ENVIRONMENTAL STUDIES, MASTER OF SCIENCE (M.S.)

Program goal

The goal of the M.S. in Environmental Studies is to provide an interdisciplinary master's degree program in environmental studies that emphasizes the critical links between environmental life sciences and public policy. This goal necessitates training that crosses disciplinary boundaries. Through a program of study combining environmental science, environmental technology and environmental policy, the successful graduate will gain a range of skills designed to facilitate a science-based understanding of the natural world and human interactions with it. The M.S. is specifically designed to prepare students for careers involving science and policy research through the completion of a culminating thesis project.

Student learning outcomes

1. **Multidisciplinary content**: Graduates will acquire foundational knowledge from a broad range of disciplines that are directly relevant to environmental science and policy with particular emphasis on earth sciences, ecology and environmental policy.
2. **Environmental data and technology:** Graduates will master cutting-edge skills in data collection management and analysis. Special emphasis will be placed on geographic information systems and the R programming language.
3. **Application and communication**: Graduates will develop a novel application to showcase their newly acquired knowledge and skills. Relevant examples may include a thesis project and publication (for M.S. degree) and technical reports, infographics, maps, presentations, grant proposals, curriculum materials, etc. (for M.Env. degree).

VCU Graduate Bulletin, VCU Graduate School and general academic policies and regulations for all graduate students in all graduate programs

The VCU Graduate Bulletin website documents the official admission and academic rules and regulations that govern graduate education for all graduate programs at the university. These policies are established by the graduate faculty of the university through their elected representatives to the University Graduate Council.

It is the responsibility of all graduate students, both on- and off-campus, to be familiar with the VCU Graduate Bulletin as well as the Graduate School website (http://www.graduate.vcu.edu/) and academic regulations in individual school and department publications and on program websites. However, in all cases, the official policies and procedures of the University Graduate Council, as published on the VCU Graduate Bulletin and Graduate School websites, take precedence over individual program policies and guidelines.

Visit the academic regulations section for additional information on academic regulations for graduate students. (https://bulletin.vcu.edu/academic-regs/)

Graduation requirements

As graduate students approach the end of their academic programs and the final semester of matriculation, they must make formal application to graduate. No degrees will be conferred until the application to graduate has been finalized.

Graduate students and program directors should refer to the following graduation requirements as published in the Graduate Bulletin for a complete list of instructions and a graduation checklist.

Visit the academic regulations section for additional information on graduation requirements. (https://bulletin.vcu.edu/academic-regs/grad/graduation-info/)

Apply online today. (https://www.vcu.edu/admissions/apply/graduate/)

Admission requirements

Degree:	Semester(s) of entry:	Deadline dates:	Test requirements:
M.S.	Fall	Jan 15	TOEFL (or IELTS or equivalent) for international students
	Spring	Sep 15	

Special requirements

- For students seeking consideration for fall admission and potential funding, preference is given to applications received by Feb. 1. See program website (http://www.vcu.edu/cesweb/) for details.

In addition to the general admission requirements of the VCU Graduate School (https://bulletin.vcu.edu/graduate/study/admission-graduate-study/admission-requirements/), applicants must have successfully completed undergraduate training and hold a bachelor's degree from an accredited institution reflecting ability to perform at the graduate level.

While qualified students from any baccalaureate program will be considered for admission to the Master of Science in Environmental Studies (M.S.) program, due to the program goal of linking science and policy, students with narrow training in one field or the other may be required to complete some basic education in the alternate field prior to full admission. Moreover, admission to the M.S. program requires a sponsoring faculty adviser, who will function as a thesis adviser for the admitted student. Students without such sponsorship will be considered for admission to the Master of Environmental Studies (M.Envs.) degree program. If an appropriate adviser is identified following admission, the student's program may be changed to the M.S. program.

Students admitted to the program are generally drawn from applicants with a minimum undergraduate GPA of 3.0 (on a 4.0 scale or equivalent). Applicants holding an undergraduate degree from recognized foreign institutions should display an acceptable level of English proficiency by achieving a minimum score of 600 on the TOEFL paper-based examination or 100 on the Internet-based examination. The IELTS or equivalent is considered as well.

Degree requirements

In addition to general VCU Graduate School graduation requirements (https://bulletin.vcu.edu/academic-regs/grad/graduation-info/), students must:

1. Complete a minimum of 33 graduate credit hours, approved by the program director, with an overall minimum GPA of 3.0 on all graduate course work attempted after acceptance into the program (at least one-half of required course work must be at the 600 level or higher)
2. Complete five required core courses (13 credit hours)
3. Complete an additional seven credit hours of approved graduate electives
4. Develop a research proposal approved by a committee of three faculty members
5. Qualify for degree candidacy based upon satisfactory completion of the above requirements
6. Complete the proposed research culminating in a publication-quality thesis (minimum of 13 research/thesis credit hours)
7. Successfully defend the research thesis

Curriculum requirements

Course	Title	Hours
Core requirements		
ENVS 521	Introduction to Geographic Information Systems	3
ENVS 543	Environmental Data Literacy	3
ENVS 601	Survey in Environmental Studies	3
ENVS 603	Environmental Research Methods	3
OVPR 601	Scientific Integrity	1
Thesis		
Select a minimum of 13 credit hours (M.S. degree only):		13
ENVS 697	Research	
or ENVS 698	Thesis	
Electives		
Choose any ENVS courses at the 500 or 600 level or select from electives below. [1]		7
Total Hours		**33**

[1]

Courses must represent at least two of the disciplines below. Listed courses are options and are not comprehensive of all electives. Other electives may be allowed with prior permission of major adviser and program director.

Electives

Course	Title	Hours
BIOL 510	Conservation Biology	3
BIOL 514	Stream Ecology	4
BIOL 591	Special Topics in Biology (applied and environmental microbiology)	1-4
ENVS 510	Stream Surveys	3
ENVS 515	Tropical Field Ecology	4
ENVS 518	Healthy Food: Behaviors & Environments	3
ENVS 519	Environmental Field Research	1-3
ENVS 531	Landscape Ecology	3
ENVS 532	Urban Ecology	3
ENVS 541	Principles of Waste Management	3
ENVS 550	Ecological Risk Assessment	3
ENVS 555	Hydrogeology	3
ENVS/ANTH 556	Historical and Cultural Landscapes	3
ENVS 575	Avian Ecology and Conservation	4
ENVS 591	Topics in Environmental Studies	1-4
ENVS 602	Environmental Technology	1-3
ENVS 627	Infographics: Visualization of Scientific Data	3
ENVS/PADM 628	Environmental Policy and Administration	3
ENVS/GVPA 640	River Policy	3
ENVS/URSP 654	Environmental Remote Sensing	3
ENVS 655	Hydrogeology	3
ENVS 660	Environmental Law	3
ENVS 675	Advanced Environmental Applications of GIS	3
ENVS 691	Topics in Environmental Studies (environmental applications of GIS)	1-3
ENVS 692	Independent Study [1]	1-3
ENVS 693	Internship in Environmental Studies [1]	1-3
PADM 601	Introduction to Public Service and Administration	3
URSP 650	Natural Resources and Environmental Planning	3
URSP 652	Environmental Analysis	3

[1]

Students may not apply more than three credit hours (total) of ENVS 692 and/or ENVS 693 to the degree without prior approval of the major adviser and program director.

The minimum total of graduate credit hours required for this degree is 33.

Contact

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