

## **Choosing Between Graduate Program Offers: A Practical Guide**

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#### **Abstract**

This paper offers practical advice to prospective graduate students about how to evaluate offers of admissions and make decisions about which graduate program is the best "fit" for the individual's interests, needs and goals. Specific decision criteria are described to help individuals evaluate both the personal and academic fit of each institution, along with advice for interpreting and comparing offers of financial assistance. While the specific focus of this paper is on comparing offers to graduate programs (Master's or PhD) in engineering in the United States, the general principles may be helpful for a wide variety of post-graduate applicants.

#### Introduction

A recent internet search on "making the choice between graduate programs" offered nearly 10 million results, with the "most relevant" options being a variety of blog posts and opinion articles. Such accounts have been published in popular media [1], [2] and by sites that focus on higher education [3], [4], and their content ranges from identifying the pros and cons of different MBA programs [5] to broader advice on identifying the right PhD program for those who seek careers in research, academia or industry [6].

Underlying all of these articles is a basic question, which comes towards the end of a graduate school search process: which of these offers is the right one for me? The answer depends on a number of factors that fall largely into two categories: Academic Fit, and Personal Fit. This paper discusses each of these areas in more detail, including questions that applicants should ask of their prospective graduate schools before making a final decision. Finances are also discussed; both the common types of support offered to graduate students in engineering and natural sciences, and the typical "start up" and recurring costs for which graduate students need to budget. Finally, this paper discusses how to actually make a choice between graduate program offers.

In ideal circumstances, applicants will visit each graduate program in person before making a final decision. For students applying to doctoral programs in engineering from within the United States, it is common for the school to invite admitted students to visit campus, with most or all costs paid for by the hosting institution. Frequently, this offer of a campus visit is included with the program admissions information; if it is not, applicants should inquire about provisions for campus visits before making their final decision. On-campus visits for Master's degree students and for students applying from outside the United States are somewhat less common, and costs may not be covered by the hosting institution. However, it is always appropriate for admitted students to ask about the possibility of a campus visit. If visiting is not possible, then the admitted students should ask to be connected with faculty and current graduate students from the program in order to ask questions. Video conferences, phone calls, and emails can all be

effective tools for admitted applicants to gain information about the culture of the campuses, graduate programs, and research groups they are considering.

#### **Academic Fit**

While prospective graduate students typically apply to schools based on their academic programs, once students have been admitted it is important to ask detailed questions about the academic "fit" in order to understand whether this is the right graduate program choice. The best "Academic Fit" is the institution that will allow you to pursue your research interests, meet your academic goals, and provides supportive mentors to assist you along the way.

In addition to determining whether the institution has the appropriate resources to help you meet your specific academic or research goals, it is also important to understand whether there are sufficient supports in complementary areas. For example, if you are pursuing interdisciplinary research or if your research success depends on access to resources outside your department, you want to find out whether there are strong collaborative relationships between these groups. In some institutions, it is common for graduate students to take courses outside of their department or college; in other programs, graduate students are not allowed to enroll in courses outside their major or college.

Another important question to answer during your visit or conversations is what kind of working environments (office, lab, classroom, etc.) are typical for graduate students pursuing the research or degree that interests you at that institution. Pursuing a graduate degree in engineering is different than being an undergraduate; many graduate students find that their research and coursework is more like having a job than being a student. Thus it is critical that you like the people in the research group or laboratory you are considering, and that you can work effectively in that environment. It's important to ask about practical issues, too: where do people typically work (at home, in the lab, in the library, etc.)? What are the typical "working hours" (8am-5pm, noon to midnight, etc.)? What expectations do the mentors have for their graduate students, and how accessible are the faculty when students have questions or need support?

Often, it is very helpful to ask these types of questions of several different people at the same institution. The answers that you get from faculty mentors may, or may not, match what you hear from the graduate students — and it is important that you have at least some time to talk with graduate students when faculty are not present. This is common during an on-campus visit, and can be easily arranged via phone or videoconference as well. Current graduate students are often the best source of information about what the academic and research environment is like at a their institution, and can help prospective students determine whether the school is a good academic "fit" for them.

#### Personal Fit

While many undergraduates select a college without ever visiting and end up quite happy and successful, when selecting a graduate program it is critical that you consider whether the institution and location will meet your personal needs for the 2-5+ years required for most graduate degrees. At its most basic, this question is about whether you will be happy living

there? Does the location offer the types of activities you enjoy? For instance, if you love surfing or warm weather, then a graduate program in a northern, land-locked state may not bet the best fit for you. Are there adequate resources available to meet your needs? Transportation options, arts and cultural events, sports and outdoor activities are all items that you may need to consider, depending on your personal needs.

Finding a supportive community is also a critical component of success as a graduate student. For some students, having opportunities to develop relationships with others who share similar religious, cultural, geographic or social backgrounds is important. The availability of student groups, study partners, social activities, medical care, and social services can also be critically important to your wellbeing and success as a graduate student. The impact on your (future) family is another key consideration for prospective graduate students: some students come to graduate school with partners and/or children; many others will acquire partners and/or children during their graduate studies. If these factors apply to your situation, then you may need to explore options for healthcare, family services, childcare, K-12 schools, and/or employment opportunities for your partner when deciding which graduate school to attend.

## **Estimating Expenses**

New graduate students are often surprised by the number of "start up" costs associated with moving to a new university and settling into a new town. For some, this is the first time in their lives that they have lived on their own, without support from family or roommates, and many new graduate students find that they are starting from scratch in furnishing an apartment. It often takes a few thousand dollars to get settled: moving expenses; housing deposit and/or initial rent payments; fees for setting up utilities; purchasing furniture and basic household items; bus passes and/or vehicle registration fees; and insurance (vehicle, renters) are just a few of the "start up" costs to expect.

In addition to these initial expenses, new graduate students must develop a budget for their recurring costs: tuition and fees; books and supplies; housing (rent, utilities); food and personal items; health insurance and medical care; transportation (bus passes, car payments, insurance, parking). It is also important to budget for fun: movies, meals with friends, concerts, travel, etc. All universities are now required to provide sample student budgets on their websites, and it is important for new graduate students to find and compare these documents for the "finalist" schools they are choosing between. It is critical to read and understand the "fine print" when reviewing these sample student budgets. Different schools have different definitions of student status (undergraduate, graduate or graduate-professional; in-state or out-of-state resident; international citizen or US citizen/permanent resident); each of these factors can significantly impact the costs for a student at that institution. So, when comparing sample student budgets from different institutions, be certain to consider the following factors:

- How many semesters or months are reflected in the sample budget? Does it cover school breaks and/or the summer months, or do I need to budget for those separately?
- Is the tuition rate reflected in the sample budget an accurate reflection of what I would pay, based on my residency and program level (Master's, PhD, etc.)?

- Are there additional fees for students in the graduate program that I'm considering that are not included in the sample budget?
- Does the sample budget include expenses for a vehicle?
- Does the housing estimate in the sample budget accurately reflect the typical rents I can expect to pay in that area of the country? What are typical utility costs in the area? (Remember to factor in the need to pay for winter heating in the northern states, and for summer cooling in southern states.)
- Is health insurance included in the sample budget? Many sample budgets now assume that university students will remain covered on their parents' health insurance until age 26, so do not include any health care costs for students or their dependents. If this situation does not apply to you, then the sample budget will need to be adjusted to reflect your own circumstances.

Another important expense to consider is personal taxes: most types of compensation provided to graduate students (fellowships, teaching assistantships, research assistantships, and others) are considered taxable income. Some universities will withhold tax payments for some types of compensation, while other universities leave it to the student to take responsibility for making estimated tax payments each quarter. In either case, it is essential that you read and understand the IRS (Internal Revenue Service) [7] documents that apply to graduate student income and to deductible educational expenses. Be sure to include estimated tax withholding or payments as you are developing your personal budget in order to compare different graduate school offers.

## **Offers of Financial Support**

Graduate students in STEM (science, technology, engineering, mathematics) disciplines are frequently offered financial support packages when they are admitted to an institution. Many institutions offer full funding to doctoral students, while funding opportunities for Master's degree can vary widely. The most common type of support is an "assistantship" that generally requires the student to do work (teaching or research) in return for a stipend. Assistantships frequently include other benefits as well, such as waivers of tuition and/or health insurance; however, it is always important to read the details of the offer letter carefully, and to review any documents or websites referenced in the letter.

One key benefit to an assistantship is that you are immediately connected to the faculty and department: as a teaching assistant, you will be working with faculty and/or other graduate students to help with instruction; as a research assistant, you will also have opportunities to work with faculty and researchers. However, there can be drawbacks: the work requirements can vary widely between institutions and appointments, and may not be equally divided across the semester (e.g., very little work at the beginning, a lot of work during midterm and final exams). Assistantship responsibilities also need to be balanced with your own coursework and thesis research requirements.

Graduate fellowships are another common type of support, and typically do not require "work" as a condition of receiving the funding. This can be helpful, particularly when you wish to focus on coursework or research activities, but fellowships may also have significant drawbacks: you may not be immediately connected to faculty within the department, and may need to find a

research mentor to support you with an assistantship once the fellowship ends. Fellowships also come in different formats, with different benefits, so it is important to read and understand the offer and to ask questions if you are uncertain what is covered.

Frequently, the source of a student's funding will change over time. In one semester or year, a student may be supported by a fellowship or assistantship, and in another semester or year the source and type of support may be different. Rarely are students admitted to graduate school with an unqualified guarantee of support: continued funding is generally contingent on the student meeting academic and research requirements in a timely manner.

There are a number of additional details that you may wish to ask about as you review offers of financial support:

- When am I expected to be on campus? (Many assistantships have work obligations that begin prior to the first day of classes in a semester, and may extend beyond the final day of classes.)
- How often would I be paid, and when would I receive the first payment? (You will need to have sufficient funds in reserve to cover your moving and living expenses until you receive your first payment.)
- When is my bill for tuition / fees / etc. due? (In some cases, you may need to pay substantial bills up-front, before you have received any payments for your graduate studies.)
- If health care insurance is provided, when does the coverage begin and when does it end? What services are covered, and where can I receive them?
- What about summer support? (Some faculty or institutions will provide summer support for their students, while others expect students to pursue internships or other opportunities during the summer term.)
- What type of technology is required for graduate students, and is it likely to be provided by my research mentor or department? If not, can I receive a discount by purchasing the required technology through the university?

## **Making the Choice**

As you are visiting graduate programs and talking with faculty and students, you will likely be making lists of the "pros" and "cons" of each program. Such lists can be very useful in eliminating programs that are not a good fit for your academic or personal goals. However, many students still find themselves struggling to make a decision between the final two or three "good" choices. In such cases, it can help for students to think through the "worst case" scenario: what would happen if the graduate school they pick turned out to be the "wrong" choice? Could they take their undergraduate degree and get a job? Could they defer admission to their second-choice graduate program, and then switch schools after a year? Having a backup plan in mind can help to alleviate some of the pressure that students often feel as they try to make a final decision about which graduate program is the best option.

In the end, the best choice is often the graduate program that "feels right" to the student: the place where they found multiple connections and diverse opportunities, with strong support for

your academic, personal and financial goals. When faced with a choice between the "perfect" research project and the "perfect" faculty advisor, it is wise to remember that the mentoring relationship is critical to success in graduate school – while projects come and go, the support of a good mentor can have a much longer impact on your academic and professional success.

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