



Duluth Campus

Environment, Sustainability & Geography B.A.

Geography & Philosophy

College of Liberal Arts

- Program Type: Baccalaureate
- Requirements for this program are current for Fall 2021
- Required credits to graduate with this degree: 120
- Required credits within the major: 45 to 46
- Degree: Bachelor of Arts

The purpose of this degree is to prepare students to create sustainable communities for present and future generations. This program provides students with the tools to understand the physical and social systems of the earth to become informed change makers locally and globally. Sustainability challenges are all around us: from climate change, to vulnerabilities in the industrial food system, to the way we design cities. One of the fundamental hurdles in a transition toward sustainability is bridging the ecological and social sciences with decision-making. The program trains students to analyze the interwoven nature of social and ecological systems, and translate that knowledge into policies to enact change. Meaningful engagement with the world outside the classroom prepares students to comprehend and address these challenges. To this end, the program provides students with theoretical and hands-on instruction in ecological and social processes, mentoring, as well as opportunities for professional and real-world experiences through internships and applied research.

There are three tracks students may choose from: 1) Environment and Sustainability, 2) Geography, 3) Urban and Regional Studies.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Admission Requirements

For information about University of Minnesota admission requirements, visit the [Office of Admissions website](#).

General Requirements

The Board of Regents, on recommendation of the faculty, grants degrees from the University of Minnesota. Requirements for an undergraduate degree from University of Minnesota Duluth include the following:

1. Students must meet all course and credit requirements of the departments and colleges or schools in which they are enrolled including an advanced writing course. Students seeking two degrees must fulfill the requirements of both degrees. However, two degrees cannot be awarded for the same major.
2. Students must complete all requirements of the [Liberal Education Program](#).
3. Students must complete a minimum of 120 semester credits.
4. At least 30 of the last 60 degree credits earned immediately before graduation must be awarded by UMD.
5. Students must complete at least half of their courses at the 3xxx-level and higher at UMD. Study-abroad credits earned through courses taught by UM faculty and at institutions with which UMD has international exchange programs may be used to fulfill this requirement.
6. If a minor is required, students must take at least three upper division credits in their minor field from UMD.
7. The minimum cumulative UM GPA required for graduation will be 2.00 and will include only University of Minnesota coursework. A minimum UM GPA of 2.00 is required in each UMD undergraduate major and minor. No academic unit may impose higher grade point standards to graduate.
8. Diploma, transcripts, and certification will be withheld until all financial obligations to the University have been met.

Program Requirements

- 1) A second field of study (either a minor, another major or dual degree).
- 2) Study abroad is encouraged for all students and the department makes every effort to facilitate such experiences.

Learning in Community (1 cr)

Requirement will be waived for transfer students with at least 30 credits taken post high school, for UMD students who started in a

UMD collegiate unit where this is not required, and upon request for first-year students with 30 PSEO credits.

UST 1000 - Learning in Community (1.0 - 2.0 cr)

or EHS 1000 - Into the World [GLOBAL PER] (3.0 cr)

or ES 1000 - Global Cultural Perspectives on Environmental Sustainability [GLOBAL PER] (3.0 cr)

or LING 1000 - Language and Culture in the U.S. What does it Mean to Speak American [CDIVERSITY] (3.0 cr)

or PSY 1100 - Living Your Best Life: Applying Positive Psychology [CDIVERSITY] (3.0 cr)

Core (9 cr)

ES 2005 - Environment and Sustainability [SUSTAIN] (3.0 cr)

GEOG 1205 - Our Globalizing World [SOC SCI, GLOBAL PER] (3.0 cr)

GIS 2552 - Mapping Our World [LOGIC & QR] (3.0 cr)

Sustainability (4 cr)

GEOG 1414 - The Physical Geography [LE CAT, NAT SCI, SUSTAIN] (4.0 cr)

or GEOL 1110 - Geology and Earth Systems [LE CAT, NAT SCI, SUSTAIN] (4.0 cr)

Upper Division (4 cr)

ES 4090 - Internship Preparation & Career Development (1.0 cr)

ES 4612 - Field Techniques and Research Design (3.0 cr)

Advanced Writing (3 cr)

WRIT 31xx - Adv Writing (3 cr)

Electives (9 cr)

To fulfill this requirement students take at least 3 courses. Students have two options to complete this requirement: 1) Select 3 courses across the listed Course Lists. One course may be at the 2xxx level. 2) Students may propose 3 courses. NOTE: The first option is the system default. Courses listed in the tracks are not listed here as options, but may be applied with permission from an ESG adviser.

Course List (2xxx level)

Take 0 - 1 course(s) from the following:

- ES 2095 - Special Topics: (various titles to be assigned) (3.0 cr)
- ES 2100 - Western Lake Superior Sustainable Food Systems (4.0 cr)
- ES 2803 - Issues in Global Ecology [LE CAT] (3.0 cr)

Course List (3xxx-4xxx level)

Take 2 - 3 course(s) from the following:

- ES 3200 - Environmental and Ecological Justice (3.0 cr)
- ES 3300 - Anthropocene Stories: Geology, Human Histories and Possible Futures (3.0 cr)
- ES 3500 - Ecological Economics (3.0 cr)
- ESCI 3605 - The Irish Landscape in Science and Literature - Study Abroad [GLOBAL PER] (4.0 cr)
- GEOG 3370 - Geographies of Development (3.0 cr)
- GEOG 3411 - Human Environment Interactions (3.0 cr)
- GEOG 3422 - Natural Hazards (3.0 cr)
- GEOG 3481 - The Ecology of Cities (3.0 cr)
- GEOG 3712 - Geography of Latin America (3.0 cr)
- GEOG 3800 - Community Empowerment in South Asia - Study Abroad [GLOBAL PER] (4.0 cr)
- GEOG 3995 - Special Topics: (various titles to be assigned) (3.0 cr)
- GEOG 4401 - Climate Science (3.0 cr)

Optional Experience

Take 0 - 3 credit(s) from the following:

- ES 4091 - Independent Study (1.0 - 3.0 cr)
- ES 4910 - Teaching Assistantship (1.0 - 3.0 cr)
- ES 4999 - Honors Project (1.0 - 3.0 cr)
- GEOG 3991 - Independent Study (1.0 - 3.0 cr)
- GEOG 4910 - Teaching Assistantship (1.0 - 3.0 cr)
- GEOG 4999 - Honors Project (3.0 cr)
- URS 3991 - Independent Study (1.0 - 3.0 cr)
- URS 4910 - Teaching Assistantship (1.0 - 3.0 cr)
- URS 4999 - Honors Project (1.0 - 3.0 cr)

or Propose Electives

If students elect to propose courses, they must consult with an ESG adviser. No more than 1 course at the 2xxx level. Proposal form found here: z.umn.edu/umdciprograms



Program Sub-plans

Students are required to complete one of the following sub-plans.

Environment and Sustainability

Required credits to graduate with this degree: 120

Required credits within the major: 46

This track emphasizes the ecological and societal dimensions of sustainability, specifically, the food-energy-water nexus. Students develop the skills to create solutions that meet material human needs while preserving natural resources and ecosystems.

Environment and Sustainability Core (7 cr)

[ES 3100](#) - Sustainable Food Systems (4.0 cr)

[GEOG 3461](#) - Geography of Global Resources (3.0 cr)

Physical Systems (3 cr)

[GEOG 3401](#) - Weather and Climate (3.0 cr)

or [GEOG 4446](#) - Water Processes and Management (3.0 cr)

Internship (3 cr)

[ES 4097](#) - Internship (3.0 cr)

Capstone (3 cr)

[ES 4005](#) - Environmental Policy (3.0 cr)

Geography

Required credits to graduate with this degree: 120

Required credits within the major: 45

This track emphasizes a holistic and spatial approach to both human and physical systems. Students explore how humans transform the earth, with an emphasis on three broad streams of geographic thought: human-environment interaction, human systems, and physical systems.

Human-environment Interaction (3 cr)

[GEOG 2306](#) - Environmental Conservation [LE CAT] (3.0 cr)

or [GEOG 3411](#) - Human Environment Interactions (3.0 cr)

Human Systems (3 cr)

[GEOG 2313](#) - Economic Geography [LE CAT6, SOC SCI] (3.0 cr)

or [GEOG 3334](#) - Urban Geography (3.0 cr)

or [GEOG 4393](#) - Political Geography (3.0 cr)

Physical Systems (3 cr)

[GEOG 3401](#) - Weather and Climate (3.0 cr)

or [GEOG 4446](#) - Water Processes and Management (3.0 cr)

or [GEOG 4451](#) - The Geography of Soils (4.0 cr)

Internship (3 cr)

[GEOG 3997](#) - Internship (3.0 cr)

Capstone (3 cr)

[GEOG 4803](#) - Geographic Thought (3.0 cr)

Urban and Regional Studies

Required credits to graduate with this degree: 120

Required credits within the major: 45

This track emphasizes the social and cultural dimensions of urbanization, addressing how our increasingly urban world can organize in just and cohesive societies.

Urban and Regional Studies Core (9 cr)

[ARTH 2300](#) - The City as a Work of Art [LE CAT, HUMANITIES] (3.0 cr)

[GEOG 3334](#) - Urban Geography (3.0 cr)

[GEOG 3335](#) - Urban Planning (3.0 cr)

Internship (3 cr)

[URS 3097](#) - Internship (3.0 cr)

Capstone (3 cr)

[URS 4001](#) - Cities and Citizenship (3.0 cr)