

University of Idaho

MS in Environmental Science

Water Science Emphasis

Introduction

The Environmental Science Program offers a non-thesis MS degree at a distance. The area of specialization is water science. Most courses are offered via the World Wide Web. Applicable courses may also be taken through Engineering Outreach at the 400- and 500-level. Supporting courses in mathematics and in probability and statistics are available. Courses used to satisfy degree requirements must be approved by the program director.

Admission Requirements

Admission to the Environmental Science graduate program is open to students who meet all of the following requirements:

- baccalaureate degree
- undergraduate GPA of 3.0 or higher as part of the degree
- Competitive GRE score
- TOEFL score of 550 or higher (international students only)

Application Materials

Submit all of the following to:

University of Idaho
Graduate Admissions
PO Box 444266
Moscow, ID 83844-4266

1. *Application for Admission to the College of Graduate Studies*

- This may be submitted electronically at <http://www.students.uidaho.edu/gradadmissions>. Designate Environmental Science Outreach on application.

2. Application fee

3. Two official transcripts from each college or university attended

4. Statement of research interest and area of specialty – please identify yourself as a distance education student in your statement

5. Resume

6. Three letters of references

7. GRE scores

8. TOEFL score (international students only)

- Arrangements to take the TOEFL may be made by writing to TOEFL, Educational Testing Service, PO Box 899, Princeton, New Jersey 08540 or request a registration bulletin form online at www.ets.org/toefl
- Educational Testing Service sends scores directly to the Graduate Admissions office

Deadlines

Spring semester

November 15

Fall semester

June 1

Deficiency Courses

All students must meet basic requirements in math, statistics, English, biological science, physical science and social science. You may be asked to provide catalog copies of the course descriptions. If you are deficient in some of the courses necessary for preparation for this degree, you will need to make these courses part of your study plan and complete them before you graduate with your MS.

Deficiency Courses		Credits
Math	1 semester of pre-calculus	3 credits
Stat	Statistics	3 credits
Eng	Technical or Scientific Writing	3 credits
Biological Science	1 course in two of the following: biology, ecology, botany, zoology or microbiology	8 credits
Physical Science	1 course each from the following two categories: chemistry or physics and physical geography or geology	8 credits
Social Science	1 course in two of the following: economics, political science, law, sociology, history, human geography	6 credits

Program Requirements

Candidates must fulfill the requirements of the College of Graduate Studies and of the Program in Environmental Science. See the College of Graduate Studies section of the UI catalog (part 4) for the general requirements applicable to each degree.

Master of Science

Each student's MS advisory committee will be composed of his or her faculty advisor, who is a member of the EnvS faculty, and the Director of the Environmental Science Program. Additional committee members are optional. Each student will design a study plan in consultation with his/her committee. The study plan will also be subject to approval by the Graduate College.

There are five requirements for the M.S. non-thesis degree in environmental science: (1) Depth requirement: the graduate program is structured around three option areas, biological science, physical science, or social science. A student must complete 12 - 15 credits in one of the three option areas; (2) Breadth requirement: A student must complete a minimum of 3 credits at the MS level in each of the other two option areas (to total 6 – 9 cr.); (3) A student must complete one course (3 cr.) in appropriate research methods or statistics at the 500 level; (4) EnvS 501, environmental science seminar (3 cr.); and, (5) EnvS 599, non-thesis research (3 cr.). These requirements may be augmented to compensate for undergraduate deficiencies.

With the approval of the student's committee, up to 12 credits may be transferred from another institution and included in the student's curriculum.

The non-thesis degree program requires at least 30 graduate credits, including a minimum of 3 credits of EnvS 599 (non-thesis research) and 27 credits of course work. For the non-thesis option, at least 21 credits in the option and supporting area must be at the 500 level. A student can take up to 9 credits at the 400 level in the option and supporting area (one class can be at the 300 level in a supporting area with program approval). The non-thesis research part of the program for each student consists of a substantial project in which the student demonstrates ability to do rigorous independent work. The students' advisor oversees the project. Once completed, the project must be evaluated and approved by the student's committee.

SAMPLE
Biological/Physical Science Option
Study Plan in Environmental Science – Water Science Emphasis (M.S.)

Courses		Credits
<i>Two (6 cr. total) 400* or 500 level courses selected from Social Sciences</i>		
CSS 573	ST: Planning and Decision-making Processes for Watershed Management	3
PolS 562	Natural Resource Policy	3
<i>One 500 level course in appropriate research methods or statistics</i>		
EnvS 541	Sampling and Analysis of Environmental Contaminants	3
<i>Option Area Courses (15 credits total, 9 maximum @ 400 level*)</i>		
Geog 524	Hydrologic Apps	3
Geol 564	Geochemistry of Natural Waters	3
For 462	Watershed Science & Management	3
BAE 404	Environmental Hydrology	3
Soil 415	Environmental Soil Physics	3
<i>Environmental Science Special Topics Seminar)</i>		
EnvS 501	Seminar**	3
<i>Research and Thesis or Special Problems</i>		
EnvS 599	Non-Thesis Research	3
	SUMMARY: 500 Level Course Credits	18
	400 Level Course Credits	9
	Total	30

*9 credits maximum at the 400 level for the entire degree

**Seminar credits are earned in the student's community by attending local environmental science events. Contact the program office for details.

Three-Year Plan

Course descriptions and numbers may be changed at any time by the University of Idaho Curriculum Committee. Be sure to check current semester offerings for updated descriptions. The Environmental Science Program and Engineering Outreach plan to offer the following courses during the next three years. Changes in faculty and student enrollments may produce changes to this three-year plan. Students preparing a graduate study plan should work with the program director or advisor. Questions regarding the availability of a course should be directed to the department chair. Course descriptions are available in the *University of Idaho General Catalog*, or at www.students.uidaho.edu/catalogs.

Course		S08	F08	S09	F09	S10	F10
Water Quality							
ASM 430	Water & Wastewater Oper Mgt (www)	X				X	
BAE 552	Environmental Water Quality (EO)	X		X		X	
CE 533 / EnvE 543	Water Quality Management (EO) (prereq. perm)			X			
Geol 464 / 564	Geochemistry of Natural Waters (www) (prereq. Chem 112, suggested prereq Geol 423)			X			
Geol 478 / 578	Adv Geochemistry of Natural Waters (www) (prereq. Geol 564)	X				X	
Hydrology							
BAE 450	Environmental Hydrology (www)	X		X		X	
BAE 458/ CE 428	Open Channel Hydraulics (EO) (prereq. BAE 352 or CE 322)				X		
BAE 558	Fluid Mechanics of Porous Material – (EO).	X		X		X	
CE 421 / BAE 451	Engineering Hydrology (EO) (prereq BAE 351 and Engr 335)	X		X		X	
For 462	Watershed Management (www) (prereq. For 221 or perm)		X		X		X
Water Management and Policy							
AgEc 404/ 504	West US Water Res Pol & Env Eq (www)		X				X
Geog 424/524	Hydrologic Applications of GIS and Remote Sensing (www)		X		X		X
CSS 573	Planning and Decision-making Processes for Watershed Mgt (www)				X		
Other Courses Available at a Distance							
ChE 480/580	Eng. Risk Assessment/ Hazardous Waste (www)			X		X	
CSS 572	Human Dimensions of Restoration Ecology (www)	X				X	
Eng 317	Technical Writing (www)	Summer 08		Summer 09		Summer 10	

Course		S08	F08	S09	F09	S10	F10
EnvS 552 / Phil 452	Environmental Philosophy (www)	Summer 08		Summer 09		Summer 10	
EnvS 541	Sampling and Analysis of Environmental Contaminants (www) (prereq Chem 112 and Stats 301 or 251)	X		X		X	
EnvS 479	Intro to Env Regulations (compressed video - only IF and Moscow)		X				X
EnvS 428	Pollution Prevention (www)		X		X		X
EnvS 225	International Env Issues (www)	Summer 08		Summer 09		Summer 10	
EnvS 101	Introduction to EnvS (www)		X		X		X
Fish 540	Wetland Restoration (www)		X		X		X
For 426	Wildland Fire Ecology and Management (www)		X		X		X
FST 409 / 509	Environmental Toxicology (www)		X		X		X
Geol 309 / GeoE 309	Ground Water Hydrology (EO) (prereq. Geol 101 or 111 and Math 130 or 143)		X		X		X
Math 170*	Analytic Geometry and Calculus I (EO) (prereq. Math 143)	X	X	X	X	X	X
NR 402	GIS Applications in Natural Resources (www)		X		X		X
Rnge 560	Plant Ecophysiology (www)			X			
Rnge 459	Rangeland Ecology (www)		X		X		X
Rnge 440	Wildland Restoration Ecology (www)	X		X		X	
Rnge 404	GIS Applications in Fire Ecology and Management (www)	X		X		X	
Rnge 404	ST: Principles of Vegetation Measurement and Assessment (www)		X		X		X
Rnge 221	Nat Resources Ecology (www) (prereq Bio 111 or 112)		X		X		X
Stat 251*	Principles of Statistics (EO)	X	X	X	X	X	X

EO – Engineering Outreach www.outreach.uidaho.edu/eo
Compressed video – available in Idaho Falls and Moscow
www – available anywhere on the World Wide Web

Contact Information

University of Idaho
Environmental Science Program
PO Box 443006
Moscow, ID 83844-3006
Phone: (208) 885-6113
Fax: (208) 885-4674
Email: streatf@uidaho.edu
URL: www.webs.uidaho.edu/envs
Advisor: Rosemary Streatfeild

Graduation Time Line

Step 1: Gain Acceptance to the Program

Navigate to the admission requirements from www.webs.uidaho.edu/envs. Submit the *Application Form for Admission to the College of Graduate Studies* at <http://www.students.uidaho.edu/gradadmissions>. Send all required application materials. Designate Environmental Science Outreach.

Step 2: Take Deficiency Courses

Discuss a plan of study with the program director or advisor. Credits received for deficiency courses do not count towards graduate degree requirements. The program must approve any deficiency courses taken at another university.

Step 3: Take Graduate Courses (including electives)

Work with the program director and advisor to select appropriate courses.

Step 4: Preparation of Study Plan

Early in the student's academic career, he/she prepares (in conference with the program office) a study plan outlining all coursework to be completed to fulfill the requirements for the master's degree. Download the *College of Graduate Studies Study Plan* form at <http://www.grad.uidaho.edu/default.aspx?pid=32490> and file with the College of Graduate Studies after obtaining appropriate signatures.

Step 5: Complete All Coursework

Continue working with your major professor and complete final courses. Refer again to the *University of Idaho General Catalog* at www.students.uidaho.edu/catalogs and the current three-year plan developed by the program. Also refer to your study plan progress, transcripts and grades at <http://max.csvr.uidaho.edu>.

Step 6: Complete Non-thesis Requirements

Non-thesis students are required to demonstrate writing proficiency in a publication-quality technical paper (EnvS 599).

Step 7: Application for Advanced Degree

The *Application for Advanced Degree* is completed at the end of the semester prior to the semester in which the student intends to graduate. Before filling out the application, the candidate and the program director or advisor must jointly ascertain that the candidate has met all degree requirements or will do so by completion of current registration. Download the *Application for Advanced Degree* form at www.students.uidaho.edu/registrar/forms.html and file with the College of Graduate Studies after obtaining appropriate signatures.

Step 8: Final Semester Registration

A graduate student in a non-thesis program must be registered during the semester in which the non-thesis requirements are completed