

UCSB Launches Bioengineering Academic Program

New concentration in Bioengineering at UC Santa Barbara is designed to propel students into careers in biomedical research



NEWS RELEASE

John

(Santa Barbara, Calif. --) A new pilot program has been launched at UC Santa Barbara for undergraduate students to achieve a degree with a bioengineering concentration ? an advanced curriculum in biomedical science and engineering ? and to kickstart a career in bioengineering research.

Jane

The new four-year bioengineering concentration, offered to students accepted into UCSB's [College of Creative Studies](#), is designed to prepare students for graduate study and research in bioengineering. The pilot program builds upon UCSB's high standing as a top-ranked bioengineering research institution and paves the way to establish a world-class academic program in bioengineering at UCSB.

?There is a demand for bioengineering. Bioengineering is one of the most popular majors at institutions where it is offered,? said Professor Samir Mitragotri, faculty mentor for the new concentration and director of the [Center for BioEngineering](#) (CBE) at UCSB. CBE was founded in 2011 to introduce new bioengineering research and educational initiatives at UCSB, including the newly launched concentration.

?There is a huge demand for jobs in bioengineering in the pharmaceutical, biotechnology, and medical devices industries. Students who immerse themselves in a bioengineering education, and especially in research, from the start will have a competitive advantage,? added Mitragotri.

Enabled by the College of Creative Studies' innovative format and close mentorship model for students, the new bioengineering concentration is designed to be both rigorous and comprehensive to propel students into a career path in research. Students who complete their CCS biology degree with a bioengineering concentration can expect to later excel in graduate programs, academic research, and careers in biomedical industries.

Hands-on experience in research and a highly interdisciplinary curriculum set the bioengineering program at UCSB apart. ?This extensive research experience is a unique feature of the CCS program. Students in the bioengineering concentration will have a larger number of demands on their time, with a heavy course load in both biology and engineering, but will still have a substantial research involvement,? explained John Latta, faculty member in the College of Creative Studies.

For the first two years, students complete academic requirements across the physical and biological sciences, as well as engineering. The following two years include an upper division curriculum in science and engineering, emphasizing courses that offer intensive laboratory experience. Students are funneled to participate in laboratory research alongside a faculty mentor in bioengineering by their third year, and must complete a research or capstone program at the end of their senior year.

?The mentorship has been nothing short of amazing,? commented Jane Lin, a UCSB freshman pursuing the bioengineering concentration. ?The professors have been so helpful and supportive.?

Faculty mentors participating in the program include Latto, Mitragotri, and Luke Theogarajan, professor of electrical and computer engineering. Those interested in learning more about the bioengineering concentration should contact Mitragotri at samir@engineering.ucsb.edu or Theogarajan at ltheogar@ece.ucsb.edu.

In 2007, the Chronicle of Higher Education ranked UCSB #2 in the nation for bioengineering research citation impact and grant productivity, despite the absence of a formal bioengineering academic program. UCSB launched the Center for BioEngineering in 2011 with affiliated researchers who have been making strides in the areas of medical drug delivery, diagnostics, and biomaterials research for cancer, diabetes, Alzheimer's, and other complex diseases affecting society.

A new, state-of-the-art bioengineering building is slated for construction on the UCSB campus. The Center for BioEngineering will be housed in the proposed 48,000 square foot structure, which will also accommodate bioengineering research and academic programs.

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The [College of Engineering](#) at University of California, Santa Barbara is recognized globally as a leader among the top tier of engineering education and research programs, and is renowned for a successful interdisciplinary approach to engineering research.

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