

# GEOGRAPHY

## What can I do with this major?

### AREAS

#### PHYSICAL GEOGRAPHY

*Physical geographers study Earth's processes and patterns in the natural environment, such as climate and weather. They also evaluate the impact of natural hazards, such as hurricanes, tornadoes, 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, The 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.

#### ENVIRONMENTAL GEOGRAPHY

*Environmental geographers are concerned with how human beings use the Earth and impact the environment.*

Environmental Management  
Conservation  
Waste Management and Disposal  
Environmental Regulation  
Emergency Management  
Outdoor Recreation Management

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

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 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.

## AREAS

## EMPLOYERS

## STRATEGIES

### **CULTURAL & HUMAN GEOGRAPHY**

*Cultural and human geographers study the aspects of geography that relate to different cultures. They especially focus on cultural origins and movement, as well as the cultural characteristics of regions.*

Cultural Resources  
Historic Preservation  
Historical Consultation  
Community Development/Redevelopment  
Regional Geography  
Population Geography/Demography  
Political Geography  
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.

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### **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 and 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

### **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 or 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.

### **GEOGRAPHIC TOOLS AND TECHNOLOGY**

*Geographers utilize a variety of technologies to generate maps, store, analyze, and interpret map information.*

Cartography  
Photogrammetry  
Online Mapping  
Geographic Information Systems (GIS)  
Global Positioning Systems (GPS)  
Remote Sensing:  
    Radar and Satellite Imaging  
    Aerial Photography  
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, National Aeronautics and Space Administration, Central Intelligence Agency, US Geological Survey, National Oceanic and Atmospheric Administration, Forest Service, Bureau of Land Management, The National Resources Conservation Service  
Private industry including telephone, utilities, construction, engineering, energy, environmental planning, and consulting firms  
Map publishers  
Mapping/GIS/GPS software companies, e.g. ESRI, Google Earth

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.

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## STRATEGIES

### **GEOGRAPHIC EDUCATION**

*Geography teachers may specialize in one or more areas of the discipline or incorporate it into a social science education program.*

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, computer mapping, or natural resource management.  
Join the National Council for Geographic Education.

Teaching  
Research

### **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.
- Bachelor's degree qualifies you for entry-level positions in government, industry, and nonprofit. 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.