# THE RUBENSTEIN SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

http://www.uvm.edu/rsenr

In the Rubenstein School of Environment and Natural Resources (RSENR), excitement for discovery and a commitment to lifelong learning are central. The Rubenstein School's emphasis on the integration of natural science, social science, and cultural and political perspectives reflects the interdisciplinary context in which ecosystem management, resource planning, and environmental concerns must be addressed. The School believes there is a strong interplay between teaching and scholarship and each is vital to the other.

The Rubenstein School seeks to cultivate an appreciation and enhanced understanding of ecological and social processes. The School aims to generate and disseminate knowledge and to foster learning and skill building that allows students, colleagues, and citizens to become innovative, environmentally responsible, and accountable leaders.

The Rubenstein School is committed to advancing equity and justice and to creating a community that is diverse and inclusive. Individual and professional responsibility, as well as scholastic excellence, are emphasized within the school's supportive atmosphere. The School has a team of Professional Advisors and Faculty that work directly with students, providing guidance and helping them to clarify and achieve their goals. The School's academic and extracurricular programs prepare students for a range of career opportunities in the environmental field as well as pathways to pursue advanced study.

The Office of the Dean of the School is located in the George D. Aiken Center for Natural Resources.

### **EXPERIENTIAL LEARNING**

The Rubenstein Student Services Office operates a robust Experiential Learning Program for students that helps them to build skills and provide a diversity of learning opportunities. Reflective career development, course work, and co-curricular activities are integrated to foster competencies that will make RSENR graduates highly competitive professionals and engaged, effective citizens. We take a holistic approach to career preparation by encouraging and supporting participation in community-based projects, internships, applied research, and off-campus study. Student development is facilitated through support of faculty and community partners as they create and implement community-based courses and research projects. At the heart of our work is a demonstrated commitment to student and faculty development and collaborative problemsolving between school, the university, and the local, national, and international communities. The RSENR Student Services team works directly with the Office of Community-Engaged Learning (CELO), UVM Office of Engagement, and the UVM Career Center, and collaborates regularly with other academic units at UVM.

The field-based curriculum in RSENR is centered on Vermont's natural landscapes – its mountains, lakes, fields, and forests - to provide students hands-on experience studying ecology and ecosystem processes. In addition, RSENR offers a variety of intensive field courses during vacation breaks and summer session that provide students special opportunities to study outside of Vermont. Past field explorations have included: introduction to ecotourism and environmental interpretation in Costa Rica, experience with regional examples of sustainable forest management and practices, and the study of aquatic ecology in Lake Champlain from the deck of UVM's new research vessel.

The RSENR Experiential Learning staff also work with students, faculty, and community partners to facilitate and support high impact engagement through internships, independent study and research experiences. A formal structure with targeted learning objectives and deliverables related to the students' disciplinary focus allows students to earn course credits that can be counted towards degree requirements with program director approval.

### **COMPUTING RESOURCES**

The Aiken Computer Teaching Lab (Aiken 101) provides students with access to key software and technologies utilized in environmental disciplines. In addition, all undergraduate students are required to have a laptop computer that meets the minimum specifications (https://www.uvm.edu/it/students). Students are not required to purchase a new laptop if they have an existing laptop that meets the established specifications. If students need to purchase a laptop, they are not required to purchase it through UVM.

### **MAJORS**

Environmental Sciences B.S.

Forestry B.S.

Parks, Recreation and Tourism B.S.

Sustainability, Ecology and Policy B.S.

Wildlife and Fisheries Biology B.S.

#### **MINORS**

Forestry

Geospatial Technologies

Parks, Recreation, and Tourism

Sports Management

Wildlife and Fisheries Biology

### **GRADUATE**

Ecological Economics CGS Leadership for Sustainability M.P.S. Natural Resources M.S.

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Natural Resources Ph.D.

Natural Resources: Master of Environmental Law and Policy/Master of Science in Natural Resources (MELP/MSNR)
Transdisciplinary Leadership & Creativity for Sustainability Ph.D

See the online Graduate Catalogue for more information

# REQUIREMENTS DEGREE REQUIREMENTS

Students must be matriculated in the Rubenstein School of Environment and Natural Resources and in residence at the University of Vermont during the period in which they earn 30 of the last 45 credits applied toward the degree. Students must earn a cumulative grade-point average of 2.00 or above. Students must complete a program of study which includes:

- 1. University Degree Requirements for Undergraduates
- 2. Catamount Core Curriculum requirements
- 3. Rubenstein Core Curriculum Requirements
- 4. Major Requirements

### **CORE CURRICULUM**

The school's core curriculum provides a common experience for all students. The innovative eight-course sequence creates an integrated foundation upon which the individual majors in the school are constructed. Core courses focus on the underlying fundamentals from which natural resources disciplines have evolved and the application of these fundamentals to problems or issues in the natural world and society. The core courses also promote development of critical thinking, communication, problem solving, and analytical skills. Faculty from all undergraduate programs teach in the core. The RSENR core curriculum represents knowledge, skills, and values that are central to the study of natural resources and the environment.

Eight courses are required (25 credits):

Requirement Description		Credits
NR 1010	Natural Hist & Human Ecology 1 <sup>1, 3</sup>	4
NR 1020	Natural Hist & Human Ecology 2 <sup>1, 3</sup>	4
NR 1050	Critical Reflection & Dialogue	1
NR 1060	Race & Culture in NR <sup>2, 3</sup>	3
NR 2030	Ecology, Ecosystems & Environ <sup>3</sup>	3
NR 2040	Social Proc & the Environment <sup>3</sup>	3
NR 3050	Integrating Sci, Soc & Policy <sup>3</sup>	3
NR 4060	Env Prob Sol & Impact Assessmt <sup>3, 4</sup>	4
or SEP 4080	Birding to Change the World	
or SEP 4090	Adaptation to Climate Change	

- <sup>1</sup> Internal and external transfer students to take NR 1090 VT: Natural & Cultural History which substitutes for NR 1010 and NR 1020.
- <sup>2</sup> Internal and external transfer students to RSENR may take any 3-credit Category D1 course from the University Approved Diversity courses to substitute for NR 1060, and any 3-credit Category D1 or D2 course to complete the Catamount Core requirement.
- RSENR Core Curriculum requirements also fulfill many Catamount Core Requirements.
- <sup>4</sup> NR 4060 can also be substituted with SEP 4990 Ecological Restoration Politics or WFB 4990 Applied Land Management -Wildlife

NR 1010 and NR 1020 provide an introduction to the study of natural resources and the environment from both natural and social science standpoints. NR 1050 and NR 1060 explore how social justice and environmental issues are intertwined, and help students become culturally competent in an increasingly diverse world. The intermediate courses in the sequence, NR 2030 and NR 2040, emphasize ecosystems and social systems, respectively, NR 3050 and NR 4060 focus directly on integrated and holistic environmental problem solving and management. In NR 3050, students learn how to make data matter by integrating science and policy to study problems in American environmental governance. In NR 4060, the capstone course taken during their senior year, students are challenged to synthesize and apply the interdisciplinary knowledge, skills, and values they have learned to contemporary natural resources and environmental issues working with community partners.

# RSENR GENERAL EDUCATION OPTIONS

The following Natural Resources courses fulfill general education or graduation requirements across RSENR majors.

Requirement Description		Credits
NR 1100	Mindfulness & the Anthropocene <sup>5</sup>	3
NR 1101	Nature and Belonging <sup>5</sup>	3
NR 2100	Environmental Communication <sup>1,5</sup>	3
NR 2300	Landscape Restor & Leadership <sup>5</sup>	4
NR 2400	Applied Environ Statistics <sup>2, 5</sup>	0 or 4
NR 2401	Intro Environmental Statistics <sup>5</sup>	0 or 3
NR 2430	Intro to Geog Info Systems <sup>3</sup>	0 or 3
NR 2460	Remote Sensing	3
NR 2730	Landscape Natural History	3
NR 2740	CR: Sustainability Theory&Prac <sup>4, 5</sup>	4
NR 2750	Rural Lives in Global World <sup>4, 5</sup>	3
NR 2760	Tropical Ecology in CR <sup>4, 5</sup>	4

NR 2996	Honors Seminar	1-6
NR 2999	Undergrad Teaching Fellowship	1-3
NR 3010	Research Methods <sup>5</sup>	3
NR 3430	Adv Geospatial Techniques	1-3
NR 4430	GIS Practicum	3
NR 4640	C Ross Env Pb Srv Practicum	4-5
NR 4680	Soil Ecology	0 or 4

<sup>&</sup>lt;sup>1</sup> NR 2100 is required for ENSC, FOR, and SEP majors. Optional for PRT and WFB majors.

# **UNDECIDED MAJORS**

Students interested in studying the environment and natural resources, but who wish to postpone their decision on a specific major, enroll in Undecided-Environment and Natural Resources.

# **INTERNAL TRANSFER CANDIDATES:**

Students planning to transfer from another college or school on campus must meet the prerequisite requirements. Internal transfer candidates into the Rubenstein School must have completed at least 12 credits at UVM with a GPA of 2.5 or higher and must submit an application for internal transfer by March 15 using the online application form. Student admission is evaluated based on their justification for a switch to a RSENR degree and how their academic and professional goals align with their selected major, and enrollment capacity within individual majors. Students are admitted at the beginning of the fall semester only.

Internal Transfer Application: https://www.uvm.edu/rsenr/undergraduate-resources

## **DEPARTMENTS AND PROGRAMS**

**Environmental Sciences** 

Forestry

Parks, Recreation and Tourism

Sustainability, Ecology and Policy

Wildlife and Fisheries Biology

NR 2400 is required for WFB, FOR, and SEP Applied Ecology majors.

<sup>&</sup>lt;sup>3</sup> NR 2430 is required for WFB.

<sup>&</sup>lt;sup>4</sup> Costa Rica Study Abroad Program.

<sup>&</sup>lt;sup>5</sup> Fulfills one or more Catamount Core requirements.