes from St. Louis.

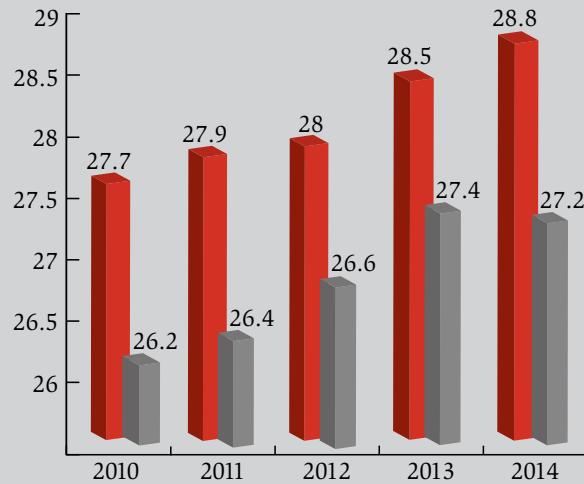
ABOUT THE SCHOOL OF ENGINEERING

The development of engineering innovation for our global community requires the collaboration of talented individuals who have diverse perspectives shaped by their unique experiences. The SIUE School of Engineering takes pride in its diversity and acknowledges that other people, voices and cultures can offer new ways of seeing the world, solving problems and working together. The School believes that differences in age, gender, race, culture, nationality, education and other characteristics of a person's background can be leveraged as assets, particularly toward a goal of improving quality of life.

ACT Scores - First Semester Freshmen

■ ACT Math

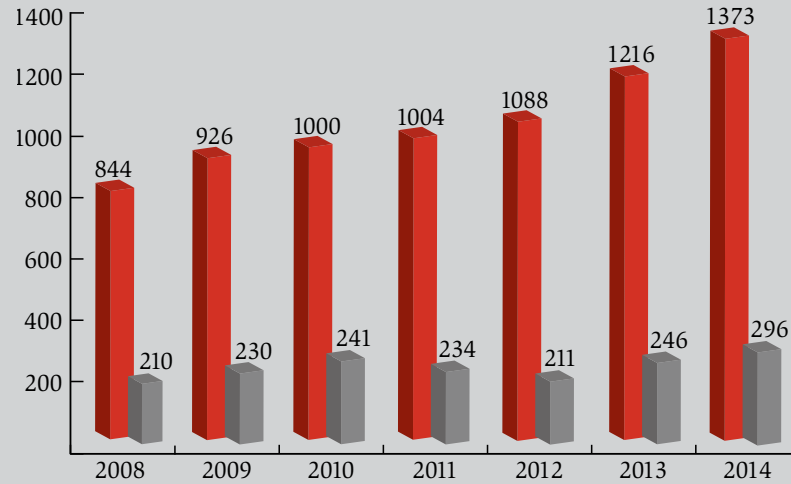
■ ACT Composite



Record Enrollment

■ Undergraduate

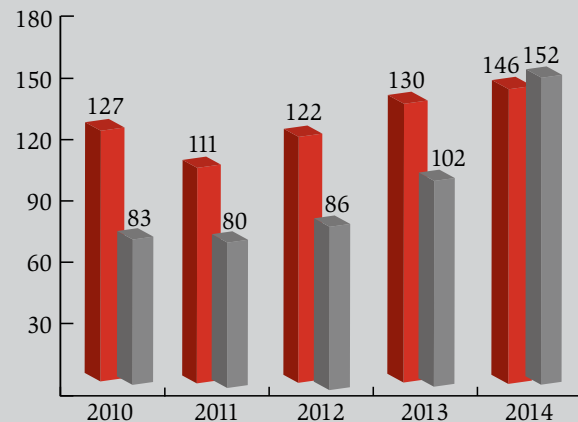
■ Graduate



Minority & Female Undergraduate Enrollment

■ Female

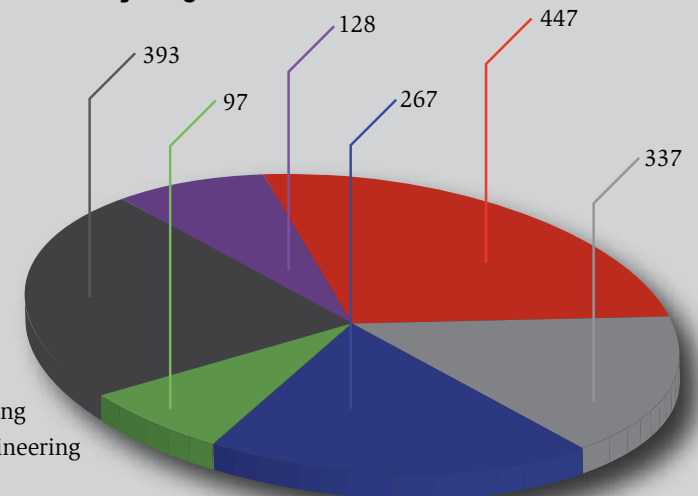
■ Minority



Undergraduate and Graduate Enrollment by Program

298	39	Graduate
206	61	
97	0	
283	110	
99	29	
390	57	
Undergraduate		

- Computer Science
- Civil Engineering
- Construction
- Electrical & Computer Engineering
- Industrial & Manufacturing Engineering
- Mechanical Engineering





MESSAGE FROM THE PROVOST

SIUE is a vibrant, growing university with unlimited potential as a premier student-centered educational community. Working toward this goal, the School of Engineering provides an unprecedented environment for incorporating integrative and interdisciplinary learning, while fostering the outstanding research and scholarship initiatives of its faculty.

The faculty within the School take the lead on inspiring the next generation of engineers, computer scientists and construction managers through their commitment to the teacher-scholar model and discovering new technologies through their research initiatives.

Since the creation of its engineering community in 2007, the School of Engineering has enjoyed continued achievement and success.

- The School's enrollment has increased by 58 percent since 2008.
- The rising ACT scores of incoming freshman show that the School is attracting well-prepared, high-quality students.
- The faculty and students are fully engaged with the community, continually striving to link student learning with practical application and experience.

- The School's students serve as articulate ambassadors of their programs.
- Employers consistently seek the School's students for internships and co-ops, and graduates for full-time employment.
- The School has expanded its global presence by establishing collaborations with universities from around the world.

Please join me in supporting the School in maintaining a superior learning environment and powerful commitment to our students.

Parviz Ansari, PhD

Provost and Vice Chancellor for Academic Affairs

ENGINEERING DEGREES

The SIUE School of Engineering offers a comprehensive collection of professionally accredited engineering programs:

Civil Engineering – BS, MS

Industrial Engineering – BS, MS, Minor

Construction Management – BS, Minor

Electrical Engineering – BS, MS, Minor

Computer Science – BA, BS, MS, Minor

Engineering Science – PhD (*collaborative program with SIU Carbondale*)

Computer Engineering – BS, Minor

Mechanical Engineering – BS, MS, Minor



Through the Student Design Center, Ed Grady, BS Civil Engineering '72, hopes to provide students with a space they can call their own for conducting research and hands-on project development. "I think the concept in engineering of having labs and places where people can participate in hands-on learning is extremely important," Grady said. "I look at the new Student Design Center as an area we're creating for students to have experiences that will help them gain future opportunities."

STUDENT DESIGN CENTER: CONSTRUCTING EDUCATIONAL OPPORTUNITIES

Ed Grady has created a successful life by taking advantage of countless opportunities. Throughout his career, Grady has worked all over the United States and revamped the sales of four failing businesses to make them profitable once again. He explains that the School of Engineering provided him with invaluable opportunities, and he wants to pay it forward to current and future SIUE engineering students.

Grady, an active alumnus who supports the continued success of the School, is the lead gift bearer toward the development of the new SIUE School of Engineering Student Design Center. A 1972 civil engineering graduate and native of Alton, Ill., he is an outspoken advocate of equal opportunity, especially for students who are looking to enhance their education.

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He hopes that his donation will serve as a catalyst to convince others to contribute funding toward this impressive Student Design Center. "With this contribution, I hope to help construct the Student Design Center and make it a beautiful place where students can work toward their dreams," Grady said.



HOW WILL ENGINEERING STUDENTS BE IMPACTED BY THE NEW ENGINEERING STUDENT DESIGN CENTER?

"The Student Design Center is not only an investment in the University, but an investment in its students, the School's most powerful recruiting tool."

**Zach Crawford, Senior
Mechanical Engineering, St. Elmo, Ill.**

"The Student Design Center will give engineering students a centralized location to showcase our projects and show donors, sponsors, prospective engineering students and the SIUE community what we can do."

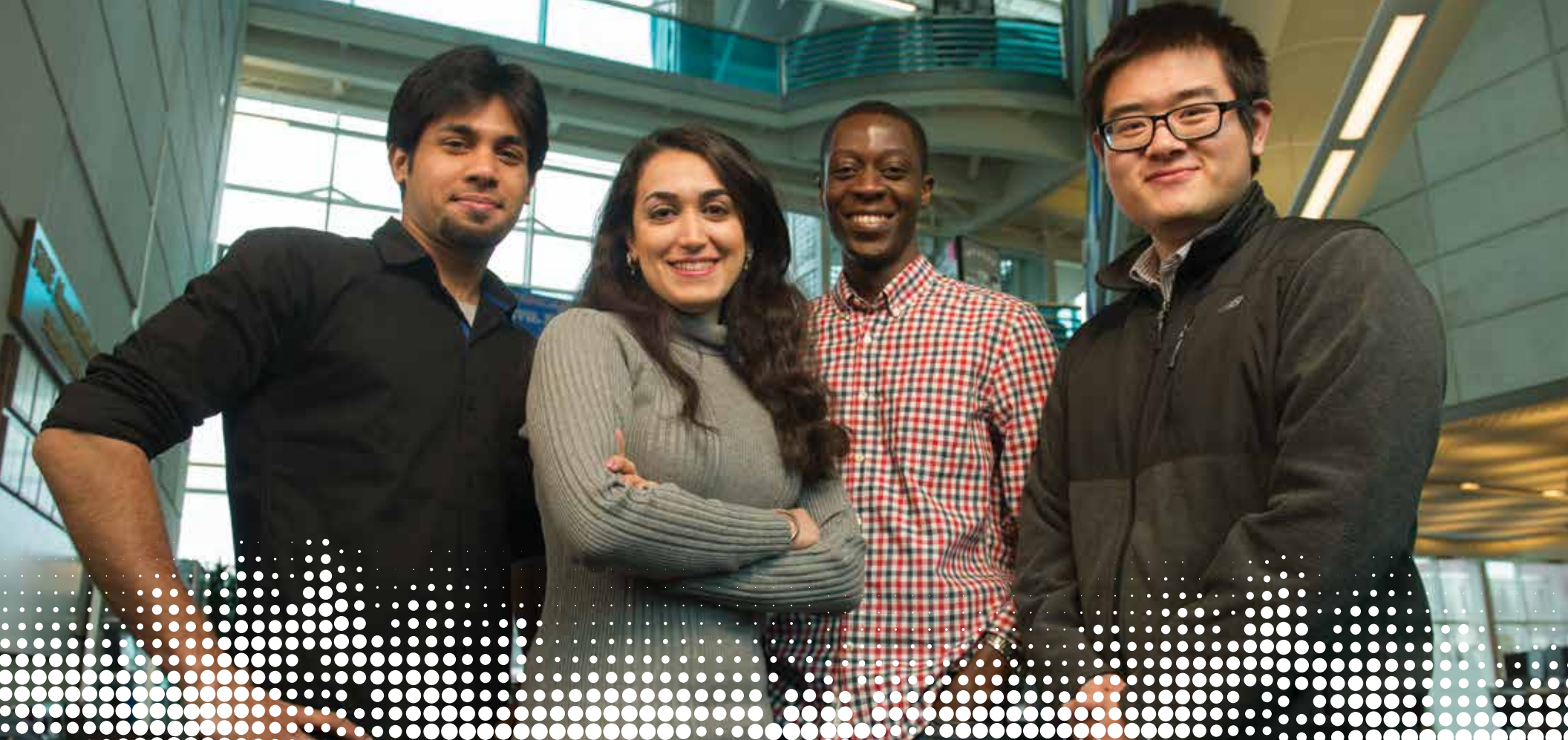
**Nichole Schackmann, Junior
Mechanical Engineering, Newton, Ill.**

"A new space where teams can design, build and practice is necessary if we, as a School of Engineering, want to continue to grow and support our student teams and organizations."

**Amanda Fisher, Sophomore
Civil Engineering, Springfield, Ill.**

"A new Student Design Center will allow student design teams to have more professionally engineered projects, which will increase each team's competitiveness. Allowing students to build projects that are competitive is the best recruiting mechanism for the School. The Student Design Center has the power to make prospective students choose SIUE over other universities."

**Brad Herman, Senior
Mechanical Engineering, Newton, Ill.**



MAKING AN INTERNATIONAL IMPACT

The School of Engineering provides a multicultural atmosphere and new experiences to international and domestic students alike. The School has enjoyed an increasingly vibrant international student population over the last 10 years. In 2014, the School educated 265 international students, making it home to more than 60 percent of the international student population on SIUE's campus.

Consisting of 73 undergraduate students and 192 graduate students, these future engineers came from 16 different countries, including India (122 students), Turkey (69 students), Iran (24 students), China (13 students) and Nigeria (11 students).

Proudly, the School educates diverse individuals and gives them the opportunity to not only better the United States, but also the ability to make an impact globally.

"International students add to the intellectual rigor of the School and bring cultural diversity to student life," said Dr. Hasan Sevim, dean of the School of Engineering. "These students will be a rich source of talent all around the world."

Engineering faculty realize the importance of educating students to live and work within a multicultural environment. Today, employers seek applicants who are

able to think in broad cultural terms, work in culturally diverse teams, converse in foreign languages and augment the company's international agendas. The School focuses heavily on these professional aspects by providing a variety of group collaboration projects, which serve as real-world simulations of the cultural differences that can be found within engineering project execution.

ENVIRONMENTAL RESOURCES TRAINING CENTER: A PLACE OF UNIQUE OPPORTUNITY

Lending itself to the unique atmosphere of the School of Engineering is the Environmental Resources Training Center. Also known as the ERTC, the Center is responsible for educating, training and certifying students in the field of water treatment. Participants in the year-long Water Quality Control Operations Program are given the opportunity to test for as many as five water treatment certifications, an offering that cannot be found anywhere else in the state. The ERTC serves as Illinois' sole training center in the area of water treatment technology, further adding to its uniqueness.

Within its walls, the ERTC operates five 30,000-gallons-per-day, training-scale water treatment plants—two wastewater plants and three forms of drinking water treatment—along with two water-quality teaching laboratories. The training received by the students includes plant operations, instrumentation, electrical and mechanical maintenance, sampling, laboratory analysis, and safety practices. They also receive thorough training that provides them with all aspects of water treatment from the basics to the most advanced systems, such as reverse osmosis and biological nutrient removal.



The ERTC Director Paul Shetley is very pleased with the growth of the ERTC and the commitment of its students, both past and present, to the overall improvement of water quality in the Midwest. “The kind of training we give is something special. It’s not just sitting in a classroom,” he said. “We implement hands-on training that encourages students to feel a sense of ownership for the ERTC. The students take great pride in this method of education.”

For the future, the ERTC plans to focus on environmental sustainability and improved accessibility to training programs. The ERTC has already implemented an alternative energy program that includes the installation of solar panels and a wind turbine, which have saved the University more than \$13,000 in utility fees since 2011. Further, the ERTC will begin development of online courses, making their unique training programs accessible to anyone with internet service.



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The School of Engineering values high-quality, leading-edge faculty research that contributes to the advancement of its disciplines. Whether it is basic research aimed at the development of new knowledge, or application research that converts knowledge into useful products and services, research enables faculty to deliver state-of-the-art education to students.

RESEARCH EVOLUTION

Mark Grinter

Assistant Professor, Construction

Mark Grinter has paired with the Illinois Center for Transportation to study practices for limiting water runoff from transportation infrastructure as an alternative to expensive water treatment and water quality testing. Grinter and three other School of Engineering faculty members are investigating stormwater best management practices and their associated cost and effectiveness. In another project, Grinter partnered with the SIUE Department of Biological Sciences to evaluate temporary vegetation variety performance on construction sites. The study resulted in beneficial modifications to current seeding specifications, and their findings are expected to be included in the next edition of *The Illinois Department of Transportation's Standard Specifications for Road and Bridge Construction*. This manual controls site work on all public and most private projects undertaken in Illinois.

Ryan Fries, PhD

Associate Professor, Civil Engineering

Dr. Ryan Fries is recommending a method for measuring the accuracy and availability of traveler information on certain routes to the Illinois Department of Transportation. The goal of this project is to improve personal and commercial shipment of goods travel. By providing more accurate information, better choices can be made about how to travel, which routes to take and when to leave. Fries is also studying the effect of the mounting position of road signage on impaired driver sign recognition. Using a state-of-the-art traffic simulator, the project's goal is to reduce the number of poor decisions made by impaired drivers entering freeways.

Xin Chen, PhD

Assistant Professor, Industrial Engineering

Dr. Xin Chen is currently working with the Illinois American Water Company to construct a reliability model which uses preventative measurements to reduce the number of pipeline breaks in existing water distribution systems. The goal of his research is to detect pipeline issues before breakages occur, thus improving the reliability of the entire water distribution system. Chen is also studying humanitarian logistics and transportation planning. This project analyzes supply chain logistics and attempts to identify the optimal routing for distribution vehicles. Using mathematical models, Chen will work to develop exact and heuristic algorithms for cargo shipment.

Mark McKenney, PhD

Assistant Professor, Computer Science

Dr. Mark McKenney is currently conducting spatiotemporal database research. His research includes creating models to represent real-world objects in database systems, creating algorithms to manage and analyze that data, and creating systems to allow users access to computational facilities, allowing them to quickly make decisions based on complex data analysis. Through a fellowship with the CyberGIS Center for Advanced Digital and Spatial Studies at the National Supercomputing Center, McKenney is also working with a team to design frameworks and educational practices to enable cyberinfrastructure that allows students and professionals to access supercomputing resources through web interfaces. The goal is to allow access to large-scale data analysis and computational capabilities to anyone with a web-enabled device.

Jeff Darabi, PhD

Associate Professor, Mechanical Engineering

Dr. Jeff Darabi's research interests include microelectromechanical systems (MEMS), micro/nanofluidics and biomicrofluidics. Currently, Darabi is developing a biomicrofluidic device that is targeted toward early detection of cancerous circulating tumor cells (CTC) in the bloodstream. His device is considered to be an exclusive and emerging technology – even among major research universities. Darabi currently has three pending patents on his device. Through successful implementation of this device, the medical field could move away from centralized laboratory work into point-of-care care diagnostics to aid in individualized therapy. His work has been published in high impact journals, such as *Biomicrofluidics*, *Microfluidics and Nanofluidics*, *JMEMS*, etc.

Xin Wang, PhD

Assistant Professor, Electrical and Computer Engineering

Dr. Xin Wang has several research interests, including hybrid electric vehicles, four-wheel motor control, electrical machines and drives, automatic controls, power systems and power grades. The goal of his research topics is to improve vehicle power densities, achieve speed and torque control on four-wheel motor systems, prolong the performance and life of electric vehicles, and improve the efficiency of sustainable energy resources. Wang hopes to make breakthrough discoveries that lend to the overall innovation of hybrid vehicles. He believes it is important to include students in research, as his projects are assisted by more than 10 students at both the graduate and undergraduate levels.



MENTORING STUDENTS TOWARD THEIR PROFESSIONAL ASPIRATIONS

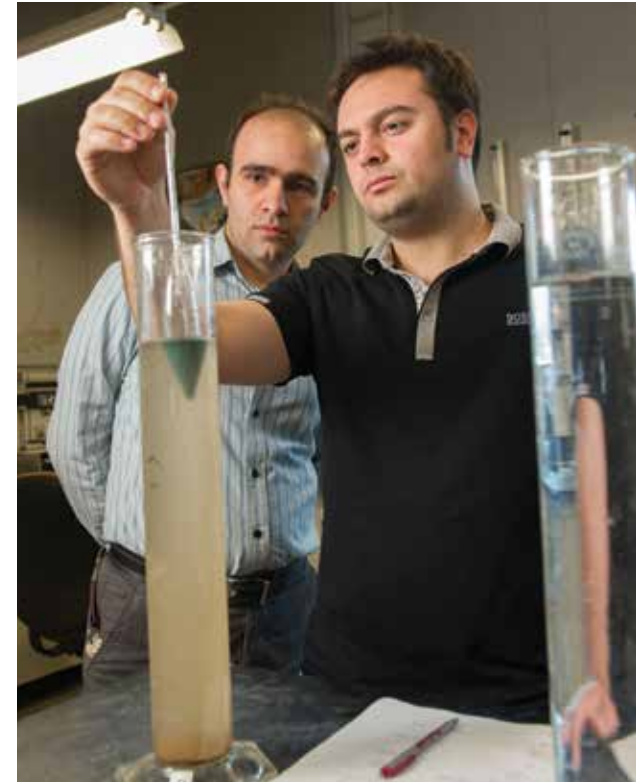
Faculty-student mentorships are an excellent resource and learning experience for the professional growth of a student. Mentorships concentrate on teamwork, collaboration with professional research faculty and in-depth experiential learning not available inside the classroom. Working in such a research-driven field, the School of Engineering emphasizes the formation of these relationships to enhance students' professional skills prior to graduation.

Programs such as Undergraduate Research and Creative Activities (URCA) and research assistantships create opportunities for engineering students to participate in faculty-led mentoring opportunities. Now more than ever, students are taking advantage of these benefits as they build impressive educational resumes.

Dr. Abdolreza Osouli, assistant professor of civil engineering, feels strongly about the lasting impressions created through faculty-student mentorships. "If you have a good mentor, you learn so much from that person by just interacting on a daily or weekly basis. You learn very important professional skills," he said. "These skills apply to all jobs, so they will impact the successes of students' entire career."

Osouli came to SIUE in 2012 to establish the School's geotechnical program. He is a devout advocate of faculty-student mentorship, citing that much of his work could not be completed without student collaboration. He acknowledges the impact that past mentors have had on his career, allowing him to serve as a similar role model for his own students. "It is important to guide students in the direction of solutions without giving them the answers," Osouli said. "That is where they truly learn."

He plans to continue offering faculty-student research opportunities, explaining students discover their professional interests in these situations. "As faculty members, it is our duty to guide and engage students.



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MECHATRONICS: THE FUTURE OF INNOVATIVE TECHNOLOGIES

As industrial practices and society as a whole become more reliant on technological improvements, so does the field of engineering. Medical surgeries are becoming more intricate, handicapped individuals desire technologies they can more easily interact with, industry seeks more efficient robotic technologies for production, and consumers demand computing tools that feature improved ergonomics.

Though many impressive contributions have been made, there are still many new uses of mechanical technologies to be discovered. For this reason, the School of Engineering will introduce a new bachelor's degree program in mechatronics in fall 2016 and educate the future inventors of break-through robotics and machinery.

Among the instructors involved in the program is Dr. Jenna Gorlewicz, assistant professor of mechanical engineering. Gorlewicz, who earned a bachelor's in mechanical engineering from SIUE in 2008, was appointed to faculty in 2013 to contribute to the development of the mechatronics program.

"I love that this field offers a real-world translation of an engineer's hard work and has the ability to help improve the lives of others," Gorlewicz said.

A combination of both mechanical and electrical engineering, mechatronics focuses on the integration of hardware and software to develop working systems that can perform desired functions. The field of mechatronics is viewed as a quickly growing profession that is currently in high demand, opening several doors to new opportunities for SIUE students. Current and future students are excited about the mechatronics program and the opportunity to be able to work in this area of study as an undergraduate.

"Students will be able to concentrate their personal creativity and work with systems that they, at one point, only dreamed of, and now they will actually be putting them together," Gorlewicz said.



DEPARTMENT OF CIVIL ENGINEERING GRADUATE PROGRAM NEW PRINCIPAL AREAS OF STUDY

Environmental Engineering

- Solid and hazardous waste management
- Water and wastewater treatment

Geotechnical Engineering

- Underground construction
- Retaining geo-structures

Structural Engineering

- Earthquake engineering
- Structural analysis and design

Transportation Engineering

- Alternative transportation modes
- Traffic engineering





ENHANCING STUDENT SUCCESS

Whether it is tutoring opportunities, faculty-student mentorship or the upcoming creation of the Student Design Center, the School of Engineering is continuously developing opportunities for student growth and success. Several programs such as these are the result of ambitious collaborations between School administrators and the School of Engineering Student Services Office.

While the student services office plays a central role in recruitment and retention activities in the School, their primary focus is to serve as the advisement hub for all undergraduate engineering students. Using a modest staff of six, the office facilitates the academic progress of the students they advise. The team advises all new incoming freshmen, transfer students and students enrolled in the School's various partnership programs, such as the 2 + 2 Community College Programs; Istanbul Technical University Dual Diploma Program; and the Brazilian Science Mobility Program. These programs foster collaboration locally and internationally to enhance student learning opportunities.

Leading the student services staff is Director Loen Graceson-Martin, a dedicated student advocate. "I take pride and pleasure in my interactions with students and am always looking for ways to enhance the advising experience for them," Graceson-Martin said. "The Student Services team is always thinking of ways to better assist our students, faculty and staff. We welcome collaboration with our colleagues to improve the successes of not only our talented students, but the School of Engineering as a whole."

In addition to their own offerings, the office promotes additional resources available to engineering students, such as learning communities and tutoring in the residence halls. By promoting existing resources and creating new opportunities to engage and support students, student services staff provide engineering students with the tools they need for academic success.



BREWING CAREER SUCCESS

Mike Blakey serves as a testament to how beneficial the SIUE co-op program can truly be. While attending SIUE, Blakey participated in a co-op program through Anheuser-Busch InBev (AB), which developed into a successful career. He has held several titles within AB, and is currently a maintenance improvement manager in the St. Louis brewery, performing duties such as overseeing brewery maintenance, maximizing maintenance dollars, efficiently executing maintenance work and keeping equipment running reliably.

“The SIUE co-op program was one of the most eye-opening and educational experiences I’ve ever had,”

Blakey said. “Co-ops offer great initial experience. Students do the same job a full-time employee does, so they’re really doing an engineer’s job while still taking courses. Having that foresight while you’re still in school is incredibly valuable.”

A '93 BS electrical engineering alumnus, Blakey recognizes SIUE as one of the best educational values in the Midwest, emphasizing the quality of his affordable education. He vividly remembers the collaborative atmosphere that was available in the School of Engineering, which developed his communication skills and has led to managerial success at AB.

“What I remember most is how much help I received and how many resources were available,” Blakey said. “There were always teaching assistants available for help. The professors were very accessible. The class sizes were not very big. The whole atmosphere provided a great learning experience.”

Blakey now serves on the School of Engineering Industrial Advisory Board to assist others who are committed to the School’s improved success. “SIUE provided me with an opportunity to excel in my life and make my life better,” he said. “I want to make sure other students get that same opportunity.”



CONVERTING ACADEMIC LEADERSHIP INTO PROFESSIONAL PRESTIGE

Having learned several valuable leadership skills during her time at SIUE, Erica (Miller) Lonie is now putting her new abilities to the test. Lonie, a '12 BS industrial engineering graduate, currently works as a logistics professional for Caterpillar, Inc., in the company's logistics professional development program. Through this exclusive leadership program, she has rotated to three different positions within facility engineering, operations, and supply chain management over the last three years. Lonie credits SIUE with providing her an experience that demanded organization, reliability and team collaboration, all attributes that have directly translated into her training as a future leader at Caterpillar.

Lonie, a former Meridian Scholarship recipient, is appreciative of the opportunities that were presented to her at SIUE. The Meridian Scholars Program offers an eight-semester scholarship including tuition, mandatory fees, and room and board to 20 students with strong academic ability and a record of personal achievement. What she treasures most about her experiences at SIUE are the family-like relationships that she was able to form with faculty, staff and fellow classmates.

"The professors were always available to assist me, and in more than just academics," she said. "They were always looking for opportunities for me to participate in research projects and internships, while also providing recognition for my accomplishments on campus. The faculty and staff at SIUE really had my best interest in mind."

Lonie feels that the School of Engineering went above and beyond in preparing her for professional success. She predicts the School will rapidly evolve in the future – a time in which she would like to be involved with helping the School as an alumna. "The School of Engineering is growing so quickly," Lonie said. "I'm excited to participate in the continued growth, and I'm proud to tell others that I am a graduate of the SIUE School of Engineering."



INVESTING IN FUTURE LEADERS

A man dedicated to funding educational scholarships, Dr. Charles (Al) Wentz Jr. has developed numerous scholarship opportunities within the School of Engineering. A native of Edwardsville, Wentz is passionate about continued education and ensuring students are given all of the tools necessary to obtain their professional goals.

"I feel it's a responsibility of someone who has been successful to give back to whatever has helped in getting to wherever he or she is today," Wentz said. "The SIUE School of Engineering has been doing great things for the Metro East community for many years, and I am proud to be a part of it."

Wentz suggests that anyone who has the ability to provide scholarship funding should do so because it is an exciting way to see your money being put to good uses. "I enjoy seeing the positive benefits of what's happening with the money I'm donating, and its uses can be modified to meet the needs of the School's students," he said.

Wentz has a personal philosophy on donating: Start small, see how well your gift is operating and make adjustments as needed. "If you start smaller, you aren't jumping in with both feet," Wentz said. "You gradually learn from each donation and get better at managing them."

"I strongly encourage people to contribute and help change the lives of people within an organization you feel passionately about. This is my preferred way of giving back to the institutions that have helped me create my enjoyable life."



ALUMNI HALL OF FAME 2014

Vicki LaRose, PE, BS Civil Engineering '90

Originally from Wisconsin, Vicki LaRose now considers St. Louis her home. She earned her bachelor's in civil engineering from SIUE in 1990 and her master's in engineering management from Missouri University of Science & Technology. LaRose founded Civil Design Inc. (CDI) in 1996 to provide responsive, quality-driven civil engineering services. Under her direction, CDI has experienced continuous success, gaining a reputation for delivering on-time, in-budget designs for construction management, environmental, roadway and site development projects. LaRose started CDI in her basement with one employee. Today, she owns a building in Souldard and employs 27 engineers, technicians and surveyors.

LaRose is married and works with her husband, Dennis, who is also a civil engineer. Together, they have three children: Nathan, Ben and Tori. A registered professional engineer in Missouri, Illinois and Kentucky, she serves the School of Engineering through her role on the Department of Civil Engineering Industrial Professional Council.

"I'm from a small town in Wisconsin and back then, my world was quite small," LaRose said. "SIUE opened my world to a much bigger place and was the foundation to get me started. I'm very proud that SIUE has given me the foundation to be able to grow, reach new communities and make people's lives better."

SCHOOL OF ENGINEERING INDUSTRIAL AND PROFESSIONAL ADVISORY COUNCILS (IPAC)

Civil Engineering

Jeffrey Abel, BS '91 · Illinois Department of Transportation
Garry Aronberg · Bernaardin, Lochmueller & Associates, Inc.
Geri Boyer, BS '91 · Kaskaskia Engineering Group, LLC
Tom Cissell, BS '97, MS '04 · Oates Associates Inc.
Pat Judge, BS '96 · Gonzalez Companies LLC
Charles Juneau · Juneau Associates, Inc.
Vicki LaRose, BS '90 · Civil Design, Inc.
Scott Miller, BS '96 · MiTek Industries
Ted Nemsky, BS '85 · Illinois Department of Transportation
Ruofei Sun · Cannon Design

Computer Science

Charles Beatte, BS '95 · NJVC, LLC
Jayson Bentley, BS '95 · Monsanto
Hal Gentry, BS '82 · Capital Innovators
Michael Katich · ESS Data Recovery, Inc.
Gary Kochan, BS '77, BS '88 · Enterprise Holdings
Paul Scheibal, MS '90 · Laclede Gas Co.
John Spyers · Perficient

Construction Management

Brad Barnard, BS '91 · Contegra Construction
Tonya Beesley · Baker Concrete Construction
Mark Bengard · Murphy Company
Tom Buchheit · BRic Partnership LLC
Ken Cates, BS '96 · Northstar Mgmt. Co. LLC
Ron Covarrubias, BS '88 · Alberici Constructors
Michael Dundas, BS '85 · Ameren Services
Tim Garvey, BA '72 · Southern Illinois Builders Association
Scott Green · Tarlton Corporation
Phillip Hoher · Pace Construction Company
Tim Holland, BS '98, MBA '05 · Kay Bee Electric Co.
Daniel Hunyar · Premium Outlets
Tom Lavelle, BS '03 · Keller Construction
Josh Lawrence, BS '99 · McCarthy Building
Jason Mantle · The Korte Company
Jody Mertzke · DW Mertzke Excavating & Trucking Inc.
James Peterson, MS '07 · Self-Employed
Matthew Pfund, BS '96 · Tarlton Corporation
Len Toenjes · AGC St. Louis
John Wendler, BA '74 · John D. Wendler Law Office
Ron Wiese · Alberici Constructors

Electrical and Computer Engineering

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Mike Basler · Basler Electric
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