

ENVIRONMENTAL PLANNING SPECIALIZATION, MUP Program

The specialization in environmental planning integrates knowledge of urban and natural systems to address pressing environmental challenges in rapidly urbanizing and climate-vulnerable regions worldwide. It emphasizes the design, planning, and governance of urban patterns, infrastructures, and landscapes that reduce environmental risks, promote climate adaptation and mitigation, and improve the well-being of both human and non-human communities.

The specialization provides the theoretical, methodological, technological, and legal foundations necessary for planners to play an effective role in incorporating environmental science and justice considerations into planning and decision-making. It prepares professional planners to:

- Integrate disciplinary perspectives—including urban ecology, climate science, and public health—to analyze urban and regional environmental challenges.
- Use advanced analytical and evaluation methods, including scenario planning and modeling, to assess the ecological, social, and equity impacts of urban development.
- Apply a multi-scalar perspective to design and implement environmental strategies, policies, and plans that respond to climate change, biodiversity loss, and social vulnerability.
- Employ cutting-edge spatial and digital tools—including geospatial data infrastructures, remote sensing, machine learning, and participatory mapping—to support environmental planning and decision making.
- Apply collaborative and adaptive methods for resolving conflicts in environmental and resource management, with attention to equity and inclusion.
- Navigate institutional, cross-sectoral, and intergovernmental complexities to advance effective implementation of environmental policies and plans.

The specialization is designed to provide essential knowledge and skills for MUP students aiming to become environmental planners as well as those interested in working at the interface of planning, environment, and technology. It prepares students for careers across governmental agencies, international organizations, research institutions, private consulting, environmental NGOs, and community-based organizations working on sustainability, climate resilience, and environmental justice.

Required foundation courses

<u>Course Number</u>	<u>Course Title</u>	<u>Quarter</u>	<u>Instructor</u>
URBAN 534	Environmental Planning	Spring	Alberti
URBAN 522	Geospatial Analysis	Winter	variable
URBAN 598	Research Design for Urban Science	Autumn, Year 2	Alberti

Electives

A minimum of two additional courses in urban ecology, climate change adaptation, natural hazards mitigation, environmental justice, or related subjects within or outside the department, to be determined in consultation with the faculty advisor.

Capstone

A thesis, professional project, or capstone studio related to environmental planning.