

Guidelines for Ph.D. Qualifying Examination in Environmental Engineering

All students admitted to the Ph.D. program in Environmental Engineering must take and pass the qualifying examination as described herein. The objective of qualifying exam is to assess a student's scholastic aptitude and his/her ability to conduct independent research.

The examining committee must be set up and the exam must be administered in the first year of a student's Ph.D. program. The committee must consist of at least three tenure-stream faculty members, all of whom will normally be faculty in the Department of Civil and Environmental Engineering. At least two members of the examining committee cannot be directly associated with the student's current research project. Examination topics are drawn from the core scientific areas and associated engineering specialties underlying environmental engineering: environmental chemistry, environmental biology, and environmental physics. Students must be examined in at least two of these areas by faculty whose expertise is in the respective area.

The qualifying exam will be focused on critical thinking skills associated with the student's research interests. The examination will be individually formulated and may include an assessment of the student's ability to critique a research paper or proposal, analyze data, and/or formulate a hypothesis and design an experiment to test that hypothesis. Each examiner, in collaboration with the student's advisor, will write and submit one or more questions to the student's advisor. The student's advisor, serving as examination coordinator, will compile the questions and administer the exam to the student. The student must complete the exam within three weeks after receipt from his/her major advisor. The student will provide a sufficient number of copies of the completed examination to his/her advisor for distribution to the committee. Within two weeks after completing the exam, the student will meet with his/her examining committee for an oral exam, which will focus on, but not be limited to, the written questions and answers. To pass the exam, the committee must unanimously agree that the student has both the scholastic aptitude and ability to conduct independent research at the doctoral level. The results of the exam will be determined in a meeting without the student present immediately following the oral exam.

At the discretion of the committee, the student may retake the qualifying exam once, but not in the same semester and before completion of the student's third semester in the program.