

MASTER OF SCIENCE PROGRAM IN ENVIRONMENTAL SCIENCE

Program Overview

Whether you are making a mid-career transition or have a background in environmental science and want to strengthen your skills, UChicago's MS in Environmental Science can open new doors. The program's core classes provide a foundation in data science tools needed across a wide range of environmental disciplines, with a capstone project to hone your skills. The program's electives allow you to specialize in areas such as climate science, biogeochemistry, ecology, and environmental policy.

You will gain the quantitative and data science skills through Foundations of Environmental Data Science I and II. These courses will provide a foundation in different types of environmental data, data analysis, data collection instrumentation, and advanced data science topics such as machine learning with a specific focus on environmental problems.

You will choose six electives (<https://geosci.uchicago.edu/academics/ms-in-environmental-sciences/curriculum/>) from a variety of courses, including up to two from other departments, which will allow you to build expertise in a specialized area. **To see what electives are being taught in our department currently please review offerings** here. (<https://geosci.uchicago.edu/academics/information-for-current-students/courses/>)

Your experience will culminate in a project-based capstone focused on real-world problems developed in consultation with field-defining faculty in our department.

Students with limited computational background can take advantage of coding bootcamps offered in September.

Director of MS in Environmental Science

- Maureen Coleman

Faculty

- Dorian Abbot
- David Archer
- Clara Blättler
- Andrew Campbell
- Fred Ciesla
- Maureen Coleman
- Nicolas Dauphas
- Andrew M. Davis
- Michael Foote
- Pedram Hassanzadeh
- Philipp Heck
- Dion L. Heinz
- David Jablonski
- Malte Jansen
- Allison Karp
- David Keith
- Susan M. Kidwell
- Edwin Kite
- Elizabeth J. Moyer
- Noboru Nakamura
- Sunyoung (Sunny) Park
- Michael J. Pellin
- Meghana Ranganathan
- Linta Reiji
- Tiffany Shaw
- Graham J. Slater
- Jacob Waldbauer
- Mingyi Wang

- Mark Webster
- Alexandra Worden
- Da Yang

ENVIRONMENTAL SCIENCE COURSES

ENSC 33850. Low Temperature Geochemistry. 100 Units.

This course covers topics related to the geochemistry of Earth's surface, including all its fluid and solid components. Specific emphasis will be placed on stable isotopic tools for understanding modern Earth system processes and the ancient geological record. Seminar format will allow students to choose topics of interest to them and shape the reading and discussion content of the course.

Instructor(s): Clara Blättler Terms Offered: Autumn

Equivalent Course(s): GEOS 33850

ENSC 36100. Environmental Data Science I. 100 Units.

Environmental Data Science I for MS students

Terms Offered: Autumn

ENSC 36200. Environmental Data Science II. 100 Units.

Environmental Data Science II for MS students

Terms Offered: Winter

Prerequisite(s): Environmental Data Science I

ENSC 36300. Environmental Data Science Capstone Project. 100 Units.

Environmental Data Science Capstone Project for MS students

Prerequisite(s): ENSC 36100-36200 Environmental Data Science I & II

ENSC 39501. Practicum I: Environmental Science. 100 Units.

A practicum in Environmental Science. Note that this is the first of a two quarter sequence that must be taken in order.

Instructor(s): Moyer Terms Offered: Autumn

ENSC 39502. Practicum II: Environmental Science. 100 Units.

A practicum in Environmental Science. Note that this is the second of a two quarter sequence that must be taken in order.

Instructor(s): Moyer Terms Offered: Winter

Prerequisite(s): ENSC 39501

