

Environmental Health Sciences

Academic degree programs in the Graduate Group in Environmental Health Sciences (EHS) are recommended for individuals with clear research orientations who wish to complete work of an interdisciplinary nature. Applicants may apply to the MS program, the PhD program, or to the joint MS/PhD program. (Continuation into the PhD program is contingent upon successful completion of the MS requirements or the Graduate Professional MPH degree requirements). EHS is administered within the Division of Environmental Health of the School of Public Health. Although students receive their academic degrees from the graduate group (under the jurisdiction of the Graduate Division of the UC Berkeley campus), students are also affiliated with and apply to the School of Public Health.

Admission to the University

Minimum Requirements for Admission

The following minimum requirements apply to all graduate programs and will be verified by the Graduate Division:

1. A bachelor's degree or recognized equivalent from an accredited institution;
2. A grade point average of B or better (3.0);
3. If the applicant comes from a country or political entity (e.g., Quebec) where English is not the official language, adequate proficiency in English to do graduate work, as evidenced by a TOEFL score of at least 90 on the iBT test, 570 on the paper-and-pencil test, 230 on the computer-based test, or an IELTS Band score of at least 7 (note that individual programs may set higher levels for any of these); and
4. Sufficient undergraduate training to do graduate work in the given field.

Applicants Who Already Hold a Graduate Degree

The Graduate Council views academic degrees not as vocational training certificates but as evidence of broad training in research methods, independent study, and articulation of learning. Therefore, applicants who already have academic graduate degrees should be able to pursue new subject matter at an advanced level without need to enroll in a related or similar graduate program.

Programs may consider students for an additional academic master's or professional master's degree only if the additional degree is in a distinctly different field.

Applicants admitted to a doctoral program that requires a master's degree to be earned at Berkeley as a prerequisite (even though the applicant already has a master's degree from another institution in the same or a closely allied field of study) will be permitted to undertake the second master's degree, despite the overlap in field.

The Graduate Division will admit students for a second doctoral degree only if they meet the following guidelines:

1. Applicants with doctoral degrees may be admitted for an additional doctoral degree only if that degree program is in a general area of

knowledge distinctly different from the field in which they earned their original degree. For example, a physics PhD could be admitted to a doctoral degree program in music or history; however, a student with a doctoral degree in mathematics would not be permitted to add a PhD in statistics.

2. Applicants who hold the PhD degree may be admitted to a professional doctorate or professional master's degree program if there is no duplication of training involved.

Applicants may apply only to one single degree program or one concurrent degree program per admission cycle.

Any applicant who was previously registered at Berkeley as a graduate student, no matter how briefly, must apply for readmission, not admission, even if the new application is to a different program.

Required Documents for Applications

1. **Transcripts:** Applicants may upload *unofficial* transcripts with your application for the departmental initial review. *If the applicant is admitted*, then *official* transcripts of all college-level work will be required. Admitted applicants must request a current transcript from every post-secondary school attended, including community colleges, summer sessions, and extension programs. Official transcripts must be in sealed envelopes as issued by the school(s) attended.
If you have attended Berkeley, upload your unofficial transcript with your application for the departmental initial review. *If you are admitted*, an official transcript with evidence of degree conferral *will not* be required.
2. **Letters of recommendation:** Applicants may request online letters of recommendation through the online application system. Hard copies of recommendation letters must be sent directly to the program, not the Graduate Division.
3. **Evidence of English language proficiency:** All applicants from countries or political entities in which the official language is not English are required to submit official evidence of English language proficiency. This applies to applicants from Bangladesh, Burma, Nepal, India, Pakistan, Latin America, the Middle East, the People's Republic of China, Taiwan, Japan, Korea, Southeast Asia, most European countries, and Quebec (Canada). However, applicants who, at the time of application, have already completed at least one year of full-time academic course work with grades of B or better at a US university may submit an official transcript from the US university to fulfill this requirement. The following courses will not fulfill this requirement: 1) courses in English as a Second Language, 2) courses conducted in a language other than English, 3) courses that will be completed after the application is submitted, and 4) courses of a non-academic nature. If applicants have previously been denied admission to Berkeley on the basis of their English language proficiency, they must submit new test scores that meet the current minimum from one of the standardized tests.

Where to Apply

Visit the Berkeley Graduate Division application page (<http://grad.berkeley.edu/admissions/apply>) .

Admission to the Program

Application to the MS or MS/PhD programs requires an undergraduate degree in one of the natural sciences, commonly biology, chemistry, engineering, or environmental sciences. Admission to the doctoral

program generally requires a masters degree in similar fields or in environmental health. In all cases an important aspect of the application for admission is the personal statement indicating an understanding of the interdisciplinary nature of the field of environmental health, the applicant's future aspirations in the field, and the relevance of their previous academic background and/or their research or professional experience.

Normative Time Requirements

Normative Time to Advancement: 4 Semesters

The normal time from entry into the doctoral program to advancement to candidacy is four semesters although it is generally somewhat less for students who complete a masters degree in Environmental Health at Berkeley.

Total Normative Time: 12 Semesters

Time to Advancement

Curriculum

Although there are no formal course requirements for the doctoral degree students are expected to be well-versed in the material covered in the following courses at the time of the qualifying examination.

PB HLTH 142	Introduction to Probability and Statistics in Biology and Public Health (or equivalent)	4
PB HLTH 220C	Health Risk Assessment, Regulation, and Policy	4
PB HLTH 250A	Epidemiologic Methods I	3
PB HLTH 270	Introduction to Environmental Health Sciences	3
PB HLTH 270A	Exposure Assessment and Control	3
PB HLTH 270B	Toxicology I	3

Prospectus

A preliminary examination including a research prospectus must be successfully completed prior to the qualifying examination.

Time in Candidacy

Dissertation

Dissertation required.

Required Professional Development

Presentations

Presentations are common, but only required in context of doctoral seminar.

Professional Conference

Professional conference presentations are common, but not required.

Colloquium Presentaion

Colloquium presentations are common, but not required.

Poster Presentation

Poster Presentations are common, but not required.

Teaching

Service as a graduate student instructor for at least one upper division or graduate course in required.

Curriculum

Courses Required – General EHS

PB HLTH 220C	Health Risk Assessment, Regulation, and Policy	4
PB HLTH 250A	Epidemiologic Methods I	3
or PB HLTH 250B Epidemiologic Methods II		
PB HLTH 270	Introduction to Environmental Health Sciences	3
PB HLTH 270A	Exposure Assessment and Control	3
PB HLTH 270B	Toxicology I	3
PB HLTH 271E	Science and Policy for Environment and Health	3
PB HLTH 272A	Geographic Information Science for Public and Environmental Health	4
PB HLTH 142	Introduction to Probability and Statistics in Biology and Public Health (or equivalent)	4
PB HLTH 145	Statistical Analysis of Continuous Outcome Data	4
GRAD/Upper Division ELECTIVES as per approved study list		

Courses Required – Global Health & Environment Concentration

PB HLTH 270	Introduction to Environmental Health Sciences	3
PB HLTH 270A	Exposure Assessment and Control	3
PB HLTH 270B	Toxicology I	3
or PB HLTH 260A Principles of Infectious Diseases		
PB HLTH 142	Introduction to Probability and Statistics in Biology and Public Health	4
or PB HLTH 141 Introduction to Biostatistics		
PB HLTH 250A	Epidemiologic Methods I	3
or PB HLTH 250B Epidemiologic Methods II		
PB HLTH 299	Independent Research	1-12
GRAD/Upper Division ELECTIVES (7) from International Development Area		
GRAD/Upper Division ELECTIVES as per approved study list re student's research interest		

- No internship/field work/practicum but field work common
- Capstone/Thesis (Plan I)
- Capstone/Comprehensive Exam (Plan II)
- Capstone/Master's Project (Plan II)