MASTER OF SCIENCE IN
Sustainability Management

Columbia University
School of Continuing Education
The Earth Institute
Columbia University
Features

- Study with Earth Institute, Columbia University faculty, who are leaders in sustainability, management and environmental science.

- Receive practical training based on a comprehensive, flexible program of study while gaining hands-on experience with real-world sustainability projects.

- Join the Earth Institute’s unique interdisciplinary community that is dedicated to making lasting advances in global sustainability research and practice.

Program Objectives

The M.S. in Sustainability Management is offered jointly by the Earth Institute and the School of Continuing Education. Courses are taught by faculty, researchers, and sustainability practitioners, who are leaders in the fields of environmental and financial management, Earth science, and engineering. The program draws from the Earth Institute’s vast research and the experience of sustainability practitioners to train a new generation of leaders. Organizations turn to our graduates for help in taking on the singular challenge of our time: meeting the needs of the present without limiting the ability of future generations to meet their own needs.

In response to the increasing challenges all organizations face — from reducing energy and water use to managing scarce resources — the program melds academic leadership, scientific rigor, and professional practice in a dynamic, interdisciplinary course of study.

The Earth Institute has developed numerous innovative courses that train students to understand and address the pressing and complex issues of environmental protection and sustainability. The Earth Institute, with its 30 research centers and programs, is conducting and applying interdisciplinary scientific research to address many cross-cutting issues, while training a new generation of problem solvers to tackle these issues in all areas of society.

The School of Continuing Education offers innovative and rigorous programs that integrate knowledge across disciplinary boundaries, combine theory with practice, leverage the expertise of students and faculty, and connect global constituencies.

The program takes an innovative and integrative approach to sustainability that prioritizes the protection of Earth’s systems and resources through an understanding of best practices in environmental and organizational management.

“As someone who is passionate about sustainability, I want my work to have an impact and I know my future efforts will have an even greater impact on society with the knowledge and experience I gain from the program.”

— Davida Heller, Sustainability Management Student
The Curriculum

The 36-point program includes course work in five required areas of study:

1. Integrative Courses in Sustainability Management (9 points)
   These three courses give students an understanding of the elements of sustainability by teaching them about complex interactions between the natural and social systems, which sustainability practitioners must always consider. Students will also learn about the different ways in which sustainability is understood.
   - Sustainability Management (Required)
   - Writing about Global Science for the International Media
   - Earth Institute Practicum
   - Ethics and Values for Sustainability Management
   - The Sustainable Built Environment

2. Economics and Quantitative Analysis (9 points)
   The economics requirement reflects the need to understand the financial costs and benefits of sustainability practices. The quantitative analysis requirement gives students the necessary tools to utilize data in analyzing issues and identifying solutions to problems.
   - Economics of Sustainability Management
   - Energy and Sustainable Development
   - Cost-Benefit Analysis
   - Geographic Information Systems (GIS) for Sustainability Management
   - Sustainability Metrics

3. The Physical Dimensions of Sustainability Management (9 points)
   The physical dimensions area of study teaches students about the connections between environmental inputs (i.e., natural resources) and outputs (i.e., energy), and the effects of those processes on the natural environment. The emphasis in this area of study is on understanding the environmental impacts from organizational activities.
   - Sustainable Futures
   - Sustainability Science
   - The Science of Sustainable Water
   - Earth’s Climate System
   - The Science of Urban Ecology
   - Sustainable Cities
   - Architecture and the Sustainable Built Environment

4. The Public Policy Environment of Sustainability Management (6 points)
   Policy shapes how urban environments are managed, and sustainability practitioners must be able to analyze public policy and its effects on what they are able to do. This requirement provides students with an understanding of current policy and strengthens their ability to react to future policy developments.
   - Research Methods and Quantitative Technology Management
   - Statistics for Sustainability Management
   - Decisions Models & Management
   - Energy Analysis for Energy Efficiency
   - Life Cycle Analysis

5. General and Financial Management (6 points)
   The general management requirement teaches the skills that are essential to shaping the behavior of an organization and thus to carrying out effective sustainability initiatives. Students graduate equipped with the tools to shape organizational culture and employee behavior, even as new environmental challenges arise. The financial management requirement gives students a foundation in finance and financial models. Students also gain an understanding of how environmental commodities markets regulate polluting industries and provide incentives to encourage desired behaviors.
   - Policy and Legal Context of Sustainability Management
   - International Environmental Law
   - Transnational Water Governance
   - Sustainability Communication Strategy and Reporting
   - Carbon Accounting
   - Global Environmental Markets
   - Green Accounting
   - Sustainable Finance
   - Sustainable Operations
   - Financing the Green Economy

“A decade from now, all excellent managers will be sustainability managers. Just as the definition of excellent management today includes effective financial, human, and information management, soon it will also include effective sustainability management.”

— Steven Cohen, Director, M.S. in Sustainability Management
Integrative Capstone Workshop in Sustainability Management

The capstone course is a client-based workshop that integrates each element of the curriculum into an applied project, giving students hands-on sustainability management experience. In this course, students learn how others manage programs and conduct analysis. Students work in teams as consultants to public and nonprofit organizations, undertaking a special analytical project. The experience increases students’ understanding of the constraints under which sustainability managers operate. The workshop also serves the purpose of sharpening students’ analytical and communication skills, by allowing them to apply their previous experience and knowledge gained from the program to real-world problems. Recent projects include:

- Identification of Pervious Pavement Opportunities in New York City
- Mashomack Preserve Sustainability Strategies for Renovating in a Sensitive Ecosystem
- Development of a New Communications Strategy for Freshkills Park
- Insurance, Climate Change, and Flood Resilience in New York City
- Corporate Strategies to Increase the Market Share of Sustainability-Managed Forest Products for GreenBlue
- Climate Change Adaptation and Creating a Framework for the City of Philadelphia
- Developing Metrics and Determining the Targets to Meet Sustainability Goals for the City of Albany
- New Award Metrics for Sustainability for King Abdullah II Award for Excellence

Our Faculty

Courses are taught by expert faculty, including renowned practitioners in fields ranging from environmental law to alternative energy financing, as well as researchers who are leaders in environmental management, Earth science, and engineering. The program utilizes environmental and sustainable development research and practitioner experience to provide practical training in sustainability management to a new generation of professionals who will address critical interdisciplinary issues.

For complete faculty bios: http://ce.columbia.edu/Sustainability-Management/Faculty

Our Students

Sustainability Management students represent a cross section of the industries and organizations currently incorporating sustainable initiatives into their day-to-day operations, as well as those who are looking to change careers. The program’s students are dedicated not only to mastering the theory and science of sustainability—they are passionate about putting their education into practice.

- 27% of students enter with 7 to 10 years of professional experience
- 24% of students enter with 3 years or less of professional experience
- 19% of students enter with 11 to 20 years of professional experience
- 8% of students enter with 21 or more years of professional experience
- 22% of students enter with 4 to 6 years of professional experience
Admissions

TIME COMMITMENT
The M.S. in Sustainability Management is offered as both a full- and part-time program. Courses are held primarily in the evenings, and the degree can be completed without daytime courses. The program is designed to enable part-time students to maintain full-time employment while enrolled in the program.

WHOM SHOULD APPLY
The M.S. in Sustainability Management is ideal for professionals currently working in or aspiring to be in management positions in regulatory compliance, facilities management, operations, and environmental stewardship. The program is geared toward those who have some form of sustainability responsibility in their current position, are looking to incorporate this into their current organization’s practices, or are looking to switch their career path to pursue opportunities in this field.

Admission is selective. College-level science, math, and economics are preferred. Practitioner experience is greatly valued and accomplishments in the fields of sustainability management will be considered.

APPLICATION DEADLINES
Applications are accepted on a rolling basis. Prospective students are encouraged to apply early.
- Fall Admission: Final deadline is May 15
- Spring Admission: Final deadline is November 1

HOW TO APPLY
For complete information about how to apply to the program, please visit http://ce.columbia.edu/Sustainability-Management/Apply-Program

APPLICATION MATERIALS CHECKLIST
Only complete applications are reviewed.
- Completed application form
- $80 application fee
- Transcripts from all postsecondary schools attended
- Professional résumé
- Statement of academic purpose addressing: your purpose and interest in pursuing a degree in sustainability management; how the degree program fits into your overall professional growth, focusing in particular on the connection between the program and your academic and/or professional experience
- Two letters of recommendation written by teachers or professional colleagues who are well positioned to comment on your intellectual strengths and professional promise
PROGRAM CONTACT

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