ENVIRONMENTAL & SPATIAL SCIENCES, B.S.

The Department of Geography offers a Bachelor of Science program in Environmental and Spatial Sciences. Environmental scientists with advanced training in geospatial technologies (i.e. geographic information science (GIS), global positioning system (GPS) technology, remote sensing, data management, and cartography) are well positioned for careers in environmental analysis and mitigation of environmental problems. The proposed program prepares students to assess environmental and human-environment systems, identify and evaluate environmental problems, and design innovative and sustainable solutions. The degree requires 120 credit hours with 54-58 credit hours in the major with an additional 20-21 credit hours that may be applied to the general education requirements of the university.

Graduates of the B.S. Environmental and Spatial Sciences program will:

1. Describe and analyze concepts and theories of the history, structure, function, interactions, and changes in environmental and human-environment systems.
2. Describe and analyze concepts and theories of the historical, political, and social context of environmental issues, policies, and institutions.
3. Apply appropriate concepts and methodologies to organize, assess, visualize, evaluate, and analyze complex social and environmental processes and problems, interpret relationships and trends, and make predictions about future change.
4. Design independent and team-based scientific inquiries to identify, collect, organize, analyze, integrate, and synthesize complex environmental and spatial data and information from multiple sources.
5. Design integrative and equitable scientific, technological, and policy solutions to environmental issues with a focus on sustainability.
6. Demonstrate proficiency in environmental and geospatial technology and data management.
7. Demonstrate proficiency in critical thinking and written and oral communication skills through a range of media and to diverse scientific, policy decision-makers, and general public audiences.