

Careers: Geographical Sciences

The University of Maryland Geographical Sciences major graduates have been successful in many different fields post-graduation. Using information from the University of Maryland graduation survey, we have compiled information about GEOG majors, such as where they work or go to graduate school post-graduation. Check out the topics below to learn more about planning for your career! [#GeoTerps](#)

Review additional resources at the [University Career Center @ BSOS](#) Your Career webpage.

Titles/Industries of Recent Alumni *(Sample)*

Explore career paths of GEOG majors with LinkedIn's [Alumni tool](#).

Note: Must have a LinkedIn account to access.

GIS

Job Titles:

Ecological Modeler
Freelancer
Geospatial Analyst
Geospatial Specialist
GIS Analyst
GIS Consultant
GIS Developer
GIS Specialist
GIS Technician
GIS Research Associate
Remote Sensing Technician
Remote Sensing Data Analyst
Surveying and Mapping Technician

Organizations:

AECOM
Anne Arundel County Department of Health
ASRC Federal
Deloitte
Esri
GIS and Geospatial Center at University of Maryland Libraries
Geospatial Consulting Group International
IIC Technologies, Inc
National Park Service
U.S. Census Bureau
U.S. Department of Agriculture
U.S. Environmental Protection Agency
U.S. Forest Service

Entry tips:

Important qualities/skills generally include: data analysis, organizational, and problem-solving skills.

GIS internships are available in a variety of fields, including both government and private sector.

For more information about careers in GIS, review these Vault articles:

- [GIS Specialists](#)
- [Remote Sensing Technicians](#)
- [Surveying and Mapping Technicians](#)

Geography and Cartography

Job Titles:

Cartographer
Geographer
Human Geographer
Mapping Specialist
Maritime Cartographer
Maritime Geographer
Nautical Cartographer
Surveying and Mapping Technician

Organizations:

Geomni
IIC Technologies
NAVSEA
NOAA
The Nature Conservancy
University of Maryland
U.S. Census Bureau
U.S. Forest Service
U.S. Geological Survey

Entry tips:

Important qualities/skills generally include: statistics, analysis, and interpretation skills.

Join professional associations such as the [Association of American Geographers](#).

For detailed tips, visit Vault's articles on [Cartographers](#) and [Geographers](#).

Data | Technology | Engineering

Job Titles:

Consultant
Data Analyst
Data Scientist
IT Specialist
IT Technician
Network Engineer
Research Assistant
Software Engineer

Organizations:

ActioNet
AppGuard Inc.
Booz Allen Hamilton
Center for Global Development
Esri
Hughes Network Systems
National Geospatial-Intelligence Agency
Triumvirate Environmental
USAID

Entry tips:

Important qualities/skills generally include: data analysis, statistics, and interpretation skills.

Many positions require statistical skills. Utilize [LinkedIn Learning](#) to learn programs such as R, SPSS, Stata, data visualization and more!

Learn more about [IT Career Paths](#), including [data visualization](#)

Urban Planning

Job Titles:

Comprehensive Planner
Environmental Planner
GIS Planner
Land Use Planner
Regional Planner
Trail Planner
Transportation Planner
Urban Planner Assistant

Organizations:

AECOM
Bureau of Transportation Statistics
City of Rockville
Fairfax County Government
Maryland Department of Planning
Maryland-National Capital Park and Planning Commission
Rails-To-Trails Conservancy

Entry tips:

Important qualities/skills generally include: data analysis, statistics, and interpretation skills.

Local governments are a great place to find internships in planning.

Check out Vault's overview of [Urban and Regional Planners](#)

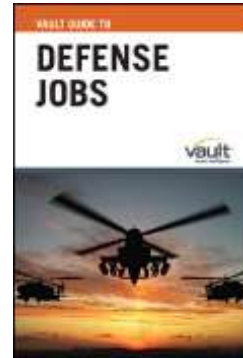
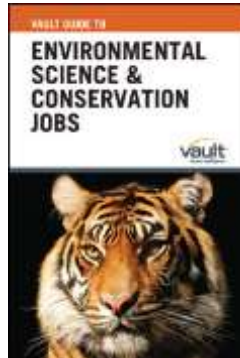
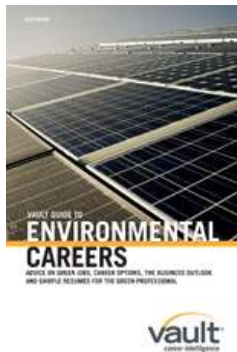
*Some of these titles require an advanced degree.

Explore career options: Resources

Use the sample job titles listed in this document to start exploring career paths. The links below provide search boxes for you to locate more information on the titles as well as search for other options.

- [Occupational Outlook Handbook](#), a career title dictionary
- [O*NET Online](#), the nation's primary source of occupational information
- [FOCUS2](#), explore career paths using self-assessment questionnaires
- [Terrapins Connect](#), talk with professionals working in the field through UMD's alumni network
- [Federal positions by major](#), research career titles with the federal government related to your major

[Vault Guides](#) - browse 100's of industry guides to gain tips from insiders (*see examples below*).



Additional career fields to research and consider:

- [Cultural Resources](#)
- [Cultural Geographer](#)
- [Emergency Management](#)
- [Cartography](#)
- [Geographic Information Systems](#)
- [Remote Sensing](#)

Explore career options: gain experience

Not sure where to start in planning your post-graduation activities? Start by reviewing these general resources.

- [Are you a Geographer?](#)
- [Career Planning](#), Wise Words from UMD GEOG Alumni
- [Environmental Careers](#), provided by UMD Environmental Science and Policy Program
- [Federal positions by major](#), mostly undergrad
- [Preparing for a Geography Career](#), career tips from American of Association Geography

The links below will be a helpful start in locating internship openings.

- [Research Opportunities](#), advice and links for undergraduate students
- [BSOS Engagement Opportunities](#), offers links on internships, etc.
- [National Consortium for the Study of Terrorism and Responses to Terrorism](#) (START), Internships
- Geographical Sciences provides a list of [Internships with Short Descriptions](#)
- UMD [Careers4Terps](#), a job and internship database for off-campus positions
- UMD [National Scholarships Office](#), opportunities for undergraduate

The Department of Geographical Sciences offers [internship](#), [study abroad](#), and [independent study](#) related information on their website.

Did you know?

“Whether or not one has an internship impacts short-term and longer-term career success. Survey takers who completed at least one internship received a job offer more quickly and had a higher first position salary than those who did not.”

-[NACE](#)

Internships

Internships are a great way to try out an interest, regardless if they are directly related to your major. Employers tend to favor job seekers who have had an internship in the field they are hiring for.

Sample internship titles/sites

- Cartograph Roads Project Intern, *Charles County Government*
- Database Manager, *NASA*
- Geospatial Intelligence Intern, *National Consortium for the Study of Terrorism and Responses to Terrorism*
- GIS Intern, *Maryland-National Capital Park and Planning Commission*
- GIS Technician Intern, *University of Maryland Facilities*
- Intern, *Humanitas Global*
- Intern, *Geospatial Data Center*
- Project Management Intern, *Clark Construction*
- Senior Intern, *Maryland State Geographical Information Committee*
- Summer Intern-Environmental Education Intern, *Howard County Nature Conservancy*

Skills Developed

Skills lead to jobs. Which skills do you possess?

- [Assess your](#) skills, abilities, interests, and values and explore how they relate to career options.
- Complete this [skills inventory](#) to get started.

Geography majors have skills in...

- Reading and interpreting maps, charts, and photos
- Applying remote sensing techniques
- Representing facts graphically
- Designing and constructing charts, maps, and models
- Analyzing data
- Problem solving
- Evaluating impacts
- Simplification of information
- Using advanced mathematics, computer science, and statistics



Add to your skill set with [these learning videos](#)/courses.

Graduate School Programs

Start researching your career path of interest to identify the educational requirements. The list below offers a brief overview of some of the more popular graduate degree programs and institutions our GEOG undergraduates have attended.

Graduate programs listed by topic:

Biogeochemistry, Ph.D. | Cornell University
 Business Administration, M.B.A. | University of Maryland
 Data Science, Graduate Certificate | Georgetown University
 Geography, M.A. | George Washington University
 Geography, Ph.D. | University of Maryland
 Geographical Information System, M.S. | University of Maryland
 Geospatial Information Sciences, M.P.S. | University of Maryland
 Human Paleobiology, M.S. | George Washington University
 Natural Resources, M.S. | Cornell University
 Nursing, M.S. | University of Maryland, Baltimore
 Public Policy, M.P.P. | University of Maryland
 Remote Sensing, Ph.D. | Brown University

Source: LinkedIn, UMD Geographical Sciences undergraduate alumni who pursued advanced degrees (sample)

Graduate School Resources

Researching programs:
[Peterson's Graduate School](#)

Application tips:

- [Questions to consider](#)
- [Application timeline](#): stay on track with your graduate school application
- [Tips](#) for the application
- [Financing](#) ideas for graduate school



Need help starting your career exploration or job search? Schedule a [career consultation appointment](#) with the University Career Center. Get started mapping your [career action](#) plan today!