

GEOL 234	Global Biogeochemical Cycles	
GEOL 235	Geochemistry of Natural Waters	
NR 143	Intro to Geog Info Systems	
or GEOG 184	Geog Info:Cncpts & Applic	
ENSC 195	Internship	
ENSC 196	Undergraduate Research	
A maximum of 3 credits of ENSC 195 or ENSC 196 may apply toward the 14 elective credits with advisor approval.		

Global Environment and Climate Change Concentration

FOR/NR 146/ GEOG 185	Remote Sensing of Natural Res	0 or 3
or NR 143	Intro to Geog Info Systems	
Choose a minimum of 11 additional credits from the following courses:		
CE 132	SU: Environmental Systems	
ENSC 195	Internship	
ENSC 196	Undergraduate Research	
ENSC 274	SU:Climate Chg: Sci & Percept	
GEOG 140	Biogeography	
GEOG 143	Climatology	
GEOG 148	Global Environmental Change	
GEOG 153	The Circumpolar Arctic	
GEOG 244	Adv Top: Global Change	
GEOG 245	Adv Top:Human Env Interactions (The Anthropocene)	
GEOG 246	Adv Top:Climate&Water Resource (Climatology and Natural Hazards)	
GEOG 246	Adv Top:Climate&Water Resource (Paleoclimatology)	
GEOL 151/ GEOG 144	Geomorphology	
GEOL 234	Global Biogeochemical Cycles	
NR 102	SU:Water as a Natural Resource	
or GEOG 145	SU: Geography of Water	
NR 220	Landscape Ecology	
PSS 261	Soil Morph Class & Land Use	
A maximum of 3 credits of ENSC 195 or ENSC 196 may apply toward the 11 elective credits with advisor approval.		

Water Resources Concentration

Choose a minimum of 14 credits from the following courses:		
ENSC 195	Internship	
ENSC 196	Undergraduate Research	
GEOG 246	Adv Top:Climate&Water Resource (Snow Hydrology)	
GEOL 135	Environmental Geochemistry	
GEOL 235	Geochemistry of Natural Waters	
NR 102	SU:Water as a Natural Resource	
or GEOG 145	SU: Geography of Water	
NR 143	Intro to Geog Info Systems	
NR 250	Limnology	
NR 260	Wetlands Ecology & Mgmt	
NR 280	Stream Ecology	
PSS 269	Soil/Water Pollution/Bioremed	
WFB 161	Fisheries Biology & Techniques	
WFB 279	Marine Ecology & Conservation	
A maximum of 3 credits of ENSC 195 or ENSC 196 may apply toward the 14 elective credits with advisor approval.		

ENVIRONMENTAL STUDIES IN THE COLLEGE OF AGRICULTURE AND LIFE SCIENCES

<http://www.uvm.edu/~envprog/>

The environment is a common theme in the courses offered at UVM. The College of Agriculture and Life Sciences (CALs) partners with the Rubenstein School of the Environment and Natural Resources and the College of Arts and Sciences to offer two interdisciplinary majors: Environmental Sciences and Environmental Studies.

CALS ENVIRONMENTAL STUDIES MAJOR

The Environmental Studies Program at University of Vermont was established in 1972 to meet the need for greater understanding of the ecological and cultural systems supporting all life on earth. This broadly interdisciplinary program is a campus-wide program serving students in four colleges across the university. The faculty are committed interdisciplinary thinkers drawing on the sciences, social sciences, and humanities to create a lively hub, addressing local and global issues with equal concern. We believe in collaborative problem-solving and the power of human imagination to create a more sustainable future.

The Environmental Program offers a major in Environmental Studies (ENVS) that can be pursued in three different colleges, including the College of Agriculture and Life Sciences, the College of Arts and Sciences, and the Rubenstein School of Environment and Natural

Resources. Students can choose which college best suits their broad educational needs and then pursue the Environmental Studies major from within that college. While major requirements differ slightly from college to college, the core curriculum is the same. Following the introductory courses and working closely with faculty advisors, each student creates a plan for an individually-designed major. The major culminates in a final capstone internship, thesis, or advanced courses, usually carried out in the senior year.

MAJORS

ENVIRONMENTAL STUDIES MAJOR

Environmental Studies B.S. (p. 271)

MINORS

ENVIRONMENTAL STUDIES MINOR

Environmental Studies (p. 271)

ENVIRONMENTAL STUDIES B.S.

All students must meet the University Requirements. (p. 471)

All students must meet the College Requirements. (p. 246)

MAJOR REQUIREMENTS

Environmental Studies students majoring through the College of Agriculture and Life Sciences must complete a minimum of 120 credits, with a minimum GPA of 2.00, and fulfill the following requirements:

The CALS Core Competencies		
Required courses:		
ENVS 001	SU:Intro to Envrnmtl Studies	4
ENVS 002	D2:SU:International Env Stdies	4
ENVS 101	Academic Planning Workshop	1
21 credits of approved environmentally-related courses at the 100- or 200-level, including three credits at the 200-level.		21
One breadth course in each of the following areas:		9
Natural sciences		
Humanities		
Social sciences		
Nine credits of a senior capstone: Thesis, Internship or Advanced Course Sequence		9

ENVIRONMENTAL STUDIES MINOR REQUIREMENTS

A total of 17 credits is required for the minor.

ENVS 001	SU:Intro to Envrnmtl Studies	4
ENVS 002	D2:SU:International Env Stdies	4
9 credits at the 100-level or above. ¹		9

¹ One non-ENVS course at the appropriate level may be substituted with the approval of the student's advisor.

FOOD SYSTEMS

UVM is a pioneer and global leader in food systems education, research, and collaboration and is the first and only university in the country to offer undergraduate, master's, and doctoral degrees in Food Systems.

UVM faculty, staff, and students have developed and maintained this position by embracing transdisciplinary approaches and fostering strong partnerships within the university, state, and beyond that contribute to a culture of collaboration and innovation. Given its strong systems orientation, UVM food systems scholarship encompasses a wide range of topics such as innovative production systems, environmental quality, entrepreneurship, human health and wellbeing, and nutrition. UVM's scale, as a land-grant university in a small state, provides students, staff, and faculty access to both diverse resources and an approachable campus community. This setting sustains relationships that integrate distinct disciplines in the natural and social sciences, as well as the humanities.

MAJORS

FOOD SYSTEMS MAJOR

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MINORS

FOOD SYSTEMS MINOR

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GRADUATE

Food Systems M.S.

Food Systems Ph. D.

See the online Graduate Catalogue (<http://catalogue.uvm.edu/graduate>) for more information

FOOD SYSTEMS B.S.

All students must meet the University Requirements. (p. 471)

All students must meet the College Requirements. (p. 246)

The food systems curriculum provides students with a broad foundational knowledge about the food system that includes environmental, social, and economic sustainability of food production. This knowledge is presented within the context of a changing climate, agricultural systems, food, health, and nutrition, food security, policy development at federal, state, and local levels, and an understanding of the complex dynamics of a global food system. In addition, students declare a concentration with a focus