A PROUD PAST, A POWERFUL FUTURE

Throughout our 50 years at UWM, the College of Engineering & Applied Science has made a name for itself as a pipeline of talent for the state of Wisconsin and beyond. More than 100 corporations actively recruit our students for internships, co-ops, and full-time employment, fostering the economic vitality of our region.

Our college has produced more than 10,000 engineering alumni, and our graduates lead their fields, head corporations, make breakthrough discoveries, and inspire future engineers.

The groundbreaking work led by our award-winning faculty has helped us achieve elite status as a top research university. In 2016, UWM earned the highest rating—referred to as R1—from the Carnegie Classification of Institutions of Higher Education, the gold standard for assessment.

We have a lot to be proud of at the College of Engineering & Applied Science. Your support will enable us to continue to educate creative engineers by inspiring dreams, training leaders, making discoveries, and changing the world.

Brett A. Peters, Dean

CAMPAIGN GOAL: $12 MILLION
RAISING THE BAR

Over the past several years, we’ve seen an increase in the caliber of the students we are recruiting. They are coming to our college with higher GPAs, ACT scores, and math placement scores. This important change can be attributed in large part to an increase in the number of scholarships we offer. By allowing us to be more selective in recruiting undergraduates, scholarships have also helped us raise our freshman retention rates and ultimately our graduation rates as well. Companies that rely on our college as a pipeline of talent appreciate that we are continually providing them with better and brighter engineers.

SCHOLARSHIPS
Scholarships help us attract and retain the best and brightest students to our engineering program. Endowed scholarships serve as a lasting tribute to the donor or honoree and an enduring source of support for future engineers.

STUDENT ENTREPRENEURIAL PROGRAMS
Our college is increasingly working to equip students with innovative thinking and entrepreneurial skills needed in the job market. Through the Student Startup Challenge and the Innovation Fellows program, students get practical experience creating prototypes that provide solutions to real problems.

STUDENT ORGANIZATIONS
Our wide-ranging organizations provide students with opportunities to compete, attend professional society meetings, and perform community service.

ENGINEERING STUDY ABROAD PROGRAM
By studying outside the U.S., students hone their communication and decision-making skills, learn responsibility and teamwork, expand their professional network, and gain a global perspective appreciated by future employers.

PROFESSIONAL DEVELOPMENT
Through our college’s career services, students can interact with alumni, expand their public speaking and professional skills, and network for employment.

GOAL FOR STUDENT SUPPORT: $5 MILLION

SCHOLARSHIPS ATTRACT THE BEST

Lead scholarship donors Avi Shaked and his wife, Babs Waldman, MD, have had an incomparable impact on engineering students at UWM. Since 2006, the couple has provided hundreds of scholarships to students at the College of Engineering & Applied Science.

“Our gift to UWM has been successful on so many levels: for the students, the College of Engineering & Applied Science, the larger university, and the employers who hire the graduates,” says the couple. “We don’t know who the next great innovator will be, but we feel the need to support students who wouldn’t otherwise have such opportunities for success.”

Avi Shaked benefitted from scholarships when he was a student at UWM and wanted to give others the same advantage. He also wanted to raise the caliber of engineering students by rewarding those with higher GPAs and ACT scores. Since the couple’s scholarship was established, those numbers have gone up and the freshman retention rate has risen.

First-generation engineering student Ameralys Correa says her scholarships allowed her to start college immediately after high school, something she could not have done without financial support. “Scholarships eliminate one of the biggest obstacles keeping otherwise capable and motivated students from chasing their dreams.”

"At UWM, you can go tremendously far as long as you are willing to work for it. With scholarship support, I can put my time and energy into going that extra mile.

AMERALYS CORREA ‘19
**SOLVING REAL-WORLD PROBLEMS**

UWM has received international recognition as an elite research institution, and our faculty and students are exploring some of today’s most pressing issues. This work has garnered attention for our faculty who have won prestigious national awards. Our world-class research centers and labs allow us to solve real-world problems as we collaborate with industry partners on a broad range of research areas. The focus of these efforts includes advanced manufacturing and logistics, biomedical research, energy and the environment, infrastructure and transportation, and water technology.

**GOAL FOR RESEARCH SUPPORT: $4 MILLION**

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**ENDOWED CHAIRS AND PROFESSORSHIPS**

Among the highest forms of recognition an institution can provide, endowed chairs help us recruit and retain senior faculty who are leaders and role models. Professorships promote scholarly research and support faculty collaboration across academic disciplines.

**INSTITUTES AND CENTERS**

Our research centers and institutes focus on areas such as by-product utilization, computational imaging, gas industries, materials manufacturing, sustainable electrical energy systems, and urban transportation.

**UNDERGRADUATE RESEARCH**

Hands-on research reinforces classroom knowledge and gives students the opportunity to apply what they’ve learned. It also enhances innovation, critical thinking, and the ability to work both independently and in teams.

**GRADUATE RESEARCH FELLOWSHIP**

Graduate students play an integral role in advancing research at UWM. Fellowships that cover tuition and provide a stipend for living expenses help us compete in attracting graduate students who are at the forefront of their fields.

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**BATTERIES TO FUEL THE FUTURE**

Heading up a world-class collaborative research effort, UWM’s Deyang Qu, the Johnson Controls Endowed Professor in Energy Storage Research, is on the cutting edge of batteries that will power vehicles of the future.

Thanks to Johnson Controls’ multi-million dollar investment that supports this endowed professorship, graduate students, and research laboratories at both UWM and UW-Madison, Dr. Qu and his students are positioned unlike any other team in the country to advance research and development in the critical area of vehicle batteries.

Faculty members, students, and Johnson Controls scientists work side by side in two labs at the College of Engineering & Applied Science, including a “dry lab” with the right conditions to test-manufacture next-generation lithium-ion batteries. It’s the only one of its kind at a North American university.

Results are promising. Since 2012, work done in these labs has attracted $35 million in federal grants for energy storage research and several UWM grads have been hired by Johnson Controls.
This experience has given purpose to my education in engineering and helped me see that there are many opportunities to help others through engineering.

JIM KENNEDY '18

COLLEGE OF ENGINEERING & APPLIED SCIENCE

MAKING CONNECTIONS NEAR AND FAR

Our college has forged deep connections with people in the Milwaukee community and on the other side of the world. Through our pre-college programs, we spark interest among school-age children and teens and encourage them to explore the field of engineering at UWM. Our corporate partners provide our students with internships and real-world problems to solve; in turn, our students often become their next hires, thereby fueling our economy. Through our study abroad program and Engineers Without Borders, our students expand their learning experience and leave their own imprint on projects both near and far.

GOAL FOR ENGAGEMENT SUPPORT: $3 MILLION

PRE-COLLEGE STEM ENGINEERING PROGRAMS

Attracting a diverse, high-quality student body is essential in preparing effective engineers. Programs such as EnQuest, First Tech Challenge, and Girls Who Code Club introduce middle and high school students to engineering and the computer sciences profession through hands-on projects.

ENGINEERS WITHOUT BORDERS

Each year, our students travel to Guatemala to build water systems in remote villages. The experience strengthens our international collaborations and enhances students’ problem-solving skills.

ENDORSED DISTINGUISHED LECTURE SERIES

Through this series, guest speakers who are experts in their fields share their insights with a diverse audience right on our campus.

CAPITAL PROJECTS AND RENOVATIONS

Facilities such as student maker spaces, an updated materials lab, a student engineering commons, and faculty water research lab would advance our work and keep our college competitive in attracting world-class students and faculty.

ENGINEERING TRIPS CHANGE LIVES

Marissa Jablonski helped found UWM’s student chapter of Engineers Without Borders in 2006, during her first semester as a master’s student at the College of Engineering & Applied Science. Since then, she has earned both her master’s and PhD in civil/environmental engineering at UWM and has continued to serve as a mentor, coordinating annual trips to Guatemala. She is also an associate researcher and instructor in UWM’s Sustainable Peacebuilding Master’s Program.

Every January, Jablonski and a group of 10 engineering students spend two weeks in Guatemala working with local nonprofit group ACCMARI to build water systems in villages ravaged by civil war. While there, the students also spend time identifying their next project and then work throughout the year to develop a detailed plan of what they will accomplish the following January.

Jablonski says, “Our students are truly becoming global engineers. Working on the side of a mountain, they learn to be resourceful in solving problems. They also broaden their world view while getting hands-on work experience, and employers appreciate that.”

Bill Berezowitz, vice president and general manager of GE Healthcare Systems, has hired several of these students over the years and is impressed with their work ethic. “We have been amazed and impressed by the global awareness and caring our young people exhibit,” says Bill.

We have been amazed and impressed by the global awareness and caring our young people exhibit. If we can give them a modest financial lift to realize their dreams, who would not want to do that?

BILL BEREZOWITZ ’84, ’96
Pictured with Kathy Berezowitz ’85
Many of the 21st century’s biggest challenges can be solved through engineering. Your support of the world-class education and research happening at the College of Engineering & Applied Science will help overcome these challenges and bring economic vitality to our region and beyond.

JOHN KISSINGER ’79, CABINET CHAIR
PRESIDENT & CEO OF GRAEF

A quality education is critical to a successful career, and high-quality students and graduates are essential to the health of industry, the strength of the college and UWM, and ultimately the community.

MARK A. JUDS ’91
SENIOR PRINCIPAL ENGINEER AT EATON CORPORATION
I want to support scholarships for qualified students and projects for faculty because I am convinced there are many students in our community who are intelligent and deserve a chance to be engineers.

– DENNIS WEBB
PRESIDENT OF SAGE WATER

By supporting faculty and research, we are helping to ensure the development of the college’s most important product: future engineers who are prepared to innovate and solve problems that improve our quality of life.

– BRUCE W. RAMME ‘76, ’80, ’04, ’08
VICE PRESIDENT ENVIRONMENTAL FOR WE ENERGIES

With every visit to UWM, I am reminded of the urgent need for scholarship support. It is my pleasure to help ease the financial burdens of students and to double my impact by utilizing a corporate match.

– RICHARD S. SCHREINER ’82
RETIRED PRINCIPAL ENGINEER FOR JOHNSON CONTROLS