

Industry Partnership Opportunities



Cultivate emerging talent, spur innovation, and tap into the skills and expertise of UW ChemE

In the UW Department of Chemical Engineering, we place top priority on educating the next generation of engineering leaders. Our students work with internationally-recognized faculty and gain specialized training in molecular engineering, nanotechnology, clean energy, and other impactful fields.

Industry partners augment these educational experiences and propel innovation in our labs. Partnerships can take a variety of forms, all of which play an integral role in supporting our students, faculty, and research. At the same time, the department can help companies build employee skills and knowledge, establish important research connections, and access talent and expertise.

INDUSTRY CAPSTONE PROGRAM

Project sponsorship..... starting at \$15,000

The capstone program brings together UW students and companies to tackle real-world, interdisciplinary engineering problems. Sponsors contribute projects from their companies and support teams of 3-5 Engineering students. These creative, talented students will design and build innovative solutions with the guidance of a faculty mentor.

Topics include:

- **Advanced materials and interfaces:** polymers, nanomaterials, colloids
- **Health and biotechnology:** synthetic biology, protein engineering, biomaterials, nanomedicine
- **Data science:** machine learning, AI, molecular design, high throughput experimentation
- **Electrochemical and energy systems:** solar energy, fuel cells, reaction engineering, batteries

RESEARCH

Gift funding..... starting at \$25,000

Through philanthropic giving, companies strengthen strategic research areas and build relationships with faculty and graduate students. With philanthropic gifts, there are no contracted deliverables or intellectual property access.

Companies may also provide gift support through in-kind donations of equipment or software, or through below-market discounts on its products. In-kind donations may be tax-deductible, but the company must develop its own assessment of the value of its gift for tax purposes.

Sponsored researchbased on project scope

Sponsored projects offer an innovative way for companies to tap UW Chemical Engineering research expertise to explore new areas and tackle complex issues. Industry sponsors work directly with faculty to define custom projects that align with their needs and interests. While the total cost for a one-year project typically starts at about \$125,000, depending upon the scope and needs, faculty may elect to take on a smaller project. The UW will work with the company to negotiate a formal legal agreement covering the project. The agreement typically includes project milestones and deliverables as well as intellectual property and other contract terms. Industry sponsored projects are subject to indirect costs at the same level that applies to federal grants.

GRADUATE FELLOWSHIPS

Term \$10,000/year for 3 years

Endowed\$250,000

Supporting master's and Ph.D. students through named graduate fellowships is an effective way to build department relationships, invest in research, and support talent for recruitment. Term gifts are a three-year annual commitment that can be renewed, while endowed funds live on in perpetuity.

FACULTY SUPPORT

Faculty Fellowship (term) \$10,000/year for 3 years

Faculty Fellowship (endowed)\$250,000

Career Development Professorship (term)\$20,000/year for 3 years

Career Development Professorship (endowed)..... \$500,000

Professorship (term) \$40,000/year for 3 years

Professorship (endowed).....\$1,000,000

Named professorships and faculty fellowships offer additional resources to fuel research and educational activities, as well as prestige for the recipients. Professorships facilitate companies' relationships with faculty working in their areas of interest, and help UW ChemE recruit and retain top talent. Term gifts are a three-year annual commitment that can be renewed, while endowed funds live on in perpetuity.

DATA SCIENCE TRAINING FOR PRACTICING ENGINEERS

Existing programs \$2,500/course (15% discount for 3-course series)

Chemical and process engineers at your company who are interested in optimizing and automating plant operations or developing data-driven strategies can enroll in the UW Global Innovation Exchange's "Data Science for Engineers" course. The course is taught by a UW ChemE Data Science Ph.D. alumnus and builds off of our successful graduate curriculum. The weeklong courses can be taken individually or together as a linked series of three. Participants in individual courses will focus on specific topics and earn 2 Continuing Education Units (CEUs) per course. When taking the series, topics build and participants earn 6 CEUs. Series participants can also receive 6 transcriptable credits from the University of Washington.

Custom program.....varies

UW Chemical Engineering faculty can work in consultation with your company to develop and run a data science course that meets the company's specific needs. These can be full week "boot camps" or run over a longer period of time.

ANNUAL LECTURE

Term \$4,000/year for 3 years

Endowed\$100,000

A named annual lecture in chemical engineering gives companies the opportunity to invite distinguished speakers to campus to share their research with a public audience. All related communication will highlight the company's support, and company personnel will have opportunities to connect with the speaker. Term gifts are a three-year annual commitment that can be renewed, while endowed funds live on in perpetuity.

EDUCATIONAL PROGRAMS

Student program support..... starting at \$5,000

Providing gift support to student programs is a strategic way to build connections for recruitment. UW Chemical Engineering's student organizations, events and programs benefit from making industry connections. All have opportunities to participate as guest speakers and panelists, and in hiring and information sessions.

American Institute of Chemical Engineers (AIChE) — UW Chapter

AIChE at UW is an undergraduate student organization that fosters community within the department. Its mission is to provide team-building activities, academic resources, and opportunities for students to grow both academically and professionally. Companies can make connections for recruiting and add value to the student experience by hosting plant tours and information sessions.

Association of Chemical Engineering Graduate Students (ACES)

ACES provides members with professional development and outreach opportunities beyond those typically available during graduate study. ACES hosts the Graduate Student Symposium (GSS) every fall to bridge the gap between industry and academia. Industry partners learn about exciting UW ChemE research, interact with future research leaders and help improve the quality of graduate education.

Women in Chemical Engineering (WChE)

WChE is a group of undergraduate, graduate, faculty, and professional women as well as male allies. WChE was founded with the following principles as guidelines: to strengthen the network of women ChemE's across all levels and to promote women in engineering, while not enabling self-stereotyping or stereotype threat. WChE holds an annual industry event in November where industry partners can provide panelists, network with students, and host an information table.

C-HACK: Chemical Engineering Hackathon

Hosted and run by UW Chemical Engineering faculty over two weeks in January, undergrads complete a Python tutorial and team up to solve a chemical engineering problem with code. Industry partners can engage by supplying projects and data, or by participating as judges.

PROGRAM CONTACTS

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