

# 11 Alternative Careers For PhD Students

Considering alternative careers for PhD students? One of the most difficult decisions for any [PhD student](#) is whether or not to pursue a career in [academia](#). In order to make this decision, you first need to understand what other alternative careers for PhD students are out there.

There was a time when most students pursuing a PhD would find themselves in [tenure track](#) teaching positions, making any other option an “alternative” career path.

Today, tenure track positions are very difficult to come by for even the most brilliant of candidates. Most PhD graduates find themselves asking the question “what do I do now with this degree?”.

Beyond the low supply of available academic positions, more graduates than ever are committing the crime of not even considering a career in academia after considering their interests and career goals.

Since the employment landscape has shifted significantly, it is good to rethink any bad feelings associated with “alternative” careers. The days of thinking that all PhDs should want to become professors are long gone.

For PhD students who want to follow an alternative career path, there are a surprising number of options.

## Considering Alternative [Careers](#) For PhD Students

Unlike other professional programs, PhD programs tend to do a poor job of educating students in the specifics of what those options are. The blame for this is not entirely on [career services](#) departments, as many schools have ramped up efforts in recent years to reach out to students in PhD programs.

The students themselves must realize that the employment landscape has changed, and that exploring alternative careers for PhD students is not something to be left as an afterthought.

Many graduate students would love to focus just on completing an awesome thesis that is meticulous and complete. The reality is that very **few employers outside of academia will really care or know the difference between a perfect thesis and a good thesis.**

[What matters in industry is not the same as in academia.](#) Sad but true. Even for students that plan on pursuing the academic career, **completing a [dissertation](#) is a starting point more than an end point**, so towards the end of [graduate school](#) it is important to multitask and devote a significant amount of time to career exploration and networking.



Many students are still reluctant to openly express an interest in alternative careers outside academia in the fear that their PI will dislike them. It is time to realize that a student’s career is first and foremost their own responsibility, not their PI’s. An honest [conversation with a PhD supervisor](#) early on will more than likely open up the opportunity for them to serve as a networking resource instead of someone to hide ambitions from. Doubt may come from a general uncertainty about which nonacademic route is available or a good personal fit.

It can be much easier to say to a PI “I want to pursue a career in management consulting” than “I don’t know exactly what I want to do, but I know I don’t want to stay in academia”. One of the first and most important steps in pushing students to be more proactive in pursuing their careers is helping them to be more informed regarding which career options are actually out there. Here are some of the most common alternative careers for PhD students along with a brief description of what each career entails

## Consulting

The management consulting industry is actively pursuing PhD graduates alongside MBA graduates in reverence for the fact that most PhDs develop exceptional analytical skills over the course of completing their thesis project.

Management consulting generally involves assessing big picture problems, finding a way to meaningfully break them down using both quantitative and qualitative methods, and providing suggestions for the methods that will best address the problems.

Although there is a general requirement for mathematical competence, the larger firms tend to have specific business boot camp programs for incoming PhDs, so loading up on business classes beforehand isn't necessary.

## **Entrepreneurship**

It should go without saying, but who's to stop you from starting your own business?

If you have a great idea or product that addresses an open and unsaturated market, then there can be nothing more rewarding than rolling up your sleeves and addressing that need yourself.

If you are getting your degree in a technical field where there might be the opportunity to patent a product or method you are developing, then you may want to go out and try to build a business around it. It can be long hours, stressful, and risky, but the potential for both financial and personal rewards are sky-high.

## **Finance**

You may not have associated PhDs with the world of finance, but there are many opportunities that demand the technical expertise and quantitative skills that many PhDs have in spades.

Two of the most popular career options for PhDs in finance are in equity research and quantitative analysis. Equity research analysts cover a specific industry and analyze companies within that industry. They advise whether the stock of a company should be bought (value will increase), sold (value will decrease), or held (meh, value will likely remain the same).

[Quantitative analysts](#) tend to be handy in computer programming and will build programs to determine when and where transactions should take place.

A degree related to a specific industry will likely help in pursuing a position as an equity research analyst. However, quantitative analysis is usually not industry specific and will usually only rely on quantitative and programming skills to be a successful candidate.

## **Government**

If you are feeling particularly patriotic, there are plenty of positions available in which you will be able to serve your country. There is the option to enlist in one of the military branches and serve as a military researcher in your field of study. There is also the option to conduct research as a civilian government employee.

## **Law**

If your degree is in a technical field such as computer science, engineering, or one of the life sciences, many intellectual property law firms employ PhDs as technical specialists to review and compose patent applications.

Most firms will require technical specialists to become a certified patent agent within a year of employment, and some will even offer programs that allow you to complete law school part-time on the company's dime.

## **Pharma/Biotech**

There is the obvious option for life science and chemistry PhDs to pursue research and development positions within pharmaceutical and biotechnology firms.

There are also other alternative careers for PhD students that may be less obvious. Other positions within pharmaceutical and biotechnology companies that are open to PhDs include business development manager, regulatory affairs specialist, medical science liaison, and field application scientist.

## **Public Policy**

Are you fed up with government policy within your field of expertise? Why just complain when you can actively participate in the policy formation process and voice your concerns directly to the decision makers.

There are quite a few opportunities to serve as a technical advisor in your field of expertise through government sponsored internship and postdoctoral programs.

### **Sales**

For those who especially love meeting new people and a good dose of travel, a career in sales may be a good fit. Many companies that produce technically complicated products and instruments actively recruit PhDs to sell those products.

If you have extensive experience using any particular instrument or technology as a part of your dissertation research, you'll likely be an especially attractive candidate.

### **Technology Transfer**

Every research university produces patentable technology, and the technology transfer office is responsible for figuring out how to turn those technologies into products that can be commercialized.

The route for commercialization involves either out licensing to companies or developing new ventures, and there are opportunities for PhDs to be involved in these processes as a licensing associate.

### **Venture Capital**

If you have an entrepreneurial spirit but would rather not be tied down to one company's success, your calling may be to help other entrepreneurs build their companies into successful ventures.

As a venture capitalist you'll be responsible for identifying companies that you believe are likely to succeed after conducting due diligence. You will consider the management team, the validity of the technology and product upon which the company is based and the potential market and disruptive potential of the technology or product.

Although it's not an easy industry to break into, the rewards can be great, both financially and personally.

### **Writing**

Of course, anyone is free to try their hand at writing a novel, but PhDs are especially well suited to a writing career given the extensive experience throughout the dissertation process.

Chances are, there is some form of media that addresses your area of expertise, whether it is television, radio, newspaper, magazine, academic journal, or even a blog. If you studied a technical field, there are also opportunities to become a scientific or medical writer within a pharmaceutical or biotechnology company.

You can read more about these alternative careers for PhD students [here](#).

## **Are You Ready For a Non-academic Career?**

Putting all of these careers into one nebulous group called "industry" or "alternative careers for PhD students" fails to take into account the variety of these options. This may bring many students into the false sense that preparing for a nonacademic career is a one-size-fits-all proposition that can be accomplished in the few weeks before graduation.

As positions within academia continue to become more elusive, alternative career preparation will need to become more than a mere afterthought.

There are specific experiences, internships, and extracurricular activities that can be undertaken while doing a PhD that can prove to be vital in developing important skills and connections within a particular industry.

The earlier students are made aware of these options, the better able they are to pursue meaningful experiences. This is often the difference between a job offer and continued unemployment.