



The optional PhD Bioengineering emphasis is for doctoral students already enrolled at UCSB in participating engineering and science departments and programs who have a research interest in bioengineering. The emphasis is ideally suited for second year doctoral students that have completed their first year of academic requirements in their home degree program, however, petitions to add the emphasis can be submitted earlier or later if there is room in the student's academic course load.

Bioengineering is a rapidly growing discipline and the emphasis is designed to prepare doctoral students to undertake research at the interfaces of engineering, physical sciences, biology, and medicine. The emphasis features a structured set of core lecture courses that are taught collaboratively by faculty across disciplines that are engaged in bioengineering related research. Additionally, the emphasis aims to provide a community of support and a vehicle for exchange of ideas for enrolled students via two seminar series: an invited guest series and a student-led series fostering research exchange and professional development.

Participating Departments & Programs

College of Engineering: Chemical Engineering, Computer Science, Electrical Engineering, Materials, and Mechanical Engineering.

MLPS Division of the College of Letters & Science: Chemistry & Biochemistry; Ecology, Evolution, and Marine Biology; Mathematics; Molecular, Cellular, and Developmental Biology; Physics; Psychological and Brain Sciences; Statistics and Applied Probability; and the Biomolecular Science & Engineering Program.

Admissions

Doctoral students in good academic standing (3.0 GPA or higher) are eligible to apply to the emphasis with approval of their home department/program. A 3-member CBE faculty admissions committee will review all applications.

Application procedures

Submit the following items to Angelina Toporov, CBE's Student Affairs Officer (BIOE, room 1106 or atoporov@engineering.ucsb.edu).

1. A completed cover page to the application (request template from Angelina Toporov)
2. A one-page maximum description of doctoral thesis research
3. A completed Graduate Division petition to add the emphasis with signature of current home department Chair or Graduate Advisor (petition available at: <http://www.graddiv.ucsb.edu/academic/forms-petitions.aspx>)
4. An unofficial copy (or copies if more than one institution) of graduate transcripts to date

Academic Requirements for the Emphasis

- Completion of the core bioengineering course sequence (ENGR 220A, ENGR 220B, and a technical elective from an approved list) and seminar courses (ENGR 225 and ENGR 230; 3 quarters each) is required with a grade of B or better. See CBE's Academic web page for course descriptions.
- Completion of the Ph.D. requirements in the student's home department/program including writing defending a dissertation related to bioengineering. The student's dissertation committee must include at least one CBE faculty member *or other ladder faculty member involved in bioengineering research with approval*. Please keep in mind that dissertation committees must include a minimum of 3 ladder faculty from home degree programs. If one of these 3 is not a CBE affiliated faculty member, then a fourth member as described above must be added.