



UC San Diego

JACOBS SCHOOL OF ENGINEERING

Shu Chien-Gene Lay Department of Bioengineering

THESIS RESEARCH IN BIOENGINEERING

Course Sequence:

BENG 299 (minimum of 12 units required)

Summary:

At UC San Diego, thesis-based students perform research under the guidance of a thesis advisor, and that advisor can be any faculty member so long as the student has a co-advisor in Bioengineering. Research duration depends on the program; Master's students typically require 6 quarters or 2 years to complete the degree. Master's theses generally demonstrate mastery of a set of techniques, applications, and/or concepts in Bioengineering.

Thesis Faculty:

UC San Diego allows any faculty member to serve as an advisor to graduate students, provided that a co-advisor is appointed in that program should the faculty member be appointed outside of that program.

What to Expect:

During the academic year, students perform independent thesis research in the laboratory of their mentor, whether in a "wet" or "dry" research lab, clinical facility, field location, or other setting. A set number of hours of thesis research/unit of credit is expected by a student's faculty advisor. Students may register for up to 12 units of research per quarter under their faculty advisor. Course time typically consists of meetings with advisor(s) as well as planning, conducting, and analyzing experiments. Students often mentor undergraduate research volunteers as a part of their own thesis research.

Pre-requisites:

Admission to a thesis-based graduate program

FAQs:

Can I take more than 12 units per quarter? Why 12?

12 units is considered full-time enrollment, so there is no need to make more than 12 per quarter. Most students will take many more units of BENG299 than are required to graduate.

If I do not know who I would like to perform thesis research with, how does the department help me find a thesis advisor?

First year students take a "get to know the faculty" seminar in the Fall quarter where faculty interested in taking new students present their group's work. Research and social activities during orientation also facilitate this process.

Are UCSD Bioengineering students admitted directly into a thesis lab?

No for both MS and PhD students. Students are encouraged but not required to perform quarter-long lab rotations in their first year to identify the lab that is the best fit for them. Typically, students that do rotate will do so in the Fall, Winter, and Spring quarters before determining their thesis lab. Students are free to rotate in any number of labs, i.e., 1 lab three times, 3 labs one time, or other combinations.