GEOGRAPHIC INFORMATION SCIENCE, CERTIFICATE

Requirements for an undergraduate certificate may be completed at any campus location offering the specified courses for the certificate.

Career Paths

There are many potential careers for graduates with GIScience backgrounds. Students earning the Geographic Information Science certificate learn a wide-range of technological, research, and analytical skills that are highly valued by employers. GIS geography undergraduates find jobs in all levels of government, nonprofit organizations, and in industry. This is one of several geography-related certificates that students can use to tailor their educational experience in preparation for the job market. In addition to Geographic Information Science, the Department of Geography offers certificates in Environment and Society Geography, Geospatial Big Data Analytics, Human Geography; Justice, Ethics and Diversity in Space; Landscape Ecology; and Physical Geography.

Careers

Students earning the certificate in Geographic Information Science are well-positioned to find employment with diverse organizations spanning business, government, and nonprofit sectors. Such organizations may include (but are not limited to): American Red Cross, Amnesty International, BAE Systems, Boeing, Esri, Federal Emergency Management Agency, NASA, National Geographic, National Park Service, United Nations, U.S. Army Corps of Engineers, U.S. Census Bureau, U.S. Environmental Protection Agency, local, regional, and state planning agencies, environmental and engineering consulting firms, State Department and humanitarian organizations.

Opportunities for Graduate Studies

A certificate in Geographic Information Science is useful for students who are interested in pursuing graduate degrees in the computational, environmental, and social sciences. Alumni enter graduate and professional studies in a variety of programs, including (but not limited to) geography, planning, urban studies, environmental sciences, ecology, geographic information sciences, information technology, environmental informatics, geodesign, business administration, supply chain management, emergency management, and law. They sometimes begin graduate or professional programs directly after finishing undergraduate studies, but often get several years’ work experience before returning to school, either full or part-time.

Professional Resources

- American Association of Geographers (AAG) (https://www.aag.org)
- North American Cartographic Information Society (NACIS) (https://nacis.org)
- ASPRS: The Imaging & Geospatial Information Society (https://www.asprs.org)
- Urban and Regional Information Systems Association (URISA) (https://urisa.org)
- International Cartographic Association (ICA) (https://icaci.org/)