TOP NON-ACADEMIC CAREERS

SOCIAL GOOD / NON-PROFIT

1. SOCIAL IMPACT OR SOCIAL GOOD CAREERS (H-SS-STEM)
“Social impact” encompasses a wide range of careers; generally, it refers simply to careers that seek to address social needs. A social impact career could entail working at a think tank, for a non-profit, in education, as a social entrepreneur, in international development, government, or in corporate social responsibility. The key is flexibility, experience, networking, and the ability to work well with others, to write well, and to have good presentation skills. Notre Dame resources include the Center for Social Concerns, the Kellogg Institute for International Studies, Irish Impact, and the Fellow Irish Social Hub (FISH). Many of these industries are listed below; here are a few links for social enterprise and global development.

Community Development Venture Capital Alliance
Initiative for Global Development
Institute for Social Entrepreneurs
NetImpact
OneOC
Opportunity Finance Network
Social Enterprise Alliance

2. SOCIAL + HUMAN SERVICES (H-SS-STEM)
Careers in social and human services include counseling, social services, epidemiology, consulting, and policy work. Human services careers generally are in administrative or managerial capacities, or in counseling positions that require a PhD (as a clinical psychologist, for example). Potential employers are school systems, government agencies (local and national), international organizations, NGOs, higher education, non-profits, sports organizations, and other organizations that fall under the general umbrella of "social good." While a PhD in psychology is necessary for some positions, a general background in policy, gender studies, sociology, health policy, or science can be translated into a human services career. Key is the ability to transfer theoretical knowledge to practical application, to be able to formulate large- and small-scale solutions to systemic and individual problems, and to work with other people. Organizations and government agencies are also in need of people with a background in finance and organizational development as they work to maximize their ability to provide services while minimizing cost. Grant-writing experience and good communication skills are important.

American Counseling Association
American Psychological Association
HHS Careers
Idealist.org
Social / Human Services Job Links (University of Michigan)
National Organization for Human Services
Non-profit careers in social and human service
3. PUBLIC POLICY (H-SS-STEM)
Public policy involves the development, formulation, implementation, and analysis of policies on national, local, and international levels. It involves working with individuals, nonprofits, lobbyists, governmental agencies, and corporations to set agendas and implement laws and regulations. It’s a good career path for both humanities and science PhDs who are interested in the broad ramifications of their area(s) of interest. While a degree in public policy is not necessary, some knowledge of economics will be helpful, as will any program that provides a theoretical foundation in one or more areas for policy development (such as conservation, gender studies, public health, geography, urban/regional planning, sociology, anthropology, political science, education). You can work within government agencies as a technical expert, analyst, or advisor, or work with a think tank or other non-profit organization. Look for internships or postdocs directly with agencies or think tanks, or positions that will allow you to work directly with these organizations. As with similar jobs, your overall research interests can help determine the kind of position you seek, but your writing, research, and analysis skills will be crucial.

AAAS Science and Technology Fellowship
AAMC Public Policy Career Advice
FDA Policy Internships
Idealist.org
Office of Science and Technology Policy
Pathways to Public Policy Careers (with a law emphasis)
Public Administration Professional Associations & Publications
Public Policy Careers (list of resources from the University of Arkansas Public Policy program)
Public Service Careers
State and City Government Fellowships/Internships

4. THINK TANKS (H-SS-STEM)
Think tanks can be either for- or non-profit. They generally work to influence public policy according to their specific mission, vary widely in size, and are clustered in national and state capitals. Working at a think tank will be research-focused, but will most likely also require presentation and grant-writing skills, as well as organizational and management skills. Your research agenda will be dictated by the think tank’s emphasis. Excellent writing, analytic, and inter-personal skills are required; specialized skills such as knowledge of strategically important languages (Arabic, Farsi, Chinese, Spanish, etc.) are an asset. Particularly for smaller think tanks, contacting the think tank directly to discuss how their mission aligns with your interests may be helpful. Individual think tanks will advertise positions on their websites.

American Policy Directory
Association for Public Policy Analysis & Management
Find Policy
NIRA’s World Directory of Think Tanks
Think Tanks and Civil Societies Program
U.S. State Department list of think tanks
Wikipedia list of U.S. think tanks
5. INTERNATIONAL DEVELOPMENT / INTERNATIONAL AFFAIRS (H-SS-STEM)
International development works to create sustainable improvement for communities on a short and/or long-term level. This could take the form of a single project or a series of projects or developments that work on several levels. Recent efforts have targeted education for women and children, microfinancing for women, health care, peace and conflict resolution, and sustainable agriculture.

International development is an attractive career choice for humanities, social science, and STEM graduates. Good preparation includes work in economic development, gender studies, public health, political science, education, sociology, public policy, urban planning, environmental conservation, and education. However, any program that focuses on knowledge and understanding of different cultures and areas of the world will provide good training. For engineers and scientists, additional training or experience in these areas will be helpful. Also valuable are grant-writing, analytic, linguistic, and presentation skills.

Many international development organizations are headquartered in major cities like Washington DC, New York, and London; consider whether you would prefer to work at an organization’s headquarters or on-site. International experience is necessary for upper level careers, so any experience that you can garner while a student will be valuable. Contact the Kellogg and Kroc Institutes for internship opportunities.

Clinton Foundation
Devex
International Jobs Center
Notre Dame Kellogg Institute
Notre Dame Kroc Institute
reliefweb
Stanford CISAC Fellowships
United Nations Foundation
US Aid
US Institute of Peace

6. CORPORATE SOCIAL RESPONSIBILITY (H-SS-STEM)
Corporate Social Responsibility (CSR) is a model of business accountability to stakeholders beyond investors and shareholders. It promotes the idea that corporations have present and future responsibilities to the environment, employees, and the community: corporations cannot function as isolated units, but participate in and have responsibilities to society at large. A career in CSR exists at the intersection of governmental policy, private enterprise, public policy, and international and local development. It requires a facility with theory and practice, leadership and communication skills, and the ability to draw together disparate interests and actors.

You can pursue a career in CSR in the private and public sector. Many corporations have CSR departments, often housed within their public affairs, compliance, or legal divisions; they could have titles such as “reputation management” or “environmental risk. Banks and energy companies (Shell, BP, ExxonMobil) have strong CSR departments, but less immediately obvious companies, like organic lifestyle companies, Hershey’s, and social media also have an interest in CSR. Consulting
firms also have CSR divisions. Public sector careers are primarily in national and international agencies and organizations. The UN and the World Bank have strong CSR initiatives, and there are numerous NGOs, think tanks, academic institutions, and professional associations that are involved in CSR advocacy with a variety of interests. These groups include Business for Social Responsibility, Ceres, and Climate Counts. Your position within these groups could focus on policy and program development or on fundraising and grant writing.

There is no one path to CSR. Transferable skills and broad knowledge of various areas of policy analysis (conservation, gender, etc) will be useful. If you’re interested in working in environmental / energy extraction CSR, a science background might be particularly helpful. You can demonstrate long-term interest not only in your graduate research, but particularly through volunteer work, internships, and coursework.

Career Opportunities in CSR
Harvard Kennedy School CSR Initiative
IISD on Corporate Social Responsibility
Net Impact
Shift
The Business of Society

7. SOCIAL ENTREPRENEURSHIP (H-SS-STEM)
Social entrepreneurship seeks to identify and address social problems. While geared toward addressing social change, business models can be for-profit, nonprofit, or a hybrid model. Notre Dame’s Gigot Center for Entrepreneurship has a specific focus on social entrepreneurship, and is a good place to start whether you want to develop a business model or look for an internship. Other Notre Dame resources include the Center for Social Concerns, the Kellogg Institute for International Studies, Irish Impact, and the Fellow Irish Social Hub (FISH).

Ashoka: Provides financing, support services, and connections for social entrepreneurs.
InsideHigherEd advice series on social entrepreneurship
Institute for Social Entrepreneurs
NetImpact
OneOC
Skoll World Forum: Information and advice on social entrepreneurship from a global network of leading social entrepreneurs.
Social Enterprise Alliance

8. FOUNDATIONS (PHILANTHROPY) (H-SS)
“Foundation” can refer to a private foundation or a public charity, to a small organization or a large one like the Gates Foundation. Just as the size and organization of foundations vary widely, so do their missions: they can be charitable in focus, have a political mission, exist to issue grants (like the Mellon Foundation) or may develop and run their own programs.
The key skills that carry over from a PhD program are grant-writing (you will most likely write and judge grants), overall writing skills, and research and analytic skills. Attending conferences for different types of foundations, interning, and conducting informational interviews are key.
9. NONPROFIT (H-SS-STEM)
Non-profit organizations (NPOs) are diverse, including health, education, arts, charitable, and religious organizations, professional societies, research institutes, museums, libraries, and advocacy groups. Any experience that you might have with grant writing and fund raising will be a considerable asset to an NPO career, as their funding comes from private and government grants, fees, and membership dues.

Skills that are easily transferable to an NPO setting include grant writing, research, advising, and program evaluation and development. Experience working with an NPO as an intern or a volunteer will help you know if the organizational structure (and low pay) are for you, and will help you in your search for a salaried position.

10. ART + CULTURAL INSTITUTIONS (H-SS)
Libraries, museums, performing art centers, and foundations are an excellent fit for humanities students in particular, but also for science students. PhDs are attractive for their research focus and experience, but also for their ability to write grants, conduct research, analyze information, and present information to diverse audiences. Consider jobs in curation and research as well as marketing, public relations, and development. Experience and networking are important; sit in on relevant classes and consider volunteering and/or interning at campus and local institutions. Any experience that you have with web design, K-12 and non-academic education, and general outreach will be valuable.

Libraries
Academic libraries and archives are an excellent fit particularly for PhDs who have experience working with historical records and/or archival research. A PhD in a relevant discipline, combined with experience drawn from your own research, is often an acceptable substitute for an MLS or similar degree in informational science. Many institutions will encourage you to pursue an MLS degree upon hire; also consider the possibility of pursuing one in tandem with your PhD. Consult
with your subject librarian and/or Special Collections; work experience, either paid or volunteer, will also be beneficial, especially without an MLS. The associations below post jobs on their websites; mailing lists such as EX-LIBRIS also post positions with libraries, archives, and rare book sellers. Any experience with digital humanities, web design, and community outreach will be highly advantageous.

American Library Association  
Association of College & Research Libraries  
Rare Books and Manuscripts Section of the ALA  
Society of American Archivists

Museums / Galleries / Cultural Institutions
Museums often hire historians as education directors, grant writers, curators, and executives. Museums look for people who not only have a knowledge of the museum’s primary focus (history, art, music, science, material culture, etc), but also have experience with K-12 education and public outreach. It’s important to have a deep knowledge of your subject and of research methods, as well as an ability to communicate well with a non-academic audience. Working as a docent as the Snite Museum on campus or in one of South Bend’s museums (like the Center for History) will be helpful. If possible, sit in or enroll in a few courses in conservation, material culture, web design, and/or curatorial design. Grant writing, networking, and fund raising skills are also important; consider positions not only in outreach and education and exhibit development, but also in marketing and public relations.

American Alliance of Museums  
American Association for State and Local History  
American Cultural Resources Management  
American Institute for Conservation of Historic and Artistic Works  
ArtJobs  
Beyond Academe FAQ (scroll down)  
College Art Association (membership required to search job database)  
Global Museum  
Museum Jobs Online  
National Park Service  
New York Foundation for the Arts  
Smithsonian Institution

11. CULTURAL + HISTORICAL ORGANIZATIONS (H-SS)
Libraries, museums, performing art centers, and foundations are an excellent fit for humanities students in particular, but also for science students. PhDs are attractive for their research focus and experience, but also for their ability to write grants, conduct research, analyze information, and present information to diverse audiences. Consider jobs in curation and research as well as marketing, public relations, and development. Experience and networking are important; sit in on relevant classes and consider volunteering and/or interning at campus and local institutions. Any experience that you have with web design, K-12 and non-academic education, and general outreach will be valuable.
Academic libraries and archives are an excellent fit particularly for PhDs who have experience working with historical records and/or archival research. A PhD in a relevant discipline, combined with experience drawn from your own research, is often an acceptable substitute for an MLS or similar degree in informational science. Many institutions will encourage you to pursue an MLS degree upon hire; also consider the possibility of pursuing one in tandem with your PhD. Consult with your subject librarian and/or Special Collections; work experience, either paid or volunteer, will also be beneficial, especially without an MLS. The associations below post jobs on their websites; mailing lists such as EX-LIBRIS also post positions with libraries, archives, and rare book sellers. Any experience with digital humanities, web design, and community outreach will be highly advantageous.

American Library Association
Association of College & Research Libraries
Library List-servs
Rare Books and Manuscripts Section of the ALA
Society of American Archivists

Museums / Galleries
Museums often hire historians as education directors, grant writers, curators, and executives. Museums look for people who not only have a knowledge of the museum’s primary focus (history, art, music, science, material culture, etc.), but also have experience with K-12 education and public outreach. It’s important to have a deep knowledge of your subject and of research methods, as well as an ability to communicate well with a non-academic audience. Working as a docent as the Snite Museum on campus or in one of South Bend’s museums (like the Center for History) will be helpful. If possible, sit in or enroll in a few courses in conservation, material culture, web design, and/or curatorial design. Grant writing, networking, and fund raising skills are also important; consider positions not only in outreach and education and exhibit development, but also in marketing and public relations.

American Alliance of Museums
American Association for State and Local History
American Cultural Resources Management
American Institute for Conservation of Historic and Artistic Works
ArtJobs
College Art Association (membership required to search job database)
Global Museum
Museum Jobs Online
CONSULTING

12. CONSULTING (H-SS-STEM)
Consultants work with clients on a range of strategic issues, helping develop solutions to problems and improve results. Consulting is a demanding field, often with extensive travel obligations and heavy workloads. Informational interviews and networking will help you decide whether it is a good fit for your skill set and your goals.

PhDs can be an excellent fit for consulting. Consulting work gives you the opportunity to conduct research in a wider range of fields than an academic research position, and also makes use of your analytic, writing, and presentation skills. Your tasks will be varied and change frequently. Many consulting firms provide extra support and training for PhDs to ease them into the business world; this could be in the form of an intensive in-house training or support for an MBA. More specialized consulting positions, such as in IT or environmental or educational consulting, will draw even more heavily on your research background and, more importantly, on your methodological experience. Experience with statistical modeling, writing, presentations, advanced mathematics, and IT are all helpful.

Careers After the PhD: A Primer on Consulting
Caseinterview.com
McKinsey FAQs for PhDs
McKinsey Insight Program
The Science Careers guide to consulting
WetFeet

IT consulting
IT Consulting can focus on helping companies adapt their IT infrastructure with their needs and goals; implementing e-commerce tools and web design; helping companies develop biometric and other high-tech security measures. One of the primary jobs of the IT consultant is to help companies implement new software and/or hardware systems, or to help two companies merge their systems. Most of the large consulting firms have IT strategy groups; there are also smaller firms that focus specifically on IT consulting.

Caseinterview.com
McKinsey Insight Program
WetFeet

Environmental consulting
Environmental consultants work with organizations to solve problems relating to how humans interact with the natural world. Consultants work on issues such as air and water pollution, industrial planning, civil planning, process engineering, wildlife impacts, environmental health assessments,
waste and water treatment, construction, and regulatory compliance. Some organizations have in-house environmental consultants, but many hire outside professionals to advise on particular projects and initiatives. Any organization that might be affected by environmental statutes, or have high resource consumption profiles, whether governmental or private, will benefit from an environmental consultant. Some organizations hire consultants to help develop plans to improve the sustainability of their practices, despite not needing to comply with specific regulations.

The common backgrounds for environmental consultants are biology, chemistry, geology, engineering, and environmental studies. It is also a good field for those who work in environmental policy, law economics, mathematics, computer sciences, and sociology. It’s a multidisciplinary field, and so you need a broad knowledge base, the ability to think as both a generalist and a specialist, and field experience.

There are positions available with firms that specialize in environmental consulting alone, but larger organizations that specialize in engineering, analysis, and management will also have environmental consulting positions. Recommended companies include Booz Allen Hamilton, SAIC, TetraTEch, Dewberry and Davis, and Battelle. Internships and practical experience will be invaluable, as will knowledge of statistics and programming languages, and excellent writing and presentation skills.

A career as an environmental consultant
Environmental consulting career advice
Education & Career Guidance in Environmental Consulting
The Scientific Consulting Group

Management consulting
Management consulting seeks to help organizations improve performance by providing guidance to management. Management consulting often focuses on organizational issues and leadership, alongside systems and marketing analysis. Management consultants generally work with businesses, but also can work with governmental agencies and nonprofits. Management consulting can be divided into more specialized categories, including strategy, accounting, IT, internal consultants, independent consultants, and smaller specialties like pharmaceutical or sustainability consulting. When conducting your job search, focus on your skills and the career you envision: if you are interested in a more high-powered career, a place with one of the big strategy consulting firms would be a good fit. For PhDs, a more specialized position within larger firms, or a career with boutique firms, or as an independent or internal consultant is often a better fit.

CaseInterview: What is Management Consulting?
Management Consulting and the Consulting Industry 101

Strategy consulting
Strategy consulting helps organizations achieve their overall mission and maximize their profits. It focuses on analyzing profitability and competition in the light of the key issues facing a company across a broad range of industries, helping corporations develop and adapt their strategic plan. As a strategy consultant, you may focus on growth, business unit strategy, larger corporate strategy, an overall plan for product development, and helping a corporation reach emerging markets. Strategy consulting is broader than other types of consulting and strategic consultants tend to work more
closely with a corporation’s top leadership. The major consulting firms—Bain, McKinsey and Company, Booz and Company, Deloitte Consulting, BCG—are the key strategy consulting firms. As with other branches of consulting, internships, networking, and interviewing are key to a successful career. Focus on your technical and research skills and expertise alongside your ability to write and present well, and to analyze and synthesize information.

**Bain: Strategy Consulting**
**Bain Brussels: what is strategy consulting?**
**CaseInterview: Strategy Consulting**
**EMH: What does a strategic consulting firm actually do?**
**PhD Career Guide: Consulting**
**Strategy consulting vs. financial advisory consulting**

*Education consulting*
While the education consulting industry is relatively small, it is gaining in importance. As an educational consultant, you may find a position within the nonprofit arm of a major consulting company (such as Bain), with a small, specialized firm (such as PCG Consulting), or you may work as an independent consultant. As an education consultant, you may work directly with institutions of higher education, or with students and parents as an applicant advisor or a consultant on navigating school systems in the US and abroad. Another niche market is academic consulting for PhDs and/or professors who want help managing their career, or who are looking for help in transitioning to alternative careers.

**CaseInterview.com**
**Independent Educational Consultants Association**
**McKinsey Social Sector**
**PCG Group**
**Wetfeet**

*Government + political consulting*
Government agencies often hire outside consulting firms to advise them on a range of issues, from management and strategy to more specific help with IT or scientific and environmental analysis. The large consulting firms are one place to look for a career working with government, but smaller, boutique firms will be a good place to look, either in major cities or in state capitals.
Political consulting focuses on political campaigns. Political consultants specialize in media as well as campaign strategy, opposition research, field strategy, and platform development. Your expertise in analyzing data, writing and presentation will be helpful, as well as any experience with social media, population research, data analysis, economics, and IT. The obvious field is political science, but any PhD has skills that are transferable. Field experience is invaluable; considering completing internships while working on your degree.

Political consulting agencies may focus specifically on one state or on national campaigns. You may find a position working with an agency, as an independent consultant, or with a PAC. There are increasing opportunities for international political consulting, especially working with the formation
of new governments. A background in history and multinational constitutional and political history is helpful for these kinds of positions.

American Association of Political Consultants (includes networking opportunities and job listings)
AvueCentral
Campaigns and Elections
HillZoo
Economist article on international political consulting
International Association of Political Consultants
LinkTank: DC Jobs & Internships
PoliticalConsulting.info
The Society of Professional Consultants
PACs by Industry
Women in Government Relations Job Listings

BUSINESS / FINANCIAL SERVICES / OPERATIONS

13. ENTREPRENEURSHIP (H-SS-STEM)
On the most basic level, entrepreneurs identify needs and develop solutions to fill them. Your entrepreneurial interests can range from business and for-profit initiatives to non-profit and social good ventures. The key transferable skills that you will develop in graduate skill include innovation, comfort with risk, and the ability to work independently.

Notre Dame’s Gigot Center for Entrepreneurship is a good place to begin developing your plan. It provides a range of opportunities to help you, from developing your business model to networking and mentoring, angel investment possibilities, and advice for start-ups.

All Business
InsideHigherEd advice series on entrepreneurship
Minority Business Development Agency
National Minority Business Council
Office of Women’s Business Ownership
Online Business Advisor
SCORE (Service Corps of Retired Executives): Provides advice and mentoring from retired and prominent executives to those working on developing their own start-ups. Also offers webinars, online workshops, and local workshops and events.
Small Business Administration
StartupJournal
The Professor is In: Small Business Ownership
VentureWell: A higher education network that focuses on developing student entrepreneurs through education and grants.

14. FINANCIAL SERVICES (STEM-SS-H)
Financial Services is a particularly good fit for PhDs with high-level training in quantitative research and programming skills, such as math, sciences, social sciences, engineering, and computer science
graduates. Roles include sales and trading, quantitative research, risk management, valuation modeling, product development, fixed income research, equity research, and risk assessment. Many of these jobs are grouped under financial engineering and risk management, and involve the development of mathematical models for pricing and risk measurement, developing quantitative tools, and/or the development of software and system frameworks for analytics, risk measurement, and valuation.

If you have exceptional analytic, problem-solving, and quantitative skills—particularly if you are strong in statistics, probability theory, stochastic calculus, software design and development, and numerical analysis—there is a broad range of career opportunities for you.

American Finance Association
American Association of Finance and Accounting
Association for Financial Professionals
Careers in Business
Ellevate Network: Networking and support for women in finance.
Financial Management Association International: Includes support and guides for PhD students.
Glass Door
JP Morgan Careers for PhDs
New York Society of Security Analysts: Provides excellent general information; there are similar societies for different geographic regions.
Seeking Alpha
Wetfeet Guides

15. ACTUARY (STEM-SS-H)
Actuaries specialize in risk management. Traditionally they work in the insurance industry, specializing in life, health, property and casualty insurance. They also work for organizations to develop their pension and retirement plans, and in financial services, transportation, energy, and environmental organizations. They are key players in developing regulations and legislation for governmental agencies such as the Department of Labor and Social Security. Actuaries can work independently as consultants, or permanently within an organization’s structure. While there are graduate programs in actuarial science, if you have a degree or expertise in math, statistics, economics, or finance, you are well prepared, as this career requires, above all, excellent mathematical and analytical skills. In order to join the Casualty Actuarial Society and/or the Society of Actuaries, you must pass an exam. Both organizations have extensive resources available on their websites.

Be an Actuary
Casualty Actuarial Society
Society of Actuaries

16. OPERATIONS MANAGEMENT (STEM-SS-H)
Operations management involves overseeing a company’s infrastructure, or all of the activities that contribute to a company’s business. Traditionally this has meant primarily manufacturing supply chains, but it now encompasses manufacturing, tracking systems, order fulfillment, customer service,
purchasing, and communications. Some industries are more operations-intensive than others; these include transportation, banking and financial services, food services, social media, retail, telecommunications, health care, and manufacturing. An operations manager helps determine the location of a business, its organizational structure, its employment policies, accounting practices, and marketing practices. S/he chooses vendors and organizes transportation and supply chains. The most important qualities are the ability to synthesize information, see the big picture, and lead diverse groups of people well. An operations manager might be hired to oversee all of a company’s operations, or to work on a particular operational subset, such as customer service. While a graduate degree is often necessary to reach the highest levels of management within an organization, experience—not only in operations, but within the organization itself—is key. You can also pursue certification in operations management through APICS. Engineers are particularly well-placed to work in operations management, as in anyone with strong math and science experience, but industry background and interest, combined with analytical skills, can also help you secure a position. When looking for a position, contact companies directly and pursue networking opportunities.

APICS
Harvard Business School Operations Management Blog
“How 5 Operations Managers Got Their Start”
Production and Operations Management Society
WetFeet Career Overview

17. USER EXPERIENCE (STEM-SS-H)
“User experience” (UX), according to the Nielsen Norman Group, refers to all aspects of the end-user’s interaction with an organization, its services, and its products. User experience seeks to meet the customer’s needs, but in a way that is simple and pleasant, and that brings together engineering, marketing, industrial and graphical design, and interface design. Usability and user interface design are part of the user experience, but the total user experience is broader. UX takes into account what users need and value and what their limitations and abilities are. It also considers the goals and overall objectives of the organization. There are subsets of UX that are central to its implementation: project management, user research, usability evaluation, information architecture, user interface design, interaction design, visual design, content strategy, accessibility, and web analytics. There is no one path into UX. As with similar fields, experience and networking are key, but a familiarity with programming, visual and information design, and psychology and behavioral science are crucial assets. There are numerous certification courses in UX basics that may be helpful, but most of all any experience that you have—working on your departmental website, helping out a friend with a project or a business—will be key to developing a career.

How to Get Started in UX Design
“Know Your UX Hats”
Nielsen Norman Group
The UX Psychologist
Usability.gov

18. HUMAN RESOURCES (H-SS-STEM)
Human resource managers plan and coordinate an organization’s administrative functions. They oversee hiring and recruitment, are key players in strategic planning, and liaise between management and employees. They work in almost every industry. Some human resource managers oversee all related issues within their organization, while others, particularly in large organizations, work within a specialty group such as compensation, benefits, talent acquisition, or as an HR generalist. Related work experience is important; pursuing administrative and organizational opportunities while in graduate school will be helpful. Courses in areas such as sociology, gender studies, communication, and psychology may be helpful. Key is excellent leadership and analytical skills alongside good interpersonal skills and an ability to adapt quickly to situations and needs.

**Association for Talent Development**
**HR Certification Institute**
**Human Resources Career Resources** (list of links from Marquette Law School; scroll down for human resources)
**Society for Human Resource Management**

19. ORGANIZATION DEVELOPMENT (SS-H-STEM)
Organization Development develops plans for organization-wide increased effectiveness by focusing on organizational “processes” and using behavioral science. These human system processes are formal and informal, and the organizational development expert identifies organizational climate and culture in order to develop organization-specific strategies to improve strategic planning, organization design, leadership, diversity, team and performance management, and work/life balance. Organization Development is grounded in core values that include collaboration, respect and inclusion, authenticity, self-awareness, and empowerment, and it is informed by data, theory, and analysis. If you are interested in people as well as in theoretical and analytic approaches to interactions and organizations, then OD would be an excellent fit. A background in psychology, sociology, and/or behavioral science will be most helpful. Many organizational development consultants work with larger consulting firms, as well as in-house organizational development specialists for businesses, hospitals, universities, and non-profits. Consulting and training experience are a plus.

**APA Profile: Organizational Development Consultant**
**Careers after Grad School: organization development**
**Organization Development Network**

20. PROJECT MANAGEMENT (TECHNICAL / PROGRAMMATIC) (STEM-SS-H)
Project management works to successfully complete a specific goal, focusing on the variables of cost, time, and quality; positions are particularly available in biotech, pharmaceutical, programming, and manufacturing. A PhD is excellent preparation for project management: the successful completion of a dissertation is an exercise in project management and often gives you experience working with a budget, perhaps delegating, and working within a time frame. Project management also requires excellent interpersonal skills as you identify stakeholders, motivate them, and align their interests and your goals. Technical and business experience is valuable; project managers often transition from another job in an industry—research and development, sales, or tech services, for example—to a position in project management after a few years. Many companies hire project
managers internally, choosing employees who demonstrate the ability to work within a group and to lead initiatives. This kind of experience is more highly valued than course work in project management. One path to experience is through joining a project management organization for its networking opportunities and advice.

There is sometimes a difference between internal project managers who lead projects that they initiate (such as internal scientists in biotech and pharmaceutical companies), and professional project managers who focus on timelines, budget, and regulatory requirements. The latter might be particularly well suited to grad students without a background in science or engineering.

BioCareers
Careers after Grad School: project management
International Project Management Association
PhD Career Series: Product Management
Science Careers Forum: Project Management
Science Mag Careers: Project Management
The Project Management Career Track
WetFeet Career Overview

21. INDUSTRY (STEM)
A position in industry allows you to continue research outside the academic environment. Some postdoc experience may give you an advantage; industry positions are highly competitive, and you will need to use your online and in-person networks. Think broadly about the types of industry jobs for which you are qualified: biotech, engineering, and software/hardware development are popular, but industries such as cosmetics, energy, textiles, and food need research and development scientists.

“How to get a job in industry after your PhD”
What life is like for PhDs in computer science who go into industry

Pharma / Biotech
Nature Jobs
Science Jobs
MedZilla
BioSpace
BioCareers

Physical Sciences / Engineering
IEEE job database
American Council of Engineering Companies
MaterialsJobs
American Chemical Society jobs
Optics and Photonics jobs

22. PHARMA / BIOTECHNOLOGY (STEM)
Careers in pharma / biotechnology include research and development as well as business development, regulatory affairs, and as medical science liaisons. Research and development positions include the initial development and screening of compounds and new drugs to clinical research jobs that involve human testing. Process development focuses on the manufacturing process; engineering backgrounds are helpful for these positions. Business development focuses on licensing, acquisition, and business partnerships, and doesn’t necessarily require a PhD in a science field so much as an ability to network, make presentations, and identify opportunity and analyze valuation. Regulatory Affairs specialists interact with government agencies and oversee the submission of investigational new drug applications and marketing applications. Medical science liaisons form relationships with the medical community to ensure that needs are being met on both sides of the relationship. Field application scientists demonstrate products and equipment; this position is an excellent fit if you’re interested in sales and customer support. An academic postdoc in a well-regarded lab will be an invaluable advantage even when seeking a career in industry. For positions with larger companies, look at the “Careers” section of their website. For smaller companies, it is particularly useful to contact them directly to express your interest and to discuss possible openings with them.

BioSpace
BioCareers
MedZilla
National Institutes of Health
Nature Jobs
Q&A: PhD entry into pharma
Science Jobs
Science Careers Q & A (scroll down)

23. SALES (STEM)
Sales is an excellent career for scientists and engineers who enjoy interacting with people and traveling. Sales representatives for biotech companies and lab instrument manufacturers usually have PhDs so that they can adequately explain their products and understand the needs of their customers. If you have extensive experience with any particular technology, you will be an especially attractive candidate. Sales representatives often work directly with customers to design experiments that will determine whether products will meet their needs, and to devise ways to reduce time and cost. They also provide feedback within the company to help design and adapt technology to meet research needs and developments.

Sales positions require industry experience of some sort; many graduates transition into sales by first working as a field application scientist or in product management. Traveling is extensive, and hours are long. But it is a career that can offer flexibility and variety along with a good salary and opportunity for advancement.

“Have PhD, Will Travel”
Laboratory equipment
List of biotech companies
List of pharmaceutical companies
24. SCIENCE POLICY (STEM-SS)
Science policy is the link between research and public policy, and is a good career for those who are less interested in working in the lab and more interested in the ramifications of research. While many of the positions are with government agencies, there are also numerous possibilities with foundations, associations, universities, and corporations. Key areas are economy, environment, defense, and science education; with the rise of biotechnology, there are numerous opportunities to bring together an interest in science, public policy, and ethics. Internships are an excellent first step into policy, but there are several fellowships available to help you transition from research to policy.

AAMC Careers in Science Policy
Policy Fellowships (American Association for the Advancement of Science)
Presidential Management Fellows
“Paths to Science Policy”
Stanford CISAC Fellowships

25. SPATIAL ANALYTICS + GEOSCIENCE (STEM)
Geospatial analysis as a career track has several sub-sectors: military (Geospatial Intelligence Agency, CIA, DoD); environmental (EPA, Nature Conservancy, NGOs, consulting); retail/commercial real estate; local and state government agencies (working to create and maintain a GIS system for tax collection, utilities, and code enforcement); urban planning; geohealth (CDC, NIH, hospitals). As these careers vary widely, choose a few sub-sectors to concentrate on and develop relevant skills. No matter what you choose, cartography and GIS courses, as well as data visualization will be invaluable. Internships and hands-on experience with software will be invaluable. If you have a background or emphasis in statistics, you can pursue a career as a spatial statistician.

With a background in geoscience, you can also pursue careers in oil and gas, mining, mass transit, “clean” technology and energy, and environmental consulting. This field pays well and there are numerous opportunities; a 2011 study predicted an extreme U.S. workforce shortfall by 2018. Experience is valued more than the PhD for many of these jobs, but if you’re interested in Research and Development, the PhD is the entry point. There are many positions available with the federal government (USGS, NOAA, NASA, NCAR, NREL, EU), state and local governments, national labs, and consulting.

American Geophysical Union: career opportunities beyond the PhD (be sure to click through to the webinar slides and the Q&A)
American Geosciences Institute (offers career resources with advice, webinars, reports, and job listings)
BP: Geoscience Careers
“Geospatial Visualization in Business”
“Spatial Career Guide – How to Become a Geospatial Analyst”
“Spatial Career Guide – Spatial Statistician”
The GIS Job Market (international job listings)
26. TECHNOLOGY TRANSFER (STEM)
Technology transfer helps researchers transform their ideas into products. Most research universities and hospitals have their own technology transfer office to support researchers in patent applications, product licensing, and start-up development. Biotech and pharmaceutical companies often have their own technology transfer offices as well. This career is particularly suitable for PhDs in science and engineering.

Association of University Technology Managers
Notre Dame Office of Technology Transfer

27. PATENTS AND INTELLECTUAL PROPERTY (STEM)
Patent agents and scientific advisors at IP law firms advise on matters of due diligence, litigation, opinions, and patent drafting and prosecution. Advanced degrees are required; law degrees are not, though often firms will pay for law school. (A law degree will be particularly helpful if you want to transition from a law firm to a commercial company.) This career will expose you to a broad range of cutting-edge technology and research. If you are considering this career, you may want to work with a technology transfer office for exposure to the type of work that you would do as a patent agent / scientific advisor.

“From bench to bar: careers in patent law for molecular biologists”
Intellectual Property and Patents jobs
BioCareers.com Guide to Patent Law
Martindale

GOVERNMENT

28. LOCAL, STATE, + FEDERAL GOVERNMENT (H-SS-STEM)
NB: U.S. citizenship is requisite for most federal government jobs.
The federal government is the largest employer in the U.S., and offers a broad range of careers for PhDs with humanities, social science, and STEM backgrounds. STEM PhDs are often hired in international development, biotechnology, systems design, the Department of Defense, NASA, the Departments of Transportation and Agriculture, and the Department of Health and Human Services and the Centers for Disease Control. PhDs with critical language skills, such as Arabic, Farsi, and Chinese, are in demand at the Department of State, the NSA, and the CIA. The National Parks Service hires scientists and historians alike. State and local agencies hire for similar positions. The federal government hires many PhDs; recent graduates will most likely be hired into GS level 11 or 12 positions.

The federal hiring process is complex. USA Jobs is the official employment site; it is critical to attend workshops on the hiring process, and, if possible, to have a federal employee review your application. For state and local governments, look on the official employment website for states, counties, and cities. Review the Beyond Academe site for helpful information on positions within local and federal governmental agencies and foundations for public historians (not just of American
An excellent opportunity to transition to a governmental career is through the ACLS Public Fellows program (deadline for application is in the spring).

**ACLS Public Fellows**

Beyond Academe (scroll down for section on government jobs)

“Breaking Into Government: The Pathways Program”

Centers for Disease Control and Prevention

CIA

Environmental Protection Agency

FBI

Food and Drug Administration

Go Government (guide for apply for federal jobs)

NASA

National Endowment for the Arts

National Endowment for the Humanities

National Institutes of Health

National Security Agency

National Science Foundation

Partnership for Public Service

Pathways: Site for students and recent graduates to look for federal government jobs.

Presidential Management Fellows Program

USA Jobs: The comprehensive list for jobs with the federal government and armed forces. Includes consulting jobs.

Department of Agriculture

Department of Defense

Department of Energy

Department of Health and Human Services

Department of the Interior

Department of State

Department of Transportation

**RESEARCH / PROFESSIONAL INVOLVEMENT**

**29. RESEARCH (H-SS-STEM)**

There are myriad contexts in which graduate students can utilize their research skills. Think tanks and research centers often hire PhDs; other sectors include education, publishing, nonprofits, government agencies, start-ups, health organizations, and financial institutions. You can perform program evaluation, fundraising research, market research, public opinion research, and historical or scientific research and consulting. Begin your search by looking in a particular field or industry (such as health care or think tanks). Governmental agencies such as the Senate Historical Office, the Naval Historical Center, the Department of State Office of the Historian, and state offices hire researchers. Institutional researchers research the internal workings of an organization to answer questions about productivity, accessibility, recruitment, or attrition; a good place to begin with IR is by visiting the university’s IR office. Another possibility is freelance genealogical research, which is particularly well-suited to those with experience using archives and documents.
30. PROFESSIONAL ASSOCIATION LEADERSHIP (H-SS-STEM)
A career in professional association leadership could mean working for a professional organization, such as the American Academy of Pediatrics or the American Library Association, or for a scholarly organization like the Modern Language Association. There are thousands of philanthropic and charitable associations with positions, alongside professional societies and trade associations. Jobs include administration, communications, component relations (working with subgroups such as chapters, councils, societies), education, finance, public policy, international activities, membership, marketing, and organizing meetings and conventions. The primary requirements are excellent planning, coordinating, and communication skills. If you’re interested in an association with international contacts, secondary language knowledge is key. Financial management, public relations, and design are also good directions.

The Center for Association Leadership (includes job listings)
“Through the Maze: Careers in Association Management”

WRITING / PUBLISHING

31. WRITING (FREELANCE, JOURNALISM) (H-SS-STEM)
A writing career encompasses freelance writing for journals or websites, translation, technical writing for different industries, and more. The obvious employers include newspapers, television, and popular journals and magazines such as National Geographic and Nature, but the more prominent the venue, the more difficult it will be. Websites usually pay little or nothing for content. Freelance is often the first step to a writing career, usually on your own blog and for other sites that offer content similar to your chosen focus. If you’re interested in technical writing, look for opportunities at software, healthcare, pharmaceutical, and biotechnology firms.

“10 Ways You Can Become a Successful Biotech/Science Freelance Writer”
“A Manifesto for the Freelance Academic”
Beyond the PhD: Freelance Writer
From PhD to Life: Freelance
“Getting Started: Science Writing”
“Health Careers for Humanities Scholars”
“How a scientist becomes a freelance science writer”
PhD Career Guide: Writing
“To Write or Not to Write”
VersatilePhD: Writing / Editing

32. WRITING AND PUBLISHING (SCIENTIFIC, MEDICAL, OR TECHNICAL) (H-SS-STEM)
An excellent career for those with strong writing skills combined with research skills. There are a number of possible venues, either as a freelance or staff writer: scientific journals, medical writing companies, and technology companies. Academic and technical journals are particularly interested in hiring PhDs as editors, but PhDs are also hirable in a wide range of marketing, production, design, and business positions in a variety of publishing niches. Look also at individual company and organization websites for internal positions.

American Medical Writers Association
“How a scientist becomes a freelance science writer”
National Association of Science Writers
Nature Jobs
VersatilePhD: Writing / Editing

33. ACADEMIC PUBLISHING (H-SS)
Academic publishing comprises journal and monograph publication. Journals can be disciplinary or multidisciplinary, and can be published by an independent organization or through an academic/university press. Academic publishing is an excellent way to stay connected to research, whether as a copy-editor, collections supervisor, or acquisitions editor. Other positions with academic presses include marketing and communications.

Academic presses are primarily associated with universities, though there are other academic presses such as Boydell and Brewer that operate independently. Budget cuts have deeply affected university presses, and changes in publishing mean that any experience that you may have with digital humanities and communication will be an asset as academic presses diversify their offerings to include digital and open access publications.

Experience is invaluable; it will be helpful to work for an academic journal while a graduate student (usually through your department or an advisor), or to work as an editor for a graduate journal. If possible, an internship with a press (or two) will give you the experience necessary for the first job as well as networking opportunities.

Association of American Publishers
Association of American University Presses: Lists jobs as well as career advice and resources.
Explore the World of Professional and Scholarly Publishing
PhD to Publishing: The experiences of one graduate student.

34. NON-ACADEMIC PUBLISHING (H-SS-STEM)
Non-academic publishing takes many forms. It encompasses “trade books” and “consumer magazines” ranging from The New Yorker to National Geographic. PhDs are qualified for the writing and the publishing / managerial end of the industry: you can work in editorial, management, marketing, production, design, IT, business, and sales positions, or work as a staff or freelance writer, drawing upon your area of expertise and your ability to research and synthesize information. (A caveat: many websites pay freelance writers very little, so plan accordingly.)
35. HIGHER EDUCATION ADMINISTRATION (H-SS-STEM)
There are a wide range of administrative positions at liberal arts colleges, universities, and community colleges, including teaching and writing centers, research and public affairs offices, and academic and student affairs. The types of positions available include communications and development, residential life, international student affairs, career services, and academic advising. The first place to look is institutions’ human resources website. Administrative positions are also advertised on the following websites:

- The Chronicle of Higher Education
- Academic Careers Online
- HigherEdJobs
- Here Higher Education Recruitment Consortium
- Academic 360
- “So You Think You Want to Be An Administrator?” Finding Jobs in Student Affairs

36. SECONDARY SCHOOL TEACHING (H-SS-STEM)
Private and charter schools are a good option for PhDs because they generally do not require certification. However, some public school systems offer the possibility of certification whilst teaching, and programs such as Teach for America and ACE offer the option of certification. The New York City Teaching Fellows Programs recruits for public schools and provides quick certification. Experience with students is one of the most important requirements for secondary and independent school teaching. If you have not had much classroom experience, you can substitute or tutor at local schools, or teach at a summer program at an independent school. The National Education Association will have links for each state’s union website; from there you can find information for specific school districts. Union leaders can give you information about the regulations and opportunities specific for each state and district. Speaking with local principals will also be helpful.

- Carney, Sandoe & Associates
- Math for America
- National Association of Independent Schools
- National Council for the Social Studies
- National Education Association
- National Science Teachers Association
- Public Charter Schools
- “Teaching History in Independent Schools”
  “Teaching at a Prep School” advice series
37. INDEPENDENT SCHOOL TEACHING (H-SS-STEM)
Private and charter schools are a good option for PhDs because they generally do not require certification. However, some public school systems offer the possibility of certification while teaching, and programs such as Teach for America and ACE offer the option of certification. Experience with students is one of the most important requirements for secondary and independent school teaching. If you have not had much classroom experience, you can substitute or tutor at local schools, or teach at a summer program at an independent school.

Carney, Sandoe & Associates  
“Land your dream job at a private school”
Math for America
National Association of Independent Schools
National Council for the Social Studies
National Science Teachers Association
Public Charter Schools
“Teaching History in Independent Schools”
“Teaching at a Prep School” advice series

38. INTERNATIONAL SCHOOL TEACHING (H-SS-STEM)
International schools, based on an Anglo-American model of instruction, are usually geared toward the children of diplomats, aid workers, and other expatriates. They often provide housing, relocation costs, health insurance, and annual trips back to your home country. While many of them do require teaching certification, it is worth contacting individual schools as well as recruitment agencies; a PhD and teaching experience are often adequate. International schools have traditionally conducted interviews at large recruitment fairs, similar to the MLA or AHA, but are now turning more often to Skype.

The US State Department provides a list of recruitment agencies and international schools with whom they work. There are also numerous English schools in Asia that provide the opportunity for certification while teaching. International Baccalaureate schools offer another option: after teaching within an IB program for a certain number of years, you have the opportunity to transfer to another IB school worldwide. International Baccalaureate also offers career opportunities in development and administration.

International Baccalaureate
International Schools Services
TES (lists jobs and advice for teaching internationally)
The International Educator
“Want to get a job as an international school teacher abroad?”
US Department of State Information
US Department of State Recruitment Agencies

OTHER RESOURCES
(This list is far from comprehensive)
Beyond Academe: Resources and advice for humanities PhDs, with an emphasis on historians.
From PhD to Life: A list of resources for humanities and STEM PhDs.
#altac-ademy
Science Careers Forum
Sources for Alternative Careers for Historians (good for all humanities students)
The Professor is In Post-Ac Advice
The Versatile PhD

List of links
1. http://centerforsocialconcerns.nd.edu/
2. http://kellogg.nd.edu/
3. https://irishimpact.nd.edu/about/
8. https://netimpact.org/
11. https://www.se-alliance.org/
17. http://www.nationalhumanservices.org/
20. https://www.aamc.org/students/research/phd/career_paths/152218/government_agencies.html
21.http://www.fda.gov/AboutFDA/WorkingatFDA/FellowshipInternshipGraduateFacultyPrograms/OfficeofPolicyandPlanningInternshipProgram/default.htm
23. https://www.whitehouse.gov/administration/eop/ostp
25. http://www.naspaa.org/students/resources/journals.asp
27. http://publicservicecareers.org/
29. http://library.uoregon.edu/govdocs/apd.html
33. http://gotothinktank.com/
34. http://www.state.gov/m/fsi/tc/79982.htm
35. https://en.wikipedia.org/wiki/List_of_think_tanks_in_the_United_States
82. http://www.aaslh.org/
84. http://www.conservation-us.org/
85. http://artjobs.artssearch.us/
89. http://www.museumjobsonline.com/
91. https://www.nyfa.org/
92. http://www.si.edu/
95. http://www.preservationnation.org/
98. http://www.ala.org/acrl/
100. http://rbms.info/
101. http://www2.archivists.org/
102. http://www.aam-us.org/home
106. http://artjobs.artssearch.us/
111. https://www.nyfa.org/
112. http://www.si.edu/
117. http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2014_09_03/caredit.a1400222
120. http://www.mckinsey.com/careers/your_career/mckinsey_on_campus/insight_engineering_and_science
122. https://dynamicecology.wordpress.com/2014/07/03/a-career-as-an-environmental-consultant-guest-post/
166. https://www.ellevatenetwork.com/
175. https://www.soa.org/member/
177. http://hbswk.hbs.edu/topics/operationsmanagement.html
186. https://www.td.org/
203. http://www.nature.com/naturejobs/science/
204. http://sciencecareers.sciencemag.org/