

VOINOVICH SCHOOL OF LEADERSHIP AND PUBLIC AFFAIRS

MASTER OF SCIENCE IN ENVIRONMENTAL STUDIES

Ohio.edu/environmentalstudies

Rise to the challenges of the 21st century

Perhaps the most pressing challenges ever to face the human race are environmental, from climate change to sustainability to watershed protection. No doubt these challenges will require leadership in both thought and action. Founded in 1970, Ohio University's Master of Science in Environmental Studies program in the Voinovich School of Leadership and Public Affairs is multidisciplinary and designed for exceptional students who recognize the complexity of environmental issues and aim to conduct cross-cutting research with direct application to real world problems.

The MSES program seeks students who want a learning-by-doing approach to develop the skills to innovate, while exploring solutions to the most pressing environmental and sustainability challenges of our time.

Our students have backgrounds ranging from business, humanities, and the social sciences to the physical and biological sciences and engineering. Because 21st century leaders face new challenges, with higher stakes, the Master of Science in Environmental Studies program provides graduates with a new framework and strategy to succeed.

THE PROGRAM

- + Study global trends to support local action
- + Interdisciplinary coursework to research the whole story
- + Learn by doing through hands on practicum partnerships





Get to know your local environment

Global environmental problems require local action. Consequently, the Master of Science in Environmental Studies program is tailored to the local environment and makes use of local resources.

- + Athens is located in one of the most scenic parts of Ohio, near 12 state parks and the Wayne National Forest. Because Athens usually enjoys a milder winter than much of the Midwest, many plant and animal species with southern distribution patterns can be found here.
- + The region has a 200-year history in the extraction industries: Coal, oil and gas, timber, iron and more have all fueled the region's economy, and the area is currently taking a front row seat as a witness to the boom in hydraulic fracturing. Numerous research opportunities are available with both University and regional organizations focused on remediation of environmental damage from these activities.
- + Environmental issues important to the area include acid mine drainage, hazardous waste disposal, agricultural runoff, timber resources and heavy industry located near the Ohio River.
- + Students make use of the University's research facilities including The Ridges, a 740-acre tract of forests and farmland. The abandoned orchards on the grounds from The Ridges' days as an asylum are known today as the Land Lab, a place where Ohio University students can do hands-on research, while they learn to be scientists in the quiet, natural beauty of the area.

Accelerate Your Career

Master of Science in Environmental Studies students learn to think about the environment in a holistic way and are consequently prepared for careers in a variety of fields and sectors:

- + Nonprofit/Non-governmental organizations
- + Public agencies
- + Consulting firms
- + Private agencies and corporations
- + Research foundations
- + Educational institutes

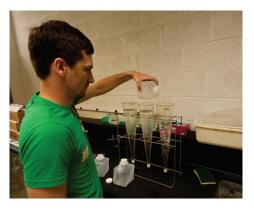
Increasing numbers of professionally trained individuals are needed in the fields of environmental science and management, meaning that Environmental Studies students have positive employment outlooks.

From 2014 to 2024, the U.S. Department of Labor Bureau of Labor Statistics projects:

- + 11% growth in jobs for environmental scientists and specialists
- + 9% growth in jobs for meteorologists and other atmospheric scientists
- + 6% growth in jobs for urban and regional planners
- + 9% growth in jobs for environmental science and protection technicians
- + 10% growth in jobs for environmental engineering technicians
- + 12% growth in jobs for environmental engineers
- + 10% growth in jobs for geoscientists







Master of Science in Environmental Studies

(36 Minimum Total Credits)

CORE CLASSES (11-13 CREDITS)

Students must complete all core courses, one research methods course and four electives approved in consultation with an advisor. Students choose to complete either a leadership practicum or a thesis.

ES 6800	Seminar: Community-Based ES	2 credits
ES 6810	Seminar: Environmental Society	3 credits
ES 6820	Seminar: Ecology and Environmental Issues	3 credits
ES 6830	Concepts in Sustainability	3 credits
ES 6900	Special Topics	1-3 credits

RESEARCH METHODS (1-4 Credits)
RESEARCH OR THESIS CREDITS (1-8 Credits)
LEADERSHIP PRACTICUM (4-12 Credits)

For a complete curriculum, visit ohio.edu/environmentalstudies

Admission Requirements

Successful MSES candidates will have the following:

- ✓ Bachelor's degree from an accredited institution
- ✓ Official transcripts
- ✓ Letter of intent/personal statement
- ✓ Three letters of recommendation.
- ✓ A list of three Ohio University faculty members whose classes or research connect most directly to your intended areas of study
- ✓ A score at least 600 on the Test of English as a Foreign Language or 250 on a computer-graded test, for non-native English speakers
- Scores from a standardized test such as the Graduate Record Examination (GRE). Scores of 50 or higher on the Graduate Writing Examination are highly recommended.
- ✓ A personal interview or electronic correspondence is desirable but not required.





About the Voinovich School of Leadership and Public Affairs

Ohio University's Voinovich School is one of the most highly regarded schools in the country that addresses rural and state issues of national importance. Ranked as a top innovative public affairs school in the country by Best Value Schools and recently elevated to the 68th top U.S. News and World Report Best Public Affairs Grad School, the School has a strong reputation as a catalyst for economic growth and opportunity, social impact and sustainability, and leadership and community building. By blending real-world problem solving and government, nonprofit and industry partnerships with education, students are offered unique learning opportunities to work with engaged faculty members and professional staff to find researched-based solutions to challenges facing communities, the economy and the environment.

Apply Now!

We accept applications at any time, but the deadline to apply to be considered for funding is February 1.

Ready to apply? Visit ohio.edu/graduate/apply

For additional information about the Environmental Studies program: ohio.edu/environmentalstudies 877.625.1714 gvsinfo@ohio.edu mses@ohio.edu

Voinovich School of Leadership and Public Affairs Building 22, The Ridges 1 Ohio University Athens, OH 45701

Graduate Research Funding Opportunities

The Master of Science in Environmental Studies Program offers the following funding opportunities for qualified graduate students on a competitive basis, based on the following topical areas. Applicants are strongly encouraged to visit faculty leaders' information on the Voinovich School website, then contact them directly before applying.

APPALACHIAN WATERSHED RESEARCH GROUP

Faculty advisor: Dr. Natalie Kruse Daniels, krusen@ohio.edu

The Appalachian Watershed Research Group is a multidisciplinary group that studies the water quality impairment and changes in hydrologic regime in Appalachian streams. Key watershed stressors are examined primarily through field studies, coupled with lab and modeling or mapping analysis, include legacy coal mining, oil and gas operations, Class II injection wells, agricultural runoff, stormwater pollution, and climate driven changes. Research is aimed at improving water quality, watershed management, resiliency of aquatic systems, and interfacing with practitioners to implement new approaches. Specific areas of research include, but are not limited to:

- + Metal fate and transport in acid mine drainage impaired streams
- + Green infrastructure and natural design for stormwater management
- + Stream channel and riparian restoration
- + Water quality monitoring technology
- + Climate induced hydrologic change and its impacts on Appalachian streams





RENEWABLE ENERGY AND POLICY RESEARCH GROUP

Research team leader: Dr. Gilbert Michaud, michaudg@ohio.edu

Projects in this realm are examining renewable energy developments, applications, economics, and policy approaches to address future use patterns. Research examines innovative program designs, market structures, generation and consumption, electricity rates, and policy mechanisms to enhance renewable investment and deployment, both from electric utilities, as well as in a distributed model via home and business owners.

- + Renewable Energy Policy Research focused on federal, state, local, and utility specific incentive programs to facilitate patterns of energy production/use that can support society's needs with the least economic, environmental, and social costs.
- + Economic Development and Workforce Research to better comprehend employment metrics, wages, and total economic contributions of renewable energy projects.
- + Outreach and Stakeholder Engagement Applied projects with practitioners and relevant experts on planning, programs, and the implementation of renewable energy use and efficiency measures.

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ENVIRONMENT, PEACEBUILDING, AND SECURITY

Faculty advisor: Dr. Geoff Dabelko, dabelkog@ohio.edu



The Dabelko Research Group is engaged in applied research and policy projects focused on connections among the environment, climate, peacebuilding, and security. The group is pursuing specific questions around utilizing environmental management for building peace, reducing the conflict potential of climate mitigation and adaptation strategies, and fostering adaptation, peacebuilding, and poverty alleviation co-benefits through resilience approaches. They work closely with a range of research and policy partners in the United States and abroad including the Woodrow Wilson Center's Environmental Change and Security Program, the Environmental Peacebuilding Association, International Peace Park Expeditions, and Adelphi Research, Berlin.

BIOENERGY, AGROECOLOGY, AND INTEGRATIVE ECOSYSTEM MANAGEMENT RESEARCH GROUP

Faculty advisor: Dr. Sarah Davis, daviss6@ohio.edu



Projects resolve ecosystem management solutions that improve soil, air, and water quality while also generating products of value. A combination of field experiments, lab experiments, and modeling are used to test emerging opportunities for bioenergy, sustainable agriculture, and other land management strategies that promote resilient resource production systems. Specific areas of research include:

- + Perennial grasses for advanced bioenergy
- + Biogas generation from wastes
- + Ecophysiological advantages of CAM plants in agriculture
- + Carbon and nitrogen cycling in managed forests
- + Coproduction systems



CLIMATE ADAPTATION AND RESILIENCE RESEARCH GROUP

Faculty advisor: Dr. Derek Kauneckis, kaunecki@ohio.edu

Projects are examine local governments, community level and regional collaborative governance around the issue of climate adaption and resiliency. Research examines organizational motivation for collaboration on climate issues, factors leading to implementation of climate adaptation efforts, evolution of networked governance systems, and knowledge gaps in resiliency training.

- + Local Climate Change Policy (LCCP) Research focused on local government level efforts, implementation, and how and when local governments cooperate with on climate change challenges.
- + Native Waters Research on building climate resiliency on sovereign tribal lands in the American West. Activities include vulnerability assessments for Native American communities, practical training in adaptation and resiliency planning, and applied research with tribal agricultural producers and tribal governments. Native American students are strongly encouraged to apply.
- + Resiliency Planning Training for Professionals Applied research and engagement with the practitioner communities in the emerging field of 'resiliency planning'.