"What Can I do With a Major in...Geography?"



Facts about a Geography Degree

- A major in Geography teaches you concepts, theories and methods that provide a unique set of skills applicable to a wide range of questions asked in many occupations
- Occupations are included in different sectors since geography students can choose from a variety of areas
- The potential for practicing geography in the private and public sector has grown considerably in recent years with the use of Geographic Information Systems (www.GIS.com)

Skills Possessed by Geography Majors

- Knowledge of the earth's physical environments and their interrelationship
- Understanding of the interrelationship of social, economic, political, and cultural factors
- Skills in the analysis and use of standard statistical methods
- Skills in writing carefully reasoned reports and academic essays
- Good visualization skills
- Skills in operating computer equipment and the latest professional tools
- Skills in the spatial analysis of socioeconomic patterns, problems and forces

From the University of Manitoba's Student Counseling and Career Center website.



Possible Job Titles for Geography Majors



Economic Geography

Location Expert

One of the most important ways a business or industry can enhance its chances of success is to find a good location. Convenience stores, automobile assembly plants, ice cream parlors, tavern, movie theaters, shopping malls, office complexes, banks--all have a common need to be in the best location. It is the job of the location expert to determine locations in which all types of businesses can be successful. Economic geography provides a good background for this, since geographers know about demographics (the statistical characteristics of populations, such as age and income), transportation, availability of labor, shopping habits, and how cities expand. Location experts are employed by firms that assess location needs for clients. Some large companies employ their own location experts.

Market Researcher

Businesses need to know which products will sell, where they sell best, to whom they will sell, and why. Market researchers provide this information by studying buying habits, regional sales characteristics for certain products, and customer preferences. Their activities include such things as collecting information on where customers live and why they shop at a particular store or on what products and features appeal to which types of customers. If you've ever been part of a "consumer survey," you've taken part in market research.

There is a large industry of market research firms employing many people. Marketing departments within companies also conduct market research. Along with courses in economics and geography, a knowledge of statistics and various business disciplines, such as marketing and advertising, is very helpful.

Traffic Manager (Shipper)/Route Delivery Manager

Large companies employ key people to arrange for the shipping of their products. Traffic managers or shippers select the mode of transportation (usually rail, truck, or air) and arrange for all aspects of the delivery of goods. Sometimes shippers must arrange to export goods to other nations.

Route delivery managers are similar to traffic managers. They must plan very efficient routes for the delivery of goods and services. Imagine how much a large mail-order company like Sears would benefit if it could make its delivery system to customers more efficient by as little as 1 percent! In an era when fuel and labor costs are high, route delivery management is a crucial skill. For both these jobs, some business background in addition to economic geography can be helpful.

Real Estate Agent/Broker/Appraiser

Geographers are particularly well equipped to evaluate the price of land or real estate. They are aware of the impact on value of zoning, available municipal services, transportation, environmental features, and potential return on the investment. Geography students planning to

work in real estate should supplement their major courses with others in economics, marketing, and finance.

Most real estate professionals need a special license to practice and may have to take special courses in the field to obtain it. Jobs are available in local and national real estate agencies, relocation companies, companies that relocate many of their own employees, appraisal firms, developers, and banks.

Environmental Geography

Environmental Manager

Environmental managers protect and conserve our natural resources. Their jobs involve the management of water; air quality; soil; energy; land reclamation; coast lands; river basins; and solid-, hazardous-, and toxic-waste disposal. Environmental managers work for governments or private industry. Many work for the federal Environmental Protection Agency or state departments of environmental protection, where they ensure adherence to the laws that keep the soil, water, and air clean. Some environmental managers work for land development companies or subdivision planners, where they prepare environmental impact statements describing how various projects would affect the natural environment. To work in this field, it helps to have had courses in biology and chemistry.

Forestry Technician

Forestry technicians plan for the distribution and care of our forests. Some work for government agencies, such as the U.S. Department of Agriculture and the National Forest Service, and are responsible for the care and maintenance of thousands of acres of federally owned forest land. Large corporations, such as Weyerhaeuser and Boise-Cascade, also employ forestry technicians to conserve and manage forests that provide trees for the lumber and paper industries. Some colleges offer specific forestry programs, but prospective forestry technicians can also benefit from studying geography, generally with support work in biology. Most forestry technicians learn their skills on the job.

Park Ranger

While the main responsibility of a ranger is to enforce the laws designed to protect the environment and make the nation's natural beauty and recreational resources available to all citizens, it is also necessary to understand forest and wildlife conservation. The National Park Service, the U.S. Forest Service, and state parks departments employ a great many rangers. Geography majors interested in becoming park rangers usually complement their geography background with some biology, zoology, wildlife management, and forestry.

Hazardous-Waste Planner

The nation's chemical and nuclear-energy industries have created a need to find safe long-range solutions to the problems of storing hazardous and toxic waste materials. Individuals with training in geography, as well as in such fields as chemical engineering and geology, work to provide regional plans to satisfy this need. Such jobs are available with chemical companies and with large waste management industries.

Geographic Education

Elementary/Secondary School Teacher

A great many new teachers will be needed in the next ten to fifteen years to teach geography, at both the elementary and high school levels. For elementary school teachers, geography is just one component of what is taught; for secondary school teachers, geography may be taught by itself or as part of a larger social studies curriculum. Teaching geography at these early levels is very important, because it is here that students gain a basic understanding of the world and their place in it.

College Professor

As the number of geography courses in high schools expands, more and more students pursue geography in college, perhaps majoring or minoring in it. This keeps college geography departments busy, and these departments employ a number of geography professors. Professors have as many specialties as there are disciplines within geography. They teach courses--from introductory courses for freshmen to advanced seminars on a specialized subject for upperclass and graduate students--and conduct research. To be a college professor, you definitely need a graduate degree, usually a Ph.D.

Overseas Teacher

There are lots of teaching jobs in foreign countries. In places where large numbers of American military personnel or businesspeople are based, there are also American children needing teachers at all grade levels. The Department of Defense maintains English-language schools in such places as Germany, Greece, the United Kingdom, Guam, South Korea, and Japan. As U.S. business becomes more international, large corporations are finding that they must offer educational opportunities to the dependents of employees working in foreign nations. There are also independent American schools in many large cities the world over. Overseas teaching jobs may pay a little bit more than a comparable job in the United States, but what you will need to take into account is the relationship of salary to cost of living in a particular country. The benefit you will always receive from teaching overseas, of course, is the opportunity for travel and cultural exploration.

Geographic Technology

Cartographer

Cartography is the science (or art) of making maps. Though hand-drawn cartography is still prevalent, traditional drafting has been replaced rapidly by computers and graphics software, which allow maps to be created quickly and accurately. Complex maps are made with sophisticated scanning equipment, while most maps can be drawn on a personal computer. Generally, cartographers begin with a grid, such as the familiar one based on latitude and longitude, to which they add such information as streets, population density, and physical features.

Many cartographers are employed by the U.S. Government to make maps for various purposes. The Defense Mapping Agency has large cartography operations in St. Louis, San Antonio, and Washington, DC. The bureau of the Census collects data on the country's population, maps it and analyzes it. The U.S. Geological Survey employs people to produce topographical maps, which show terrain and key features.

The private sector also employs cartographers. There are companies whose business it is to make and sell all kinds of maps, from road maps to trail maps. Other industries may have cartographers on staff to produce maps needed in their line of work, namely newspapers. Subdivision maps are required by builders and municipalities. Telephone companies and other utilities also employ cartographers.

Geographic Information System Specialist

A geographic information system (GIS) is a computer hardware and software system that is used to store, display, analyze, and map information. Geographers, planners, land developers, real estate agents, utility companies, and municipal officials all use these systems. In fact, modern planning cannot move forward without these systems and those trained to run them. For example, a local government might use a GIS to evaluate alternative locations for roads, landfills, or other facilities. Using the GIS, such topics as population distribution, traffic movement, land availability, real estate prices, environmental hazards, soil types, and flood zones could be analyzed together to help the government make an informed choice. Jobs are available for those who like to work with computers and understand the importance of information retrieval.

Remote-Sensing Analyst

Another important area of mapping is remote sensing. This involves the interpretation of aerial photos and the analysis of satellite images. Virtually all modern maps of large areas are based in part on remote sensing, among them the land use maps used by the U.S. Geological Survey and the soil maps used by the Department of Agriculture. The Department of Defense, the State Department, and the Central Intelligence Agency employ thousands of people to interpret photos that have been taken by high-flying aircraft or satellites to determine what is going on in other countries. For example, during the Cold War, we learned a lot about crop production, military troop movements, missile launches, and nuclear testing in the Soviet Union through the work of remote-sensing analysts. Remote-sensing analysts should have training in geography and earth science and good visual skills.

Human and Cultural

<u>Development specialist in national and international non-government or government organizations</u>

If you are interested in working in organizations like the United Nations Children's Fund (UNICEF), the World Health Organization (WHO), the Food and Agricultural Organization (FAO), the UN High Commissioner for Refugees (UNHCR), the World Bank, Save the Children, the Red Cross, USAID etc., geography is a relevant major for you. Human and Cultural geography focuses on the aspects of geography that relate to different cultures, with an emphasis on cultural origins and movement and the cultural characteristics of regions (e.g., language, religion, ethnicity, politics, historical development, agricultural methods, settlement patterns, migration, and quality of life). Cultural ecology--the ways in which humans interact with their cultural and natural environment -- is a part of human geography that is demanded in many jobs today. Many cultural and human geographers are area specialists as well, which means that they focus their attention on a specific region, such as Latin America, Europe, Africa, or Asia. Because they often carry out field observation in other countries, they will usually need good foreign-language backgrounds. Human and cultural geography courses combines very well with course offerings in global studies at Hofstra. Both private and governmental organizations are experiencing an increased need for employees with knowledge about foreign cultures. A basic knowledge of human/cultural geography is therefore relevant for most occupations today.

Community Developer

Many communities have drawn up plans for the redevelopment of their town centers, often with federal assistance. These areas are being rebuilt with an eye to history: research into the earlier nature of the downtown area is carried out, and that architectural and economic information is then woven into the development plan. Redevelopment programs, among them a very promising one called Main Street, U.S.A., use the expertise of geographers, historians, politicians, economists, and businesspeople.

Map Librarian

Maps are, of course, valuable in everyday life, but they also have considerable historical significance and can tell us a lot about the geography of the past. Large numbers of maps are produced by the government, and these are sent to document depositories in major libraries. Map librarians work with maps in the same way that librarians do books. They describe, classify, and catalog maps available for use by scholars and the general public. Most large public libraries and many major universities employ map librarians.

Peace Corps Volunteer

The United States continues to send volunteers to foreign nations to help them develop their human and natural resources. The pay is low, but the opportunity to provide a valuable service

to humankind is unparalleled. Hundreds of geographers have served in the Peace Corps, and geography training is an excellent preparation for volunteers. Language training is necessary, as is knowledge of the host country's history, economic and political systems, and educational and social background.

Regional Geography

Area Specialist

Area specialists study specific countries or areas of the world. This type of job generally requires a good knowledge of the appropriate language and a thorough understanding of the culture and daily life of the area's inhabitants. Typically, an area specialist might be employed be a U.S. government agency, such as the State Department or the Central Intelligence Agency.

Area specialists collect information from newspapers, radio broadcasts, television news shows, magazines, government documents, aerial photos, and the reports of intelligence agents. They brief diplomats and State Department officials and provide data used in speeches by the President, Cabinet Officers, and other key government officials. Often, information supplied by area specialists is used to help the government set policy or take positions on key issues.

International Business Representative

As our lives become more interdependent globally and the U.S. economy becomes more international, the need for business people with an international perspective increases. Practically every large American corporation does business with at least one foreign nation. In order to generate business, companies need individuals who know about the agriculture and industry of other nations. The success of a labor contract, for instance, may very well be based on a knowledge of another country's culture. A geographical perspective, combined with language training, often qualifies new graduates to work for American corporations in foreign countries. These kind of jobs will increase dramatically in the next decade.

Travel Agent

Travel agents make travel arrangements for other people. Sometimes that is as simple as preparing an airline ticket. Often, however, travelers want information about foreign places, and that's where geography becomes important. Travel agents are able to tell travelers what kind of clothes to wear in Europe in April, what sights to see in Tokyo, when the rainy season occurs in Mexico, or what local tours are available in Jamaica. Travel agents also need to be knowledgeable about the unique sights of various destinations and such features as mountains, valleys, and glaciers, as well as potential dangers to travelers.

Urban and Regional Planning

Urban and Community Planner

Urban and community planners work to make cities pleasant and attractive places in which to live and work, taking into account zoning, traffic patterns, building density, recreational facilities, and the management of waste materials and water. They try to organize streets and the flow of traffic to avoid congestion. They try to plan for recreation so that everyone will have access to parks and open spaces. Planners work closely with builders to make sure that cities develop within the limits of the master plan. They need lots of geographical information to do all this. Most planners have bachelor's or higher degrees, and some have to pass a national exam. Urban and regional planning programs are available at some universities. Often, students take courses in public administration or public finance, as well as geography.

Transportation Planner

Transportation has become a major problem in ever large urban area in the world. Typically,

commuters head into the middle of the city in the morning and back to the outskirts at the end of the day. This puts an enormous strain on transportation systems and creates the need for careful planning. Transportation planners try to balance the use of private vehicles with the use of public transportation by developing multimodal systems that utilize cars, buses, commuter trains, subways, and even streetcars and helicopters.

Health Services Planner

Health services planners perform a wide variety of tasks relating to the delivery of health services. For example, they help determine the best location for new hospitals, community health centers, and clinics. Some health services planners work to determine the best garage sites for ambulances or emergency medical service vehicles. Still others help decide in which hospitals vital services should be offered to make service availability as efficient as possible. These planners work closely with doctors and hospital administrators.

*The content was adapted from the following website: http://www.aag.org. *



Career Resources for Geography Majors



Specific Resources

American Geographical Society: http://www.amergeog.org/

Association of American Geographers: http://www.aag.org

Environmental Career Opportunities: http://www/ecojobs.com

Environmental Protection Agency: http://www.epa.gov/students/careers.htm

Geo Job Source: http://www.geojobsource.com/regionindex.htm

GeoSearch, Inc.: www.geosearch.com

Geospatial Information & Technology Association: www.gita.org

National Geography Society: http://www.nationalgeographic.com/

American Planning Association: http://planning.org/careers/

Urban and Regional Informational System Associations: http://www.urisa.org/

Rural Development: http://www.rurdev.usda.gov/orther_sites.html

American Real Estate and Urban Economics Association: http://www.aresnet.org

General Resources

*CareerSearch: http://www.careersearch.net/Hofstra

(username-hofstra, password-career)

Occupational Outlook Handbook: http://www.bls.gov/oco

Riley Guide: http://www.rileyguide.com

*Spotlight On Careers: http://www.spotlightoncareers.org

(username-lacn, password-holland)

*Vault: http://www.vault.com/cb/careerlib/careerlib main.jsp?parrefer=6123

(You will be prompted for your Novell username and password)

*These websites require you sign in using a username and password.

