



Associate in Science
A. S. Environmental
Studies

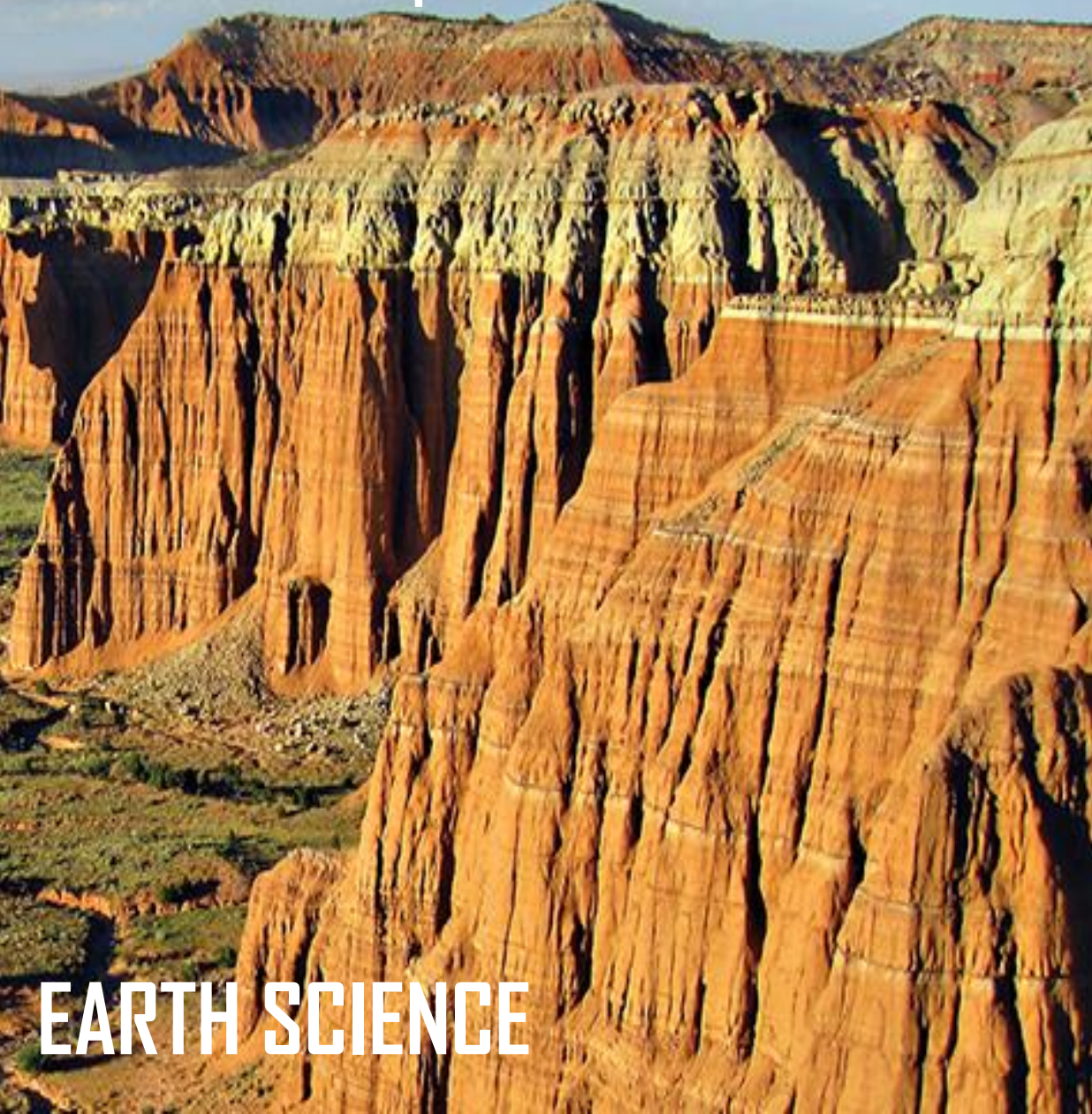
ASTRONOMY

A person is silhouetted against a starry night sky, looking through a telescope. The Milky Way galaxy is visible in the background.

Did you know?

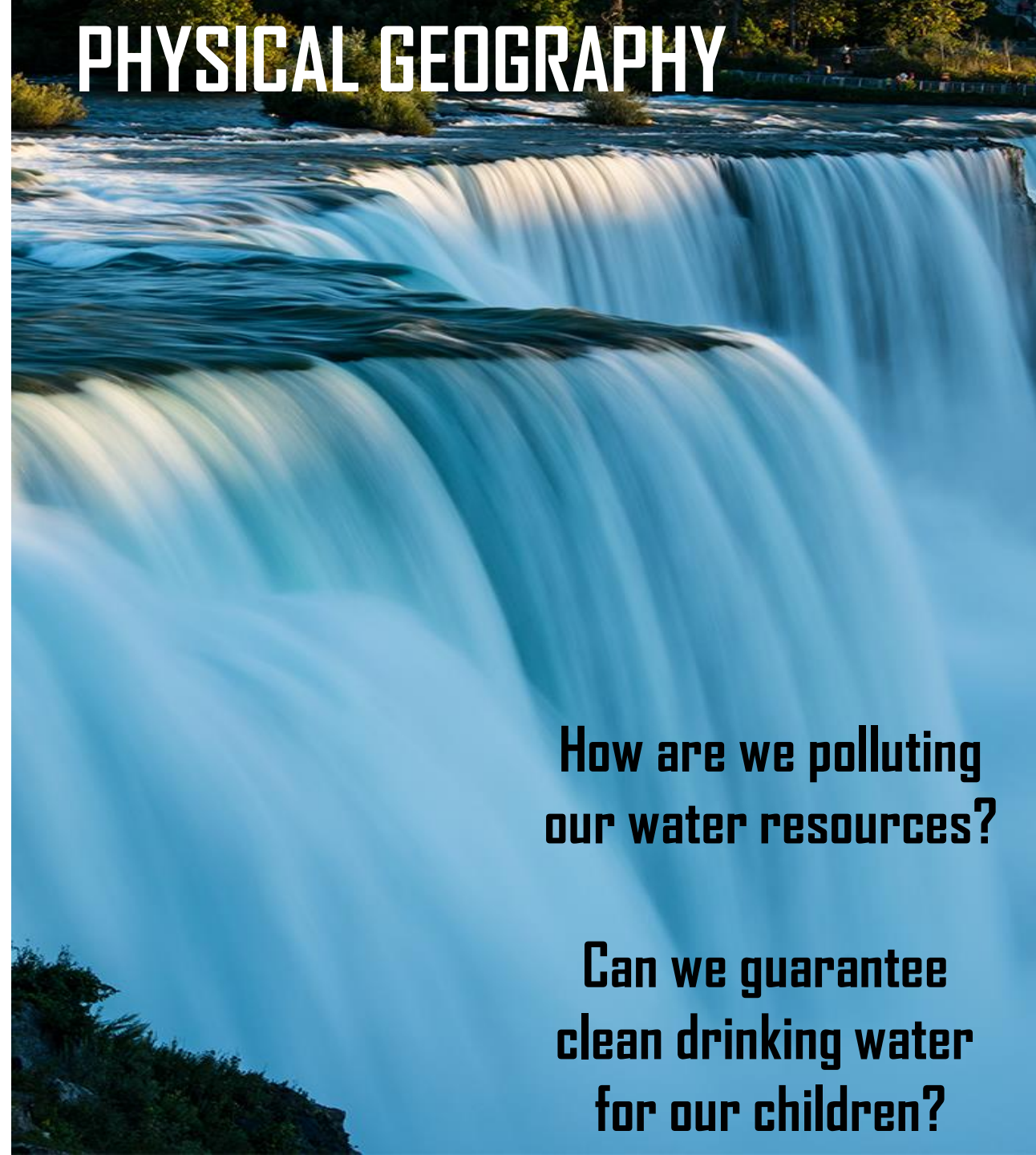
Many technologies benefitting humanity are developed in space programs.

Mineral wealth is critical to national security.
How do we acquire the minerals we need?



EARTH SCIENCE

PHYSICAL GEOGRAPHY



**How are we polluting
our water resources?**

**Can we guarantee
clean drinking water
for our children?**

With space satellites, we can see hurricanes coming. When should we evacuate cities to avoid human casualties?

WEATHER & CLIMATE

NATURAL DISASTERS

**We are still paying for "disasters".
Why are we resistant to learning
to live with nature?**

OCEANOGRAPHY

An aerial, high-angle photograph of a massive ocean wave. The wave is curling over, creating a large, hollow barrel. The water is a deep, vibrant blue, and the foam is bright white. The perspective is from above, looking down at the wave's crest and the churning water below.

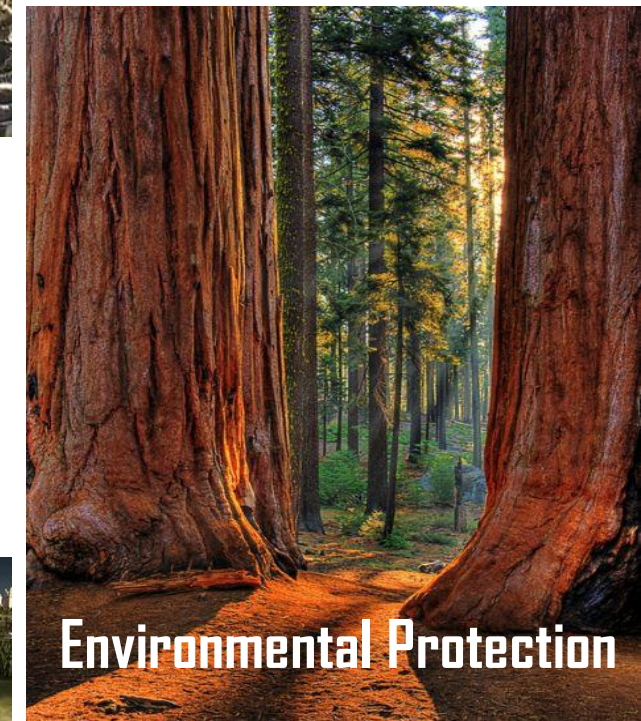
**How are oceans connected to global climates?
We know more about the MOON than the oceans!**

ENVIRONMENTAL SCIENCE



What natural connections does "nature" require to thrive?
What natural connections do "humans" require?
Are humans a part of nature? What does this imply?

PRINCIPLES OF GIS



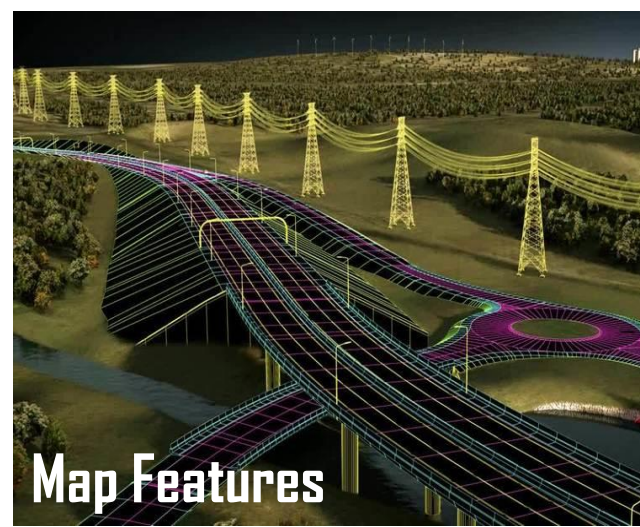
Environmental Protection

A GIS combines many map features to analyze problems for many different jobs.



Map Locations

A GIS shows the geographic location of features of interest on maps, with information describing what each feature represents.



Map Features

How Does GIS Work?

"Spatial Data" is collected from the field using various technologies. It is then mapped using GIS.



Radio Telemetry



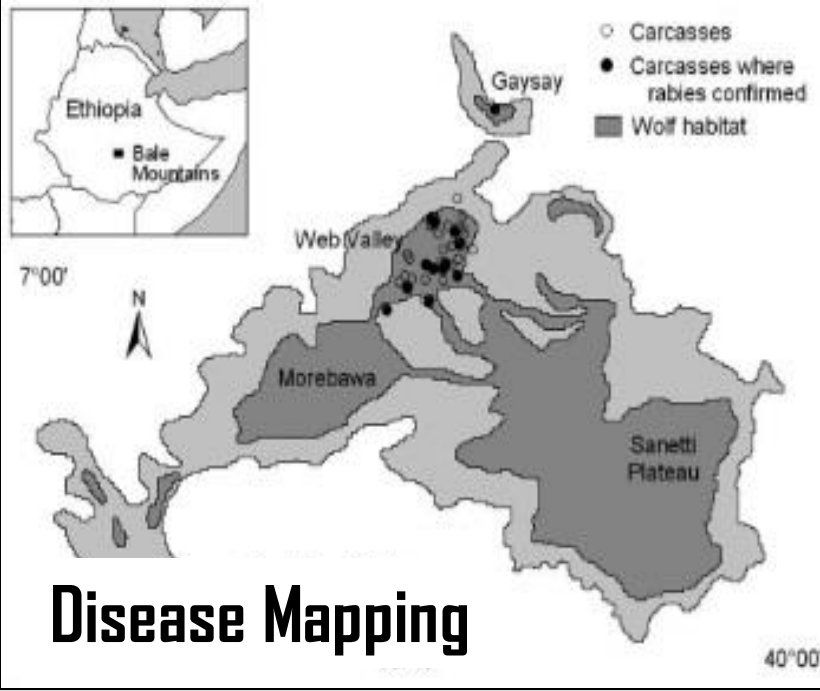
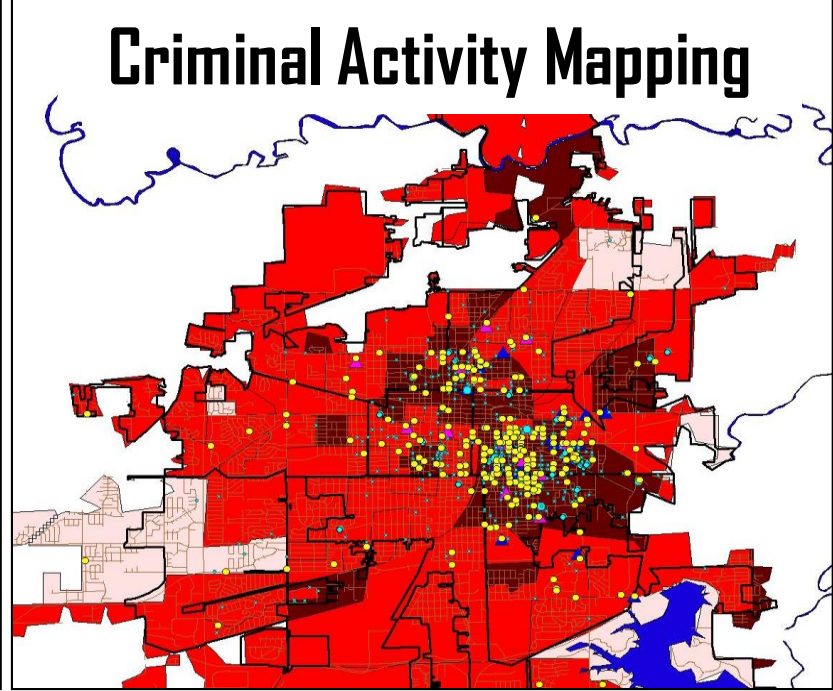
GPS

In the AS Environmental Studies program, you will also learn how to manipulate a Geographic Information System (GIS)...to create maps.

Flood Zone Mapping



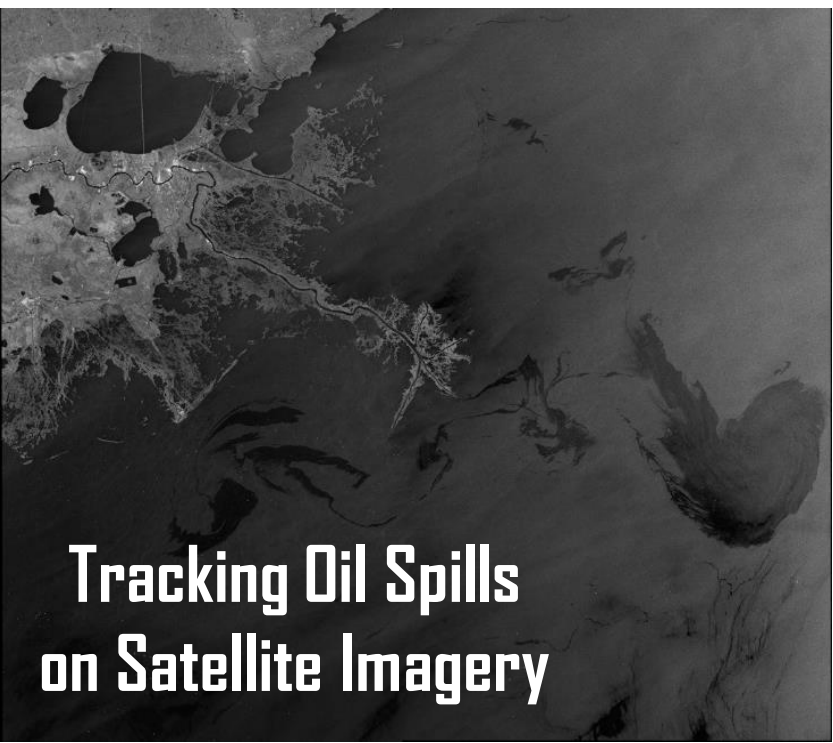
Criminal Activity Mapping



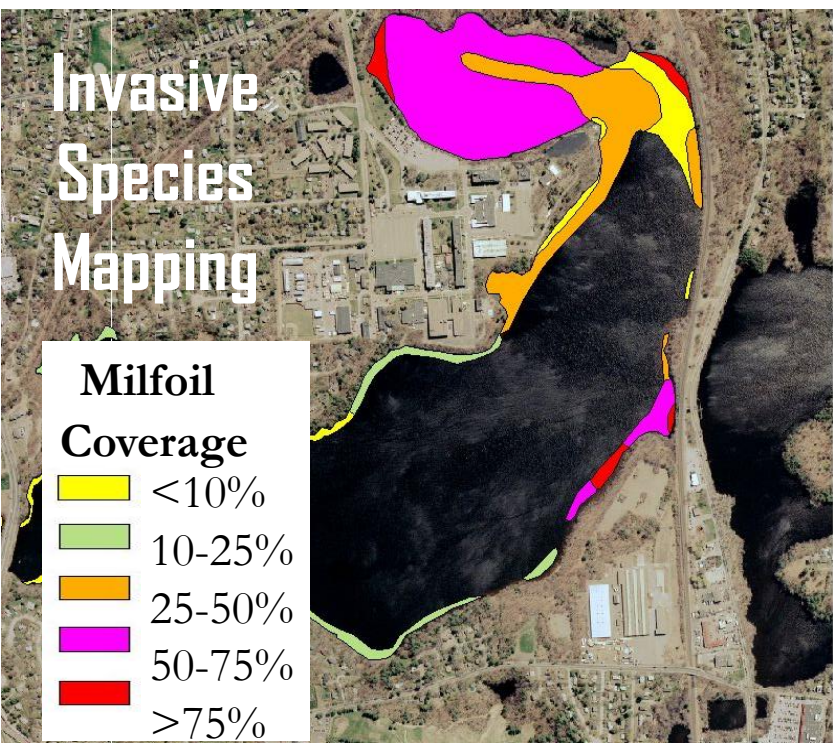
Disease Mapping

CARTOGRAPHY & SATELLITE REMOTE SENSING

You will learn how to develop
map alternatives to help
support and protect society.



Tracking Oil Spills on Satellite Imagery



Invasive Species Mapping

| Milfoil Coverage | |
|------------------|--------|
| Yellow | <10% |
| Light Green | 10-25% |
| Orange | 25-50% |
| Magenta | 50-75% |
| Red | >75% |

Environmental Studies—Related Employment

Bison Research Technician
Nature Conservancy

Director of Aerial Services
Draper Aden Associates

Biological/GIS Technician
Colorado State Parks

Assistant Professor
Lake Superior State University

Marine Scientist
Alpine Ocean Seismic Survey

Applied Limnologist
Natural Resources Research Institute

Fire Data Analyst
Spokane Fire Department

Ecological Data Specialist
Great Basin Institute

Wetland Scientist
SWCA Environmental Consultants

GIS Mapping Specialist
LandWorks

Environmental Land Use Planner
Winona County, MN

Environmental Protection Specialist
US Department of the Interior

Landscape Ecologist
Environmental Defense Fund

GIS Field Technician
EVARI GIS Consulting

Environmental Scientist
Moore Engineering

Emergency Management Specialist
FEMA

Professional Geologist
Eco & Associates, CA

Environmental Lab Technician
AW Research Laboratories

Oceanographer
NOAA

Range Technician
Bureau of Indian Affairs

Cartographic Technician
National Park Service

Geospatial Data Steward
National Geospatial Intelligence Agency

Natural Resource Specialist
Army Corps of Engineers

Environmental Health Specialist
Indian Health Service, Bemidji, MN

Environmental Health Specialist
Department of Health/Human Services

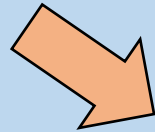
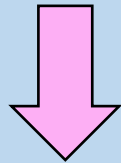
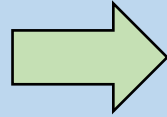
Disaster Data Analyst
American Red Cross

Storm Water Program Technician
City of Bozeman, MT

GIS Coordinator
City of Iowa City, IA

Where can I continue to develop my professional experience after MNC?

Minnesota North College
A.S. ENVIRONMENTAL STUDIES



University of Minnesota, DULUTH

B.S. Geological Sciences

B.S. Environmental Science

B.A.S. Environmental & Outdoor Education

B.S. Geographic Information Systems (GIS)

B.A. Environment, Sustainability & Geography

BEMIDJI State University

B.S. Geography

B.S. Environmental Studies

-Ecosystems

-Health & Toxicology

*M.S. Environmental Studies

B.A.S. Natural Resource Management

Minnesota State University, MANKATO

B.S. Geology

B.S. Geography

B.S. Earth Science

B.S. Environmental Science

*M.S. Environmental Science

B.S. Geographic Information Systems (GIS)



**Get involved in
Environmental
Studies at MNC.
Launch a career
and get paid to
do what you love!**

