

# Ph.D. in Environmental Science

## Ph.D. in Environmental Science (students entering with master's degree)

Specific degree requirements and dissertation topics are approved by the department on an individual basis. Students must attain a minimum overall GPA of 3.0 and earn a GPA of 3.0 in the required courses.

### Required Courses

EVSC 600	Environmental Science Seminar <sup>1</sup>	0
EVSC 610	Environmental Chemical Science	3
EVSC 612	Environmental Analysis	3
EVSC 616	Toxicology for Engineers and Scientists	3
EM 631	Legal Aspects in Environmental Engineering	3
R120 604	Microbio: Prin & Appl	3

### Electives

700-level courses <sup>2</sup>		12
Courses beyond master's degree		12

### Research

EVSC 790C	Doct Dissertation & Res <sup>3</sup>	36
-----------	--------------------------------------	----

**Total Credits** **75**

<sup>1</sup> Registration in the seminar is required every semester.

<sup>2</sup> Chosen in consultation with graduate advisor. No more than 6 credits may be in EVSC 725 Independent Study I.

<sup>3</sup> If the 36 credits are completed before submission of the final dissertation document, students must register for a minimum of 3 credits of EVSC 790 Doctoral Dissertation per semester until it has been submitted and accepted.

## Qualifying Examination

All applicants are expected to pass a qualifying examination that tests general competence in environmental sciences at the master's level. It must be taken within the first year following admission to the program, and passed within two years. A student will be allowed only two attempts to pass the examination.

## Formation of Dissertation Committee

Within three months of passing the qualifying examination, doctoral students must form a dissertation committee that meets the approval of the graduate advisor (not the dissertation advisor) in environmental science. As a minimum, the committee must consist of the doctoral student's dissertation advisor, three additional faculty members from the program, and one member from outside the program and the Department of Chemical Engineering, Chemistry and Environmental Science.

## Research Proposal

Within six months of forming the dissertation committee, doctoral students must make a formal oral presentation to their dissertation committee and other interested persons on the scope of their proposed research. The committee must formally approve the proposal within a maximum of three additional months. This ensures meeting the requirements that doctoral students must have an approved dissertation committee and an approved dissertation proposal within a year of passing the qualifying examination.

## Dissertation Defense

An oral defense of the dissertation is required after submission of the final document to the dissertation committee for approval. Signatures of all members of the dissertation committee must be received for final approval to be granted.

## Ph.D. in Environmental Science (students entering with a bachelor's degree)

Students must attain a minimum overall GPA of 3.0 and earn a GPA of 3.0 in the required courses.

### Required Courses

EVSC 600	Environmental Science Seminar (required every semester)	0
R120 604	Microbio: Prin & Appl	3
EM 631	Legal Aspects in Environmental Engineering	3
EVSC 610	Environmental Chemical Science	3

EVSC 612	Environmental Analysis	3
EVSC 616	Toxicology for Engineers and Scientists	3
<b>Research</b>		
EVSC 790	Doctoral Dissertation <sup>1</sup>	36
<b>Electives</b>		
12 credits from 700-level courses <sup>2</sup>		12
15 credits from 600- or 700-level courses <sup>3</sup>		15
<b>Total Credits</b>		<b>78</b>

<sup>1</sup> If the 36 credits are completed before submission of the final dissertation document, students must register for a minimum of 3 credits of EVSC 790 Doctoral Dissertation per semester until it has been submitted and accepted.

<sup>2</sup> Chosen in consultation with graduate advisor. No more than 6 credits may be in EVSC 725 Independent Study I or EVSC 726 Independent Study II.

<sup>3</sup> May be from outside the department

## Qualifying Examination

A qualifying examination must be taken within three semesters of admission to the program, and passed within two years. A student will only be allowed two attempts to pass the examination.

## Formation of Dissertation Committee

Within three months of passing the qualifying examination, doctoral students must form a dissertation committee that meets the approval of the graduate advisor (not the dissertation advisor) in environmental science. As a minimum, the committee must consist of the doctoral student's dissertation advisor, three additional faculty members from the program, and one member from outside the program and the Department of Chemical Engineering, Chemistry and Environmental Science.

*Research Proposal* - Within six months of forming the dissertation committee, doctoral students must make an oral presentation to their dissertation committee and other interested persons on the scope of their proposed research. The committee must formally approve the proposal within a maximum of three additional months. This ensures meeting requirements that doctoral students must have an approved dissertation committee and an approved dissertation proposal within a year of passing the qualifying examination.

## Dissertation Defense

An oral defense of the dissertation is required after submission of the final document to the dissertation committee for approval. Signatures of all members of the dissertation committee must be received for final approval to be granted.