

GEOGRAPHY

What can I do with this major?

AREAS

PHYSICAL GEOGRAPHY

Physical geographers study earth surface processes and patterns related to climates, weather, landforms, vegetation, soils, and water. They also evaluate the environmental and human impact of natural hazards, such as flooding, hurricanes, tornadoes, landslides, and earthquakes

Biogeography
Geomorphology
Climatology and meteorology
Hydrology
Coastal geography
Oceonography
Glaciology
Pedology
Geomatics and geodesy
Forestry and conservation science
Natural hazards
Emergency management

EMPLOYERS

State and local government
Federal government:
 Department of Agriculture
 National Resources Conservation Service
 US Geological Survey
 National Oceanic and Atmospheric Administration
 Forest Service
 Bureau of Land Management
Agribusiness corporations
Outdoor recreation companies
Resource management agencies
Research institutes
Insurance companies
Television and radio stations

STRATEGIES

Develop strong analytical and communication skills.
Build a solid foundation in the sciences, such as physics, chemistry, soil science, agriculture.
Identify an area of interest and take relevant courses to prepare. For example, weather systems, atmospheric dynamics, thermodynamics, and physical meteorology for careers in meteorology/atmospheric science.
Gain experience through part-time jobs, internships, or volunteer opportunities related to climate, weather, natural hazards, forestry.
Participate in summer research programs or assist a professor on a research project.
Get involved with student professional organizations.
Be willing to relocate to regions that have job availability.
Learn government application processes, and seek assistance from campus career centers.
Some specialties will require graduate degrees.

PLANNING

Planners ensure that communities develop in an orderly way and that they have the services necessary to support them.

City/Regional planning
Housing development
Convention/Tourism
Community development
Demography
Transportation
Waste management
Conservation

City, county, and regional planning agencies
Local and state government
Federal government:
 Agency for International Development
 World Bank
 Department of Housing and Urban Development
Research organizations
Private business
Banks
Industrial firms
Public utilities
Architecture firms
Real estate developers

Develop team work and communication skills.
Participate in student government.
Take courses in public administration/public finance.
Observe city/county advisory meetings.
Seek internship or work experience in a local government planning office, as they are a large employer in this area.
Learn federal, state, and local government job application processes.
Obtain a master's degree in planning or consider a dual degree in planning and law.
Research the certified planning credential obtained through the American Institute of Certified Planners.

AREAS

ENVIRONMENTAL GEOGRAPHY

Environmental geographers are concerned with how human beings use the Earth and impact the environment, positively and negatively, as well as how human-altered environments frame the limits and possibilities of people's economic activities, health, and social well-being and equality. Environmental geographers recognize the importance of understanding how social and natural systems interact with each other in shaping the sustainability of landscapes, communities, and ecosystems.

Environmental management
Conservation
Waste management and disposal
Environmental regulation
Emergency management
Defense and military
Outdoor recreation
Public health/Epidemiology
Management

EMPLOYERS

State and local government
Federal government:
 Environmental Protection Agency
 Department of Agriculture
 Department of Energy
 National Forest Service
 National Park Service
 National laboratories
Real estate developers
Scientific and research groups
Waste management companies
Chemical companies
Firms specializing in forestry, mining,
 environmental issues or surveying
Nonprofit organizations
Law firms

STRATEGIES

Become skilled in related computer technology.
Take biology and chemistry courses for environmental management positions.
Seek electives in plant science, forestry, and wildlife management for careers in recreation and for forestry management.
Join environmental organizations on campus and in your community.
Seek environmental-related experience through internships or part-time jobs.
Learn federal government job application process.
Earn a law degree to work in areas such as environmental law and policy.

ECONOMIC GEOGRAPHY

Economic geographers study the distribution of resources and economic activities within a certain region. They may use this information to advise organizations on where to build new facilities.

Location analysis
Real estate development
Transportation management
Agricultural planning
Travel/tourism planning
Business development

Federal, state, and local government
Market research firms
Manufacturing, wholesale, and retail firms
Public utilities
Consulting firms
Real estate appraisers and developers
Banks
Convention centers
Tourism bureaus

Develop strong communication skills.
Take business courses such as economics, advertising, marketing, finance, statistics to increase marketability in the field.
Earn a business minor.
Learn to see all sides of a problem, including economic, social, political, and environmental.
Observe city/county advisory meetings.
Obtain business-related work experience to gain relevant skills and build a network of contacts.
Consider earning a master's degree in business or a related field to increase opportunities.

AREAS	EMPLOYERS	STRATEGIES
CULTURAL & HUMAN GEOGRAPHY <i>Cultural and human geographers study the relationship between society and the construction of place and the built environment along with the consequential movement of ideas and people across spaces and boundaries. This study happens from the scale of homes, neighborhoods, and cities to nations, regions, and globalization. They recognize that a close connection exists between people's geographic surroundings and their identities, senses of place, and livelihoods. Cultural and human geographers play close attention to the role that spaces play in struggles for social justice and importance of responsible and fair community development.</i> Cultural resources Historic preservation Historical consultation Community development/Redevelopment Regional geography Population geography/Demography Political geography Ethnography Education Research	Federal, state, and local government Peace Corps Real estate developers Companies dealing with insurance, transportation, communications, and international trade Scientific and research groups Nonprofit organizations Museums and historical sites	Develop an open mind towards the language, history, customs, and culture of other countries. Gain experience conducting library research, making field observations, and interpreting artifacts. Learn a foreign language for field observations in other countries. Participate in cross-cultural groups and organizations. Develop excellent communication and teamwork skills in order to work with historians and archivists in recreating the geography of the past. Obtain related experience in your area of interest through volunteer or paid positions, including internships. Learn federal, state, and local government job application processes. Consider earning a graduate degree for increased opportunities.

AREAS	EMPLOYERS	STRATEGIES
<u>GEOGRAPHIC TOOLS AND TECHNOLOGY</u> <i>Geographers study geospatial science, including Geographic Information Systems (GIS), Remote Sensing, Global Positioning Systems (GPS), and online mapping such as Google Earth, and develop and use geospatial technologies to understand complex human and environment systems in both physical and virtual spaces.</i> Cartography Photogrammetry Online mapping Geographic information systems (GIS) Global positioning systems (GPS) Remote sensing: Radar and satellite imaging Aerial photography Lidar and unmanned aerial vehicles (UAVS) Spatial statistics Surveying Field research	State and regional government agencies: Departments of Transportation or Agriculture Federal government: Departments of Defense, Interior, Commerce, Agriculture, and State, Defense Mapping Military National Aeronautics and Space Administration (NASA) Central Intelligence Agency US Geological Survey National Oceanic and Atmospheric Administration Forest Service Bureau of Land Management National Resources Conservation Service Public Health/Epidemiology Private industry including telephone, utilities, construction, engineering, energy, environmental planning, and consulting firms Mapping/GIS/GPS software companies (e.g., ESRI, Google Earth, Uber)	Take courses in surveying and measurements, photogrammetry, computer systems, database management, technical mathematics, drafting, statistics, optics, remote sensing, art, graphics. Develop strong quantitative skills. Learn to be detail-oriented. Gain experience reading maps and interpreting data sources including geological surveys and satellite images. Seek related experience, such as a part-time job or internship, to develop technical skills. Research certification requirements with the American Society for Photogrammetry and Remote Sensing. All states require licensure for surveyors. Learn more through the National Council of Examiners for Engineering and Surveying. Some positions may require advanced degrees in geography or related fields.

GEOGRAPHIC EDUCATION

<i>Geography teachers may specialize in one or more areas of the discipline or incorporate it into a social science education program.</i> Teaching Research	Elementary/secondary schools, public and private Colleges and universities	Develop strong communication skills, both oral and written. Seek volunteer or paid experiences, such as camp counselor or tutor, with target age group. Obtain certification/licensure for public school teaching. Earn multiple certifications for increased employability. Complete a master's degree for community college teaching or a Ph.D. for college/university faculty positions. Maintain a high grade point average and build strong faculty recommendations to prepare for graduate school. Specialize in an area such as quantitative research techniques, programming, computer mapping, or natural resource management. Join the National Council for Geographic Education.
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GENERAL INFORMATION

- Geography provides a broad foundation for a variety of career fields. Develop a goal and seek the experiences, skills, and degrees needed to prepare for that field.
- A bachelor's degree qualifies you for entry-level positions in government, industry, and nonprofit. A master's degree qualifies you for community college teaching and advancement in other organizations. Ph.D. is required for research and teaching positions in colleges and universities and senior positions in government and industry.
- Obtain volunteer, part-time, summer, internship, or co-op experience in your area of interest.
- Join professional organizations such as the American Geography Society or the National Council for Geographic Education.
- Get involved in groups directed toward improvement of natural resources or environment and conservation.
- Maintain knowledge of current environmental issues including policy, conservation, and industry trends.
- Computer knowledge is extremely important in geography. Seek experience with and classes in geographic technologies.
- Develop strong mathematical and statistical skills, as well as good communication skills. Also build skills in mapping, graphics, and charts. An interest in photography may prove beneficial.
- Conduct informational interviews with professionals to learn more about the field and to develop a network of contacts.