The Designated Emphasis in Biotechnology (DEB)

What is the DEB?

The DEB is a specialized degree program for doctoral students in 29 biotech-related campus disciplines. Students completing degree requirements receive a notation on their diploma (Ex: PhD in Genetics with a Designated Emphasis in Biotechnology).

http://deb.ucdavis.edu/

What are the primary benefits of joining the DEB program?

- Training in interdisciplinary team science and responsible conduct of research (RCR)
- Professional career development specific for biotech-related fields
- Exposure to business networking & entrepreneurship
- Opportunity to apply for fellowships and training programs
- Assistance in finding paid internships
- Training in scientific communication to diverse audiences via Chalk Talks, symposia, K-14 outreach, networking events, industry tours, etc...

DEB Academic Training Plan (~5.5 year average time to degree):

Here is a sample DEB academic training plan, which may vary between students:

Year 1
- Make an appointment with Dr. Judy Kjelstrom (jakjelstrom@ucdavis.edu) to discuss DEB program admission.
- Begin required coursework (must take DEB263, MCB/ECH294 seminar series and an approved ethics course prior to the Qualifying Exam).
- Apply for relevant DEB-related fellowships and traineeships.

Years 2-3
- Finish required coursework and prepare to take the Qualifying Exam. Make sure at least one DEB faculty member is included on the QE committee.
- Start building science communication skills and polishing a professional curriculum vitae (CV).
  - Give a Pizza Chalk Talk – good practice for the QE.
  - Develop a professional CV with guidance of program administrators (DEB template).
  - Present a poster at the Annual Biotech Retreat.
  - Attend the MCB/ECH294 Current Progress in Biotechnology seminars (3 quarters for credit)
  - Volunteer for 1-2 outreach events or activities per year. Each quarter, opportunities are sent to the listserv (E-mentoring, HS Lab Tours, Picnic Day, Career Fairs, Teen Biotech Challenge web design competition).
- Apply for relevant DEB-related fellowships and traineeships.

Year 4
- Set internship goals (Skills you’d like to acquire? Location? Industry?) and meet with program administrators to begin looking for opportunities at least one year prior to the ideal internship start date. Timing varies between students - the internship may be completed post-QE thru graduation. Student must enroll in MCB282 to receive credit hours.
  - Finalize your professional CV and template cover letter with help of program administrators.
  - Audit MCB/ECH294 seminars of interest to network with speakers re: internship possibilities at lunch.
- Continue building science communication skills, volunteering for outreach and updating the professional CV.

Year 5
- Internship (...and sometimes...a job offer 😊)
- Dissertation and Exit Seminar!

Required Coursework:

- DEB 263 “Biotechnology Fundamentals and Application” (4 unit lecture course)
- Bioethics Course*
- MCB/ECH 294 “Current Progress in Biotechnology” (1 unit seminar for 3 quarters, may sub MIC292*)
- MCB282 “Biotechnology Internship” (min 3 months, may be taken after QE)

*See DEB website for electives and course option details.