

Requirements and Curriculum for the MS in Integrated Environmental Science (as of 10/26/15)

The thesis-based MS in Integrated Environmental Science (IES) is offered by the Department of Integrated Environmental Science in the College of Science, Engineering, and Mathematics (CSEM). The program seeks to adhere to the highest standards for academics and research, and in pursuit of these standards has set the following requirements and curriculum.

Prerequisites for the MSIES:

A program of this type is grounded in natural science but integrates information from other disciplines into it. As a result, students who have a decent science background plus some exposure to at least one non-science field would be best prepared for this program. Therefore, in addition to any university-wide graduate student requirements, a candidate for the Masters in IES must have the following background:

- 1) *Required:* A Bachelors degree in some aspect of natural or applied science or environmental policy, such as some form of biology, chemistry, natural resources (policy, management, or field oriented), wildlife management, fisheries, or similar. Alternatively, a student could enter with a different degree if their program of undergraduate study included 12cr hrs (or equivalent) of natural, physical, or environmental science including at least one lab and two courses of 200-level or higher, plus 9cr hrs of social science or humanities including at least one course of 200-level or higher, plus one course of any type focusing on environmental or resource issues from any perspective. A student wishing to pursue the program but with deficiencies in course background identified by a student's advisor or advisory committee can be admitted conditionally to make up the undergraduate courses, and admitted fully to the program upon successful completion of the undergraduate courses. Courses taken to fill deficiencies cannot be used for graduate credit.

Preferred: a major or minor in environmental science, environmental studies, resource management, resource economics, or similar environmentally-related program; an undergraduate research project/paper; at least one course in statistics or similar numerical analysis; computer skills.

As any graduate program should strive for the highest standards in student performance, candidates for the Masters in IES must also have:

- 2) A minimum GPA of 2.75 on a four point scale (or equivalent) for conditional admission, and a preferred GPA of 3.0 for full admission. Conditionally admitted students can be admitted fully after the successful completion of the first semester of graduate courses, and cannot begin thesis or research work until fully admitted.
- 3) GRE section scores in the upper 50 percent for each section. Students with lower scores (though with a minimum combined score of 300 or more) can be admitted conditionally, and can be shifted to full admission after the successful completion of the first semester of graduate courses. Conditionally admitted students cannot begin thesis or research work until fully admitted.

Requirements for the MS IES:

An MSIES graduate student must maintain a minimum cumulative GPA of 3.0 to remain in good standing in the program and to earn a degree, and must pass all courses with a grade of "B" or better. An MSIES student who earns less than a "B" in a listed course and/or receives a cumulative GPA below 3.0 will be given a grace period of one retake or one semester to correct the deficiency, or the student will be withdrawn from the degree program. A student may take advantage of a grace period only once as an MSIES student; a second occurrence will result in automatic withdrawal from the MSIES program. Any appeal for consideration of extenuating circumstances must be made in writing to the IES Department Chair and the Dean of the Graduate School within 60 days of the second occurrence. The decision of the Chair and Dean concerning reinstatement (and any associated conditions) is considered final.

Thesis-Based MSIES Curriculum

Required Courses:

ES 501 Environmental Seminar I	1 cr.
ES 502 Environmental Seminar II	1 cr.
ES 510 Organization of Human Systems	3 cr.
ES 511 Organization of Natural Systems	3 cr.
ES 530 Environmental Policy and Risk Manag.	3 cr.
ES 603 Experimental Design	3 cr.
ES 613 Advanced Environmental Ethics	3 cr.
ES 614 Coastal Environmental Science	3 cr.
ES 620 Advanced Environmental Economics	3 cr.
ES 635 Advanced GIS and Remote Sensing	3 cr.
ES 699 IES Thesis	4 cr. total (minimum)

Plus a Minimum of 6 Credits from the Following Elective Courses:

ES 550 Ecosystem Management	2 cr.
ES 605 Environmental Modeling	2 cr.
ES 631 Advanced Environmetrics	2 cr.
ES 641 Toxicology and Risk Assessment	2 cr.
ES 651 Environmental Restoration	2 cr.
ES 695 Special Problems in IES	2 cr.

Total Required Courses ***30 cr. (minimum)***

Total Electives Courses ***6 cr.***

Total for MSIES Degree ***36 cr. (minimum)***