

UC Davis College of Engineering

INNOVATING FOR THE GREATER GOOD





Building a Better World

Designing sustainable cities. Improving agricultural technology to feed the planet. Harnessing the power of artificial intelligence to prototype a Mars rover, and developing personal devices to improve lives. At the UC Davis College of Engineering, our commitment to building a better world powers everything we do.

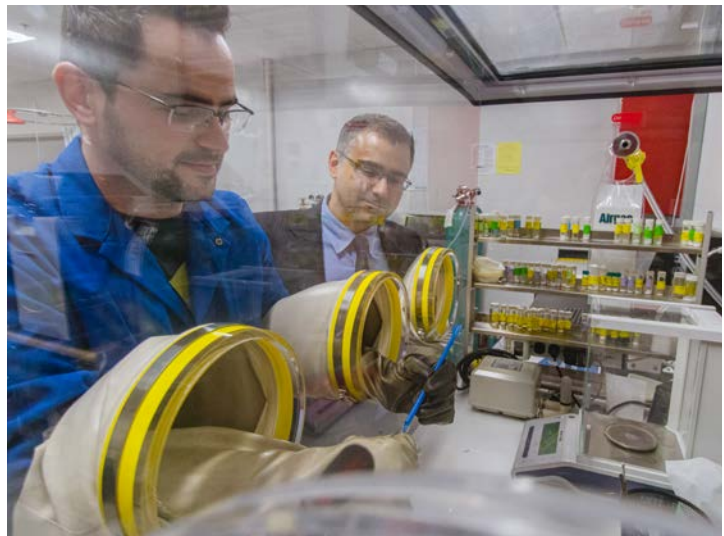
Now more than ever, society's most pressing problems demand daring, interdisciplinary solutions—and we are rising to the challenge. Aggie engineers forge their own paths, uniting theoretical knowledge and hands-on expertise to go beyond the expected. They leverage collaboration and entrepreneurial thinking to accelerate ideas from concept to reality, leading to healthier lives, stronger communities and a more sustainable tomorrow. They are driven to excel for the well-being of our planet and all of its inhabitants.

As part of the West Coast's most comprehensive university, we bring together the brightest minds to implement real-world solutions to real-world problems. From developing COVID-19 contact tracing technology that maintains personal privacy, to monitoring air quality and its adverse effects during California's most devastating wildfires, our faculty, students and alumni are the change makers who will transform so many aspects of our lives.

Looking to the future, we know that our world will expect more from engineers. And we envision our enterprising community evolving to serve the needs of a dynamic, diverse global society sharing finite resources. The philanthropic investment of our friends, alumni and industry partners will be instrumental to helping us meet these grand challenges for decades to come.

As we work to advance key campaign priorities for our college, we invite you to join us in reimagining how socially minded engineers can innovate for the greater good. With your partnership, we will foster an entrepreneurial ecosystem that prepares tomorrow's leaders and catalyzes bold solutions.

Together, we will define what it means to be a socially responsible engineer for a century unlike any other.

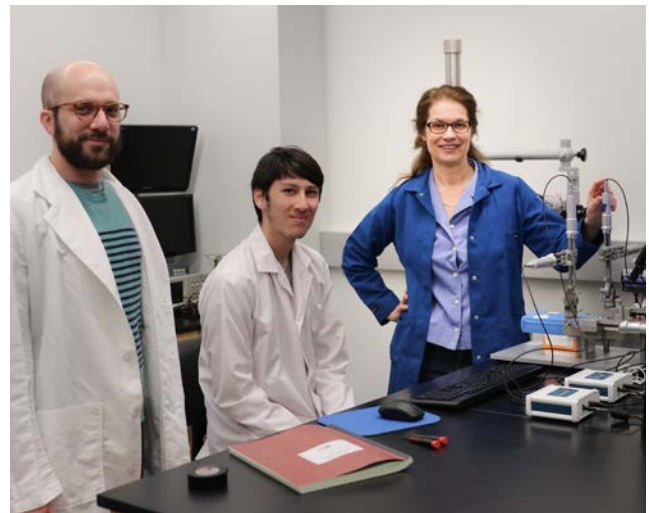


The Right Place at the Right Time

A growing global population, a rapidly changing climate and myriad other issues call for a new kind of engineering. Solving the greatest challenges of our time requires ideas developed at the intersection of diverse perspectives and disciplines. The College of Engineering is fueling these connections.

Combining hands-on practice with fundamentals, our approach to undergraduate education prepares well-rounded engineers who hit the ground running in top-tier, competitive careers and find success as game-changing entrepreneurs. Our student retention and graduation rates exceed the national average—a testament to the high caliber of the resources and networks that help students thrive, from financial support to dedicated mentorship, a strong community of student clubs, and access to faculty and research opportunities.

Our college has expanded significantly in the past five years. The breadth of our research and expertise spans eight departments, 225 faculty, more than 1,100 graduate students and over 4,600 undergraduates.



Nationally and internationally recognized for our research, teaching and service to society, we stand out among our peers for our commitment to inclusive excellence. We continuously invest in efforts to expand and equalize educational opportunities for groups underrepresented in engineering, and we count our diverse community as our greatest asset.

Our researchers use their discoveries to make a difference in the world. We collaborate with veterinarians, physicians, neuroscientists, environmental scientists, linguists and more to generate creative solutions and improve our shared surroundings. We also proactively partner with industry and government to build collaborative networks that drive innovation and translate our best ideas into high-impact technologies.

Powered by fresh perspectives and cross-disciplinary expertise, and strengthened by our partnerships with alumni and friends, we will engineer a better world.



UC Davis Advancing Educational Opportunities

- 42% of undergraduates are first-generation college students
- No. 1 best-value college in the nation for women in STEM
- Top-10 rankings among U.S. universities for research, social mobility and public service outcomes
- No. 3 in the nation among top colleges doing the most for low-income students

College of Engineering Education for a More Equitable World

- Our graduate programs in environmental engineering and biological and agricultural engineering are among the nation's top 10
- 4,600+ undergraduate students
 - 30% women
 - 23% underrepresented groups
 - 4.2 years mean time to an undergraduate degree
- 6 student organizations dedicated to students underrepresented in engineering
- 1,100+ graduate students
- 225 faculty

The Opportunity

A first-generation student pursuing her dream to explore space. A professor transforming health care with digital technology. A team of graduate and undergraduate students winning a global competition for advancing artificial intelligence. These are some of the innovators who make our college what it is today.

Philanthropic support from our alumni, friends and industry partners has a substantial impact on the College of Engineering's world-class research and teaching. With the partnership of those who share our vision for a brighter tomorrow, we will prepare our students to be inventive future leaders, elevate our facilities to match the caliber of our research, and continue to support the growth of our college and its exceptional faculty.

The following pages provide more detail about how each of these opportunities advance our mission.

We invite you to join us in:

- 1 Ensuring successful student outcomes by fostering a culture of mentorship and network of support**
- 2 Developing the state-of-the-art infrastructure necessary to power groundbreaking discovery and exceptional educational experiences**
- 3 Advancing innovative research and faculty expertise in areas that address the world's most complex challenges**
- 4 Providing flexible support for the college and its departments to respond strategically to unique opportunities**



1. Ensuring Successful Student Outcomes

Value Proposition

An investment in our students is an investment in the global thinkers who will change our world. The College of Engineering is **widening the paths of opportunity by offering students mentoring and support programs, scholarships and fellowships, and more.**

Our students graduate with more than a foundation of transferable job skills. They take with them the sense of responsibility and natural curiosity that leads to sustainable solutions. Equipped with the ability to think critically and creatively, and to collaborate in a diverse society, our engineers carry Aggie values into every aspect of their professional and personal lives.

Impact and Outcomes

Our driving vision is to create an educational atmosphere where **every engineering student has the resources they need to achieve their greatest potential.**

Philanthropic support will allow our college to expand upon the services that define the UC Davis difference. With your partnership, signature programs like Leadership in Engineering Advancement, Diversity and Retention (LEADR) will grow the academic support and community programming available to first-generation students. The AvenueE program will develop new outreach and enrichment opportunities for community college transfer students interested in pursuing a UC Davis engineering degree. And Aggie Launch @ COE and the Student Startup Center will prepare tens of thousands of students for professional and entrepreneurial success.

Philanthropic Opportunities

Your partnership can enrich the following student programs and systems of support:

Student Startup Center

Goal: \$5 million

LEADR

Goal: \$2.5 million

AvenueE

Goal: \$2 million

Student Clubs

Goal: \$2 million

Aggie Launch @ COE

Goal: \$1 million

Undergraduate Scholarships

Goal: \$800,000

Graduate Fellowships

Goal: \$800,000

Department Capstone Senior Design Funds

Goal: \$300,000

Honors Program (CHE and MAE)

Goal: \$250,000 each

“Building Presentation and Communications Skills” (ENG 3 Course)

Goal: \$250,000

50 Student Travel Awards (\$1,500/student)

Goal: \$75,000

Philanthropic support will also be critical to drawing students of the highest merit to our college and making a world-class education affordable to top students of all backgrounds. UC Davis is a leader among national public universities in providing need-based financial aid, with more than half of all Aggies receiving some form of financial assistance and half of our undergraduates finishing their degrees

without debt. Yet there is still ample room to grow our capacity to award the competitive undergraduate scholarships and graduate fellowships that increase social mobility, reduce student debt, and ensure our students benefit from internships, research experience, and professional development and networking opportunities.



Spotlight: Student Startup Center

Established by the College of Engineering in 2013, the UC Davis Student Startup Center (SSC) encourages students from across campus to make their entrepreneurial dreams a reality. From practical workshops to hands-on mentoring, the SSC helps students embrace UC Davis' strengths and build technology startups solving major global challenges.

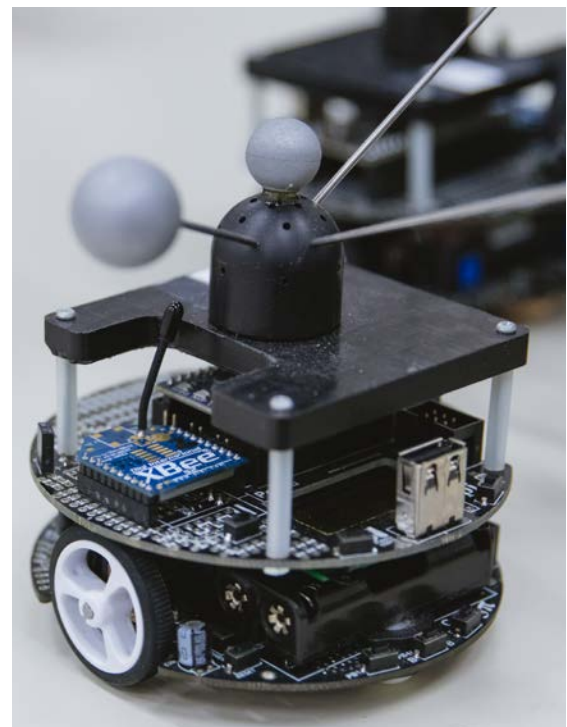
The SSC offers a variety of opportunities for students to gain a fundamental understanding of entrepreneurship and develop original ideas into fully realized ventures:

- The center hosts a full calendar of **workshops, mentoring opportunities and events**—including weekly Pitches and Popcorn nights to review best practices in securing venture funding.
- Student teams have access to **prototyping equipment**, including 3D printers, a laser engraver, a CNC machine, electronics kits, virtual and augmented reality headsets and more—all available at no cost.
- A **certificate in entrepreneurship** is available to students who complete courses covering topics such as product development, ethics, design, communication, intellectual property and leadership, as well as a practicum experience.
- **PLASMA, a highly selective 12-week accelerator program**, provides 10 teams per cohort with intensive mentorship to launch a startup. At the end of the program, angel and venture capital investors are invited to learn about teams' products at a Demo Day event.

The SSC has built an inclusive community of inventors and innovators whose unique viewpoints and ingenious solutions are building a better future.

“Passion, discipline, imagination, respect, drive—the traits of a successful entrepreneur go hand-in-hand with the Aggie spirit.”

— Aaron Anderson
Director, Student Startup Center



2. Developing State-of-the-Art Infrastructure

Value Proposition

Finding creative answers to today's problems and preparing tomorrow's leading engineers start with state-of-the-art teaching and learning environments. Adaptable spaces and modern equipment are essential to collaborative research and transformative education.

As our student enrollment and faculty ranks continue to grow, one of our highest priorities is to expand and revitalize our physical spaces.

Impact and Outcomes

Our faculty, students and staff deserve spaces that inspire unconventional thinking and provide access to the latest technologies.

Whether you are passionate about undergraduate experiences in teaching laboratories, the creative possibilities of the Engineering Student Design Center, or making a difference through one of our other philanthropic opportunities, your partnership will have a critical impact—**ensuring our engineers not only keep the pace, but set the pace in an era of rapid change.**

Philanthropic Opportunities

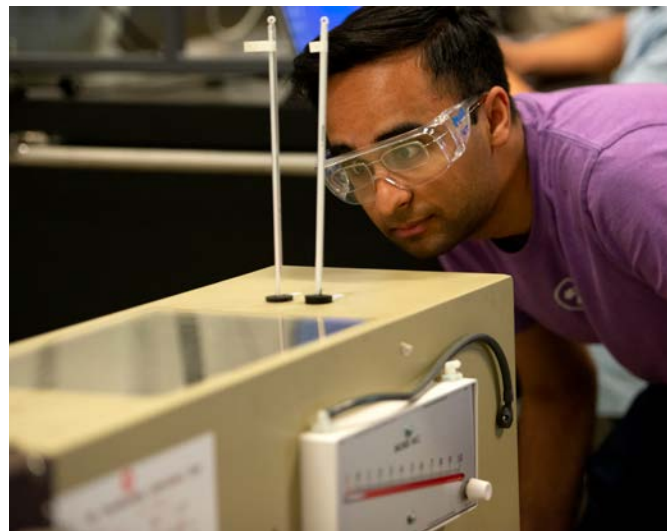
Realize our bold vision for a new Engineering Student Design Center
Goal: \$22 million

Transform the UC Davis Coffee Center's physical space into a world-class research and teaching facility
Goal: \$6 million

Update undergraduate teaching labs to provide greater flexibility and improved technology
Goal: \$5 million

Fulfill student, faculty and staff needs for cutting-edge equipment
Goal: \$2.5 million

Renovate the Chemical Engineering Tutoring Center
Goal: \$250,000



Spotlight: Engineering Student Design Center

Imagine an open and dynamic classroom that facilitates chance interactions between disciplines and cultures. Here a biomedical engineering senior design team is on the verge of completing a new sensor for detection of airborne viruses. When they struggle with their final electrical circuit design, an electrical engineering student studying nearby offers to help.

Imagine a place where a group of entrepreneurial students meet freshman year, work hard and graduate having secured seed funding to start their own company. Four years of classes, late-night study groups and extracurricular activities result not just in finished assignments and big dreams, but fully formed designs and functional prototypes.

The Engineering Student Design Center (ESDC) is where the Aggie engineer is made.

As the university's primary prototyping shop for student teams and research groups, the

ESDC offers indispensable education, resources and support. In any given year, 8,500 users benefit from the center's training and tools. To meet a rapidly growing demand and elevate student learning experiences, the center is expanding from its current 9,000 square feet to a **23,000-square-foot space created specifically for engineering design and entrepreneurship education.**

The ESDC transforms how our students engage in design curriculum, collaborate on interdisciplinary projects, learn about entrepreneurship, and receive the **hands-on guidance that complements theory explored in the classroom.** Working in a safe, supervised environment, students have ample opportunity to learn, practice and master cutting-edge techniques.

With the support of visionary philanthropists, the expanded ESDC builds on the current machine shop, electronics lab, wood shop and 3D printing space to include areas for **instruction, student-client collaboration, rapid prototyping, machining and more.**



The ESDC will also house the Student Startup Center, a cross-disciplinary hub where UC Davis students and faculty receive mentorship and find collaborators for technology business ventures (see page 8 for more information).

When complete, the new ESDC will strengthen our position as an international leader in engineering design education at scale, equipping the next generation of engineers to change our world for the better.



3. Advancing Innovative Research and Faculty Expertise

Value Proposition

Converting food and green waste into energy, constructing robotic tools that optimize agricultural harvesting, translating expertise in aerosols into a better understanding of how viruses spread—College of Engineering faculty impact lives at every level. **Philanthropic support plays a crucial role in accelerating our researchers' discoveries, catalyzing technology transfer and championing innovation.**

Our exceptional faculty have an incredible impact on students, inspiring undergraduates to become critical thinkers and motivating them to conduct independent or collaborative research. Faculty mentorship also significantly shapes student trajectories, launching dynamic new leaders into a variety of fields.

Impact and Outcomes

Faculty endowments and scholarly support attract and help retain leaders of international stature. Endowing faculty positions, creating distinguished lecture series and seminars, launching new areas of innovation and promoting UC Davis thought leadership will elevate our college to ever-greater heights.

With your partnership, we will take research in new directions, amplify the impact of our teaching and foster an environment of excellence in Aggie engineering.

Philanthropic Opportunities

Endow a professorship or chair in each department to recruit and retain world-class faculty

Goal: \$12 million, starting at \$1.5 million per position

Create an endowed college deanship to provide an exceptional leader with powerful resources

Goal: \$7.5 million

Advance the UC Davis Coffee Center's interdisciplinary research and support its operational needs

Goal: \$5 million

Launch a new construction engineering and management education program to better meet industry demand

Goal: \$2.5 million

Bring researchers and thought leaders to our campus community through college and departmental distinguished lecture series

Goal: \$2 million



4. Providing Flexible College and Departmental Support

Value Proposition

A student team has been invited to compete on the national stage. An alumni mentorship program wants to host an event for third-year students to connect with industry leaders. A lab group needs specific equipment to finalize the data on an incredible breakthrough. Unrestricted philanthropic support provides an important funding source for emerging opportunities like these and other pressing student, faculty and staff priorities. This support may go toward:

- Awarding faculty fellowships
- Constructing new facilities
- Sending researchers to important conferences
- Serving the community
- Supporting the aspirations of enterprising and creative students
- Capitalizing on a wide range of other opportunities

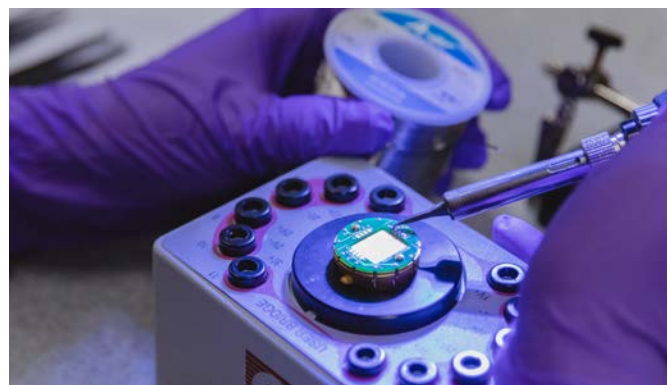
Impact and Outcomes

Your gift will make it possible for college and departmental leadership to be both decisive in responding to immediate needs and nimble in pursuing unexpected opportunities when they arise, allowing for investment in the areas of highest potential. Philanthropic support advances our commitment to innovation, enriches academic experiences and provides the foundation for pathbreaking discovery.

Philanthropic Opportunities

Ensure college and departmental leadership has the flexibility to meet new challenges, respond strategically to change, and support students, faculty and staff

Goal: \$14 million





An Invitation

As we look forward, we look to our friends, alumni and industry partners to help propel us toward a better future.

With your philanthropic leadership, we will advance our research and teaching to an even greater level of distinction, opening new frontiers and expanding the transformative impact we have on communities near and far.

We invite you to join us as we realize this bold vision for the next era of engineering education and research. Together, we will bring ideas to life that create a healthier, more sustainable and more equitable society.

**For more information,
please contact:**

Leigh Ann Hartman

Assistant Dean

Development and External Relations

College of Engineering

Email: lahartman@ucdavis.edu

Phone: (530) 304-8256

Ways of Giving



We respect that, for each donor who wishes to provide significant philanthropic support, there are personal, financial and gift planning aspects to consider. We will work with you to realize your philanthropic vision and develop the gift plan that best meets your needs. At your request, we can also work with your tax and financial advisors.

Following are various gift types and their associated benefits.

You may wish to consider a mix of gift types to help you achieve both your philanthropic and financial objectives.

Cash Gifts

- Are the simplest and most popular giving method
- Can be tax deductible in the year they are given

Gifts of Securities

- Include stocks, mutual funds and bonds
- Can avoid capital gains taxes
- Can provide an income tax deduction for the full fair market value of long-term, appreciated securities

Gifts of Real Property

- Include land, farms, personal residences, and rental or commercial property
- Can avoid capital gains tax on appreciated assets
- Can provide an income tax deduction for the full fair market value of long-term, appreciated property
- Can eliminate property expenses and taxes
- Can provide continued use for life through a retained life estate gift

Bequests and Living Trusts

- Establish the UC Davis Foundation as a beneficiary of your estate
- Can provide an estate tax deduction equal to the value of the gift
- Offer flexibility by allowing you to provide for family first

Retirement Plan Gifts

- For current gifts, utilize the IRA Charitable Rollover provision (for donors aged 70½ and older)
- Name the UC Davis Foundation as a beneficiary
- Can eliminate income tax on the plan distributions
- Preserve the plan's full value for gift purposes

Life Income Gifts

- Include charitable remainder trusts and gift annuities
- Can provide potential tax savings on income, estate and capital gains