

# DEPARTMENT OF GEOSCIENCE

The Department of Geoscience offers majors in Geography, Geographic Information Science (GIS), and Sustainability leading to the Bachelor of Arts or Bachelor of Science degree. The department also offers a Master of Science degree in Geographic Information Science (see UNA Graduate Catalog) as well as undergraduate minors in geography, geographic information science, geospatial human computer interaction (GEOHCI), geology, and sustainability. The department also offers several undergraduate certificates, including: geographic information systems, business geographic information systems, community development and planning geographic information systems, environmental geographic information systems, and remote sensing. Post-baccalaureate certificates are available in remote sensing, GIS, and advanced GIS. The department also offers coursework applicable to general education components in all programs, and coursework contributory to other curricula.

The major in Geography is designed to serve students interested in careers in natural resource management, environmental organizations, community development and planning, municipalities, government, foreign and diplomatic service, international organizations, business, and industry as geographers and cartographers or in teaching geography or social studies in the elementary, middle, junior or high school. This program prepares students for graduate studies within geography and education.

The major in Geographic Information Science (GIS) at UNA is a Science, Technology, Engineering, and Math (STEM) program and is designed to serve students who wish to prepare for careers in the more technical aspects of applied geography, including the fields of geographic information systems (GIS), remote sensing, computer cartography, GIS software development, GIS consulting, business and data analytics, security and logistics, city and/or regional planning, economic geography, environmental agencies, resource exploration, resource utilization and management, and land use planning. The major in Geographic Information Science also provides preparation for graduate study in geography leading to careers in applied geography or for research and teaching at the collegiate level.

The Sustainability degree prepares students to enter careers in sustainability in the Earth sciences and in other, diverse areas. Students are prepared to enter graduate programs of sustainability as well as Earth Sciences.

The Certificate in Geographic Information Systems is designed for professionals wishing to increase job skills and geography majors wanting their skills recognized through a certificate program. Topical certificates in GIS are designed for non-Geography majors at UNA wishing to gain GIS skills to solve business, community development and environmental problems.

Students majoring in geography and Geographic Information Science (GIS) are required to take the exit examination for graduation. All geography courses may require a field trip.

## Majors

- BA/BS Major in Geography (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/ba-bs-geography/>)

- BS Major in Geographic Information Science (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/bs-gis/>)
- BS Major in Sustainability (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/bs-sustainability/>)

## Certificates

- Certificate in Business Geographic Information Systems (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/cert-business-gis/>)
- Certificate in Community Development and Planning Geographic Information Systems (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/cert-comm-dev-plan-gis/>)
- Certificate in Environmental Geographic Information Systems (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/cert-environmental-gis/>)
- Certificate in Geographic Information Systems (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/cert-gis/>)
- Certificate in Remote Sensing (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/cert-remote-sensing/>)
- Certificate in Sustainable Trails and Waterways Development (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/cert-sust-trail-water/>)

## Minors

- Geographic Information Science Minor (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/minor-gis/>)
- Geography Minor (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/minor-geography/>)
- Geology Minor (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/minor-geology/>)
- Geospatial Human-Computer Interaction Minor (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/minor-geospatial-hci/>)
- Sustainability Minor (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/geoscience/minor-sustainability/>)