

An aerial, black and white photograph of a powerful hurricane. The eye of the storm is a bright, circular center, surrounded by dense, swirling cloud bands that extend over a vast expanse of the ocean. The texture of the clouds is highly detailed, showing the chaotic and powerful nature of the weather system.

Bard Center for Environmental Policy

Education. Leadership. Change.

2011 | 2012 Master of Science (M.S) in
Climate Science and Policy

Master of Science in Climate Science and Policy

The Bard Center for Environmental Policy program leading to the master of science degree in climate science and policy (CSP) focuses on climate science, specializing in the interactions between climate change, ecosystems, and agriculture. This degree addresses the critical need for policy makers in the areas of offset markets; biofuels; ecosystem services; forest and soil sequestration; agricultural and livestock life-cycle emissions; ecosystem and agricultural adaptation; crop, livestock, and human diseases; and crop, livestock, and forest management. Graduates gain training critical to businesses, nonprofit organizations, and governments as they face the challenges posed by climate change. The CSP degree is a two-year program, which includes an internship and a master's thesis. Professionals who have at least five years of postbaccalaureate experience in an environmentally related field may apply for a waiver of the internship.

Professional Certificate in Climate Science and Policy

A professional certificate is awarded upon completion of the first year of courses. Should the certificate recipient decide to continue toward the master's degree, either immediately or at a later time, second-year course work and all other requirements must be completed within five years of matriculation into the program.

Distinctive Features

Modular course structure, ensuring thematic cohesion across the curriculum

Integration of natural and social sciences

Professional internships in the United States and abroad

Exceptional faculty, including academic experts and professional practitioners

Close mentoring of student career preparations

A unique option to specialize in the agriculture and ecosystem dimensions of climate change

"Today's young people will witness environmental challenges of unprecedented scale, global climate change foremost among them. The Bard CEP climate degree was created to generate the leadership and workforce needed for the task ahead. Our mission is to change the future. We invite you to join us."

—Eban S. Goodstein, Director

Curriculum

The overriding goal of Bard CEP's graduate training is to provide access to the knowledge, tools, methods of inquiry, courage, and ambition necessary to create effective policies on the scale that these extraordinary times demand. Toward this end, the curriculum is designed to integrate: scientific foundations of environmental policy making, ecosystem functions, environmental systems analysis, environmental economics, natural resource economics, law and regulation, enforcement and compliance mechanisms, political processes and institutional arrangements, human and ecosystem health, ethical and moral dimensions of policy and environmental stewardship, stakeholder engagement, statistical analysis, research methodology, geographic information systems, multimedia communication strategies, and leadership training.

The new climate science and policy degree program emphasizes scientific, economic, political, legal, and empirical foundations in the first year, along with required participation in the National Climate Seminar. The program transitions to an applied focus in the second year, with the four- to six-month internship, thesis composition, and leadership training.

First-Year Course Work

The first-year courses link agricultural practices, socioeconomic activities, and human infrastructure to ecosystems and processes that support them, and to the political, institutional, and legislative responses that address energy dependence and fossil fuel use. Joint class sessions, field trips, guest lectures, and conferences expose students to the critical issues and practices of climate change science and policy.

Climate Science; Climate, Agriculture, and Ecosystems; and Science of Solutions focus on the fundamental processes in ecosystems and agriculture, interactions between these systems, and technology challenges of transitioning to a clean energy economy. Environmental Economics and Natural Resource Economics cover the assumptions economists use in environmental policy making. Climate Law and Policy focuses on the legal, political, cultural, and ethical dimensions of the policy-making process. Statistics and Geographical Information Systems provide students with the analytic means to discern quantitative and spatial information through lectures, experiments, and real world applications.

Internship

During the first year at Bard CEP, students begin to explore internship opportunities and define the nature of their master's thesis in consultation with their advisers and collaborating organizations. The internship provides hands-on experience working with professionals in the field and facilitates entry into the job market. Internship arrangements with public, private, and nonprofit institutions offer a wide range of choices, providing real benefits to the student and the collaborating organization. Climate science and policy students are required to complete a four-month internship during the summer and fall of their second year.

Bard CEP has developed internship opportunities with a variety of institutions and is continuously expanding the list of participating internship sponsors. The broad range of available internships allows students to follow their preferred areas of specialization locally, elsewhere in the United States, or abroad. The internship is an opportunity to learn in a professional setting the job-specific and communication skills students will use upon graduation. Internships also expand students' professional networks, often leading directly or indirectly to employment.

Master's Thesis

The master's thesis must be original research with practical application to a specific environmental problem. Normally linked to some part of the student's internship, the thesis should reflect the multifaceted nature of an actual environmental issue by investigating aspects of the natural and social sciences and the humanities. Students utilize knowledge and experience from their first-year course work and internship to develop a thorough analysis, then recommend policies or action on their chosen problem.

All second-year students and faculty members of the Graduate Committee attend the Master's Thesis Seminar, which serves as a forum at which students present progress reports on their thesis research and analyze substantive issues stemming from their work. Students discuss methodological challenges encountered during their projects, focusing on the ways that statistics, data, and graphs are used in conveying project results. The seminar allows students to explore together the applied interaction among science, political forces, values, and economic interests in producing policies. The seminar also offers students the chance to receive critiques of their work from their peers and a team of professors from different disciplines who lead the class.

M.S. Degree (CSP) Timeline

Year 1 First-year course work at Bard *(subject to change)*

Fall: Climate Science; Climate, Agriculture, and Ecosystems; Environmental Economics; Statistics and Econometrics

Spring: Climate Law and Policy; Science of Solutions; Natural Resource Economics; Geographical Information Systems

Full Year: National Climate Seminar; Writing Workshop

Year 2: Internship and final semester of course work at Bard

Summer and Fall (off campus): Internship; Master's thesis proposal

Spring (subject to change): Communication Strategies; Capstone Seminar; Master's Thesis Seminar

Admission

Early deadline: January 15, 2011

Regular deadline: March 15, 2011

The Bard Center for Environmental Policy (Bard CEP) seeks motivated students who are dedicated to becoming leaders in the field of environmental policy. Students are accepted into the graduate program based on an assessment of various components: record of academic achievement, letters of reference, work and career experiences, voluntary activities, and professional goals.

Prerequisite courses include statistics, calculus, chemistry, and a physical science course (e.g. biology, physics, chemistry, or geology). Students lacking the prerequisite course work are encouraged to apply for admission, if accepted, they will work with the Bard CEP admission office to identify appropriate courses to fill these gaps before they enter the program. Because of the interdisciplinary nature of the program, no specific requirements are set concerning the applicant's prior field of study.

Bard CEP Degree Options

M.S. in Environmental Policy

M.S. in Climate Science and Policy

Dual M.S. and M.A in Teaching

Dual M.S. and J.D. with Pace Law School

Peace Corps Master's International (MI) Program

Professional Certificate

3+2 Program

Bard**CEP**
CENTER FOR ENVIRONMENTAL POLICY
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