Knight Campus

https://accelerate.uoregon.edu/
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The Phil and Penny Knight Campus for Accelerating Scientific Impact is a campus designed to accelerate the cycle of moving discoveries to impacts for the greater good. Rooted in the University of Oregon's 60-year history of interdisciplinary collaboration, it is training new generations of scientists, forging tighter ties with industry and entrepreneurs, and creating new opportunities for graduate and undergraduate students.

Mission: Science advancing society

Vision: Dramatically shorten the timeline between discovery and societal impact through world-class research, training and entrepreneurship in a nimble scientific enterprise.

Goals:

- Redefine the modern research university by fostering world-changing research unfettered by traditional academic boundaries
- Serve as the educational engine driving the new economy of Oregon
- Transform student education through discovery-driven learning
- Engage the public in the excitement and creativity of scientific research
- Foster diverse perspectives and participation in scientific research
- Improve the health and wellbeing of the citizens of Oregon, the nation, and the world

Programs:

Bioengineering PhD Program:

We Focus on Your Success. The PhD program is designed to jump start and accelerate your success. Earn a dual-shield degree from the University of Oregon (UO) and Oregon State University (OSU) with full access to the world-class facilities and resources at both universities. Make impactful and innovative discoveries at the forefront of bioengineering research in areas like regenerative medicine, synthetic biology, biosensors and devices. Engage in an immersive curriculum, high impact research opportunities, and targeted research and career training programs that will take your science, and your career, to the next level.

The design of our curriculum helps students create an academic plan that drives their research and career success. This starts with minimizing core requirements to four courses that prepare students to apply bioengineering fundamentals toward innovations that advance human health. Students then tailor their individual experience through an unrivaled set of elective options. Joint program students can choose any graduate-level course at UO or OSU that aligns with their research or career goals. Students take exactly what they need to advance their science.

Knight Campus graduate students complement their academic coursework through a career acceleration program: a suite of advanced trainings in ethics, science communication, innovation and entrepreneurship, grant writing, design thinking, and career planning that accelerates their academic and professional success.

Knight Campus Graduate Internship Program (KCGIP):

KCGIP is an accelerated master's program with five focus areas that combines lab and lecture content with a paid internship. We train students to be successful in the fast-paced, collaborative environment typical of the industrial or government lab setting. We believe graduate education should equip you with the skills that allow you to excel in your career: technical expertise, hands- on experience and professional skills (including communication, leadership, and teamwork).

Students gain these skills first, through our focused coursework and hands on training in our academic labs, professional development training, and a 9-month paid internship. Program tracks span the fields of engineering, physics, chemistry and biology and include:

- Bioinformatics and Genomics
- Molecular Sensors and Biotechnology
- Polymer Science
- Semiconductor and Photovoltaic Device Processing
- Optical Materials and Devices

Bioengineering Minor Program:

Students in the minor apply their natural sciences background towards bioengineering problems, research, and innovations. You will learn through a combination of experiential approaches including hands-on work in our bioengineering teaching labs. Students in the minor also have access to elective courses in innovative technologies like 3D printing, protein engineering, and biomaterials. Completing the minor is a great way to prepare for a career in the biotech industry or to pursue graduate training in bioengineering, medicine, or law.

The minor is also a great way to meet and network with Knight Campus faculty and students and launch conversations about undergraduate research in Knight Campus research groups.

Brewing Innovation Minor Program:

The Brewing Innovation minor uses brewing as backdrop for experiential learning within the innovation process. The design of the minor complement's disciplinary majors in the sciences, humanities, communications, design and innovation. The minor uses design thinking as an approach to innovation that involves understanding and defining customer needs and the innovation challenge, generating many ideas

for addressing that challenge, prototyping ideas, and evaluating possible solutions. The design thinking process is iterative with the results of each step feeding back to inform and improve ideas in the next iteration.

More information about content of these courses can be found on the program website (https://knightcampus.uoregon.edu/brewinginnovation/).

Faculty

Please see the list on our website (https://bioengineering.uoregon.edu/people/).

Undergraduate

Minor

- Bioengineering (https://catalog.uoregon.edu/knightcampus/min-bioengineering/)
- Brewing Innovation (https://catalog.uoregon.edu/knightcampus/min-brewing/)

Graduate

Majors - Master's Degree

- Applied Physics (MS) (https://catalog.uoregon.edu/knightcampus/ms-applied-physics/)
- Biology (MS) (https://catalog.uoregon.edu/knightcampus/ms-biology/)
- Chemistry (MS) (https://catalog.uoregon.edu/knightcampus/ms-chemistry/)

Major - Doctoral Degree

- Bioengineering (PhD) (https://catalog.uoregon.edu/knightcampus/phd-bioengineering/)