

Graduate School Info Session Day One

with Dr. Sheila Humphreys and Professor Mike Franklin

Resources available to you for applying to graduate school.

- These info sessions for graduate school and also the workshops for applications and fellowships are very valuable.
 - *NSF fellowship workshop coming up.
- Ask professors for advice, they know a lot about graduate admissions.
 - Faculty at times complain that students are in fact shy about talking to grad students. Don't be afraid to go talk to faculty members, they're there to help.
- COE is the only school that assigns undergraduates an individual faculty advisor in their department.
- The Undergraduate Handbook has a section on graduate school for help.
 - Make sure to be proactive and use the resources available.
 - Industry puts in a lot of money and time to recruit students, but graduate schools do not, so it's up to you to find the information and make use of all the resources available.

Making a Strong Application

Application Process:

Time management is important. Should be spending several hours a week.

Take a look at the applications, understand each individual school's process and requirements. Make sure to take the GREs. Research the programs at different schools to make sure that they have the areas you're interested in.

Contents of a Typical Application:

Demographic info

Statement of Purpose

- It can help, a stellar record with lots of research will make the statement of purpose less important.
- If don't have such things, it can help you stand out by being able to discuss undergraduate research, social problems, community service, why certain things happened.
- Talk to the Undergraduate Affairs Office to see samples.
- Usually about a page long.
- Don't go too long, just make note of the important topics.

What are you trying to communicate in the statement of purpose?

The faculty in admissions are looking for evidence of academic achievement and evidence of research potential. They are looking for people that can contribute to the creation of new knowledge. Should already have a draft available. Have friends, parents, teachers, and other students read over it and make sure it's clear.

Three Letters of Recommendation

- Figure out who those people are now.
- Give faculty 3-4 weeks to write a letter.
- Most applications now require the letters to be done online.
- Some fellowships require 4 letters of rec.
- For Berkeley admission Letters of Rec due January 9th.

Make use of the Career Center Campus Letter Service Faculty can file the letters and the campus letter service will send them out for the pros to the separate institutions.

**Don't be afraid to ask the letter writer if they will write a favorable letter of recommendation.

Should think about applying to LOTS of schools.

Lots of schools come to Berkeley actively recruiting Berkeley students, for example: Princeton, UMich, UCSD, Harvard

Lots of choices besides MIT, Berkeley, and Stanford. Look broadly.

Interested in Graphics? Brown

UCSB has create optoelectronics.

UCSD has a great CS program, particularly if you're interested in Bio.

Talk to faculty member about where they feel would be good places to apply.

Talk to graduate students about stuff as well.

*****Put onto HKN page the latest grad school rankings.*****

Look at rankings to figure out where is a good place for you to go.

Remember to apply to lots of places.

Viewpoints on going straight to grad school or industry?

Lots of great students that go straight to grad school to Berkeley from Berkeley get tired and leave with a Masters. Sometimes good to get a change of scenery so that you don't get tired out.

=====
It is very important to understand why you want to go to Graduate School
=====

The question is very different depending on the desire to get a Masters or a PhD.

The Masters degree in most places is more of the same, just take classes and finish. Usually expected to do a project, not an all encompassing project. Take a few classes and finish the project to get a Masters.

PhD is another ball game. The point of the PhD is to become the world's expert in ONE thing, but in one thing that three other people care about, namely the people that sign for your PhD. It is HUGE commitment but also a very rewarding experience. You have to be really into it and be passionate about the particular topic. Also will have to be able to handle a lot of ups and downs, it can be really tough. 6 years is the average in EECS, but can be even more. Pursuing a PhD gives you the opportunity to really delve into a topic, which is a real luxury these days. Get to hang out with lots of smart people. Push the envelope in whatever areas you find interesting. It's great, but you really have to think about why you want to do it.

Masters degree is a no brainer, should just do it. Maybe there are lots of things you wanted to study and didn't have time to--a Masters degree gives you the opportunity to take more. At most it'll take 2 years, it's pretty bounded. Don't get a PhD because people in family think you should get one, or siblings think you should get one. Do it because you want to further your career in a way that a PhD can only allow you to do. Be a professor or a really high level architect/engineer or work in research labs, although you don't have to become a professor once you get a PhD.

=====
Deciding Where to Apply
=====

Can look at the rankings, broad rankings are generally correct. Though, the best source of info about graduate programs is the faculty here. Can ask faculty for the ranking of schools with respect to a specific field that is very difficult to find online, so talk to faculty in the area and ask for their opinion.

Where to apply?

Make an honest self assessment of yourself and see where you belong with respect to your peers. But remember that at Berkeley you're at a very good school, so being in the solid middle of Berkeley is really good.

You want to have a set of choices at the end of the application process.

Berkeley encourages graduate students to go for the PhD, but some other schools have very big Masters programs,

so not all graduate schools will completely emphasize the PhD. If you're going for a PhD, you are generally paid to go to school, Masters are usually not paid for. Also, make sure to understand the transition from PhD to Masters if you're unsure about getting the PhD.

Applying to Masters programs will not typically make it easier.

Much rather take somebody going for a PhD than somebody that wants a Masters at Berkeley. Don't lie and say you want a PhD if you really want a Masters but if you're unsure, apply for PhD.

Applying to Particular Programs

Different at every place, research the school to find out how it works.

At Berkeley, the admissions people look very carefully at the areas that applicants say they're interested in. The first people that look at your application are people that are focused on the area that you say you're interested in. Once you're in the Graduate School you're free to switch around. Pretty easy within EE (switch from circuits to comm) not as easy across from EE to CS. Not all schools give you such freedoms. Stanford, for example, will place you somewhere where they feel you belong, it does not do area based admissions.

It is very difficult to tell if a school does area based admissions or not, so don't try to play with the system. Think about what you want to do and write a very convincing statement of purpose.

Apply to programs that you show strength.

Say you've done lots of theory and little code writing, but you apply to databases. Lots of time the database people will talk to the theory people to see if they're interested in taking you. If you're a strong applicant, many times you can be co advised by a theory person and a databases person. Don't try to game the system, just be honest about what you want to do.

If you're interested in two different areas that are pretty related there are lots of programs that span many different areas, especially at the masters level. Can apply to programs that focus on both areas rather than have to pick one.

What if you're unsure about what you want to do, it's tough to tell as an undergrad?

It is important to be thoughtful and honest about your interests. Grad admissions care about somebody that has put thought and care in their interests. Be careful about not being totally honest about what you want to do because some schools will just drop you into a group and you'll be stuck in that group.

5th year Masters?

This is for people that aren't interested in getting a PhD. It is more geared to people interested in industry. Can emphasize in CS but then also take Business or Bio courses to get kind of broad.

How does having an MS affect admissions to PhD?

If an applicant has an MS admissions will have a slightly higher bar. Expect some important research and publications already. Tough call to accept people that already have Masters because once a person with a masters is admitted can't just give them a masters if they're not doing well with research. Very important to have produced decent research by the time the MS is complete if planning on applying elsewhere for a PhD.

Do the admissions committees pay attention to the other schools applicants are applying to?

Not really, it doesn't quite affect admissions, more of way for schools to evaluate themselves.

How do you look at people that have come from ugrad compared to people that have worked?

Franklin went and worked for three years as a software developers. Went and got a masters then got a PhD. Is it possible to work then go to graduate school? Longer out of school harder to come back. Why? Tough to let go of the money and lots of contacts can forget who you are. Look at the letters in the admissions process, so contacts are important.

If go out to business and enjoy yourself, then that's good. If you're unsure about PhD, it might be a good idea to try working and see how you like it, then apply to grad school.

Generally, academic institutions don't know what to make of work experience.

If applying to different school, how much does it help to contact profs that you'd like to work with?

It's worth it to try, but profs get lots of those types of letters. It's best to have a reason to e-mail him works better. Telling the professor the school is great and that's why you want to apply doesn't help that much. Telling the prof that you want to pursue something and you have some interesting ideas will be more effective.

Talk to professors here to see if they can refer you to professors outside.

Filling out the list of professors you'd like to work with.

Sometimes there are situations that you've already worked with other people at different institutions and the professors will ask you to apply because they'd love to take you, that works.

Also the list of professors you name is used to make sure that you've actually paid attention to the faculty in the departments.

What's important about the app?

For the PhD, one of the main things that they look for is evidence of research interest and research ability. Best way to show that is having done research as an undergrad. Having a faculty that can say you've done work and did good, is extremely helpful. Look for special things like that. Admissions gets lots of apps from qualified people, and that's when things like research really come into play.

Important to get letters from people that know you and think highly of you. Love to get letters from well known professors. Second favorite is to get letters from profs that are at a good institution. Then researchers that you worked with. Then from a boss from somewhere you worked for.

Letter from a professor that actually knows who you are helps a lot. Go to office hours, speak up in class, etc etc. Take advantage of talking to the faculty and getting to know them. Letters are really important.

What if letters come from a different department?

Admissions pays close attention to CS background. If don't have that much you can still apply, but it may at times benefit you to get a Masters in CS first then apply for a PhD.

Transferring graduate courses from Master's program to PhD program varies from place to place.

Is it true that Berkeley admissions look tougher at apps coming from Berkeley?

Not that we look harder, but we can follow up more easily.

We love our own students, but like to get some diversity. If kind of on the border, being from Berkeley might work against you. But if we really want you, we'll take you.

What if you do research in a discipline you're not applying to?

That's ok, but talk to the letter writer to make sure that the professor understands the situation.

Part of job as faculty is to make sure students move forward in their careers.

Once in grad school to what extent can you choose your own PhD project?

It's a little bit of a dance, both the student and advisor have to agree. It's a long relationship with the advisor, can be upward of 6 years.

Getting a letter from a prof outside of your intended focus, like CS, Math, Statistics, etc... is all right. Not all of your letters should be like that, but some are ok.

How are letters from managers from research facilities weighed against getting one from a professor?

If it's from a major research organization those letters count as highly as doing research with a faculty member.

When ultimately deciding where to go, it is usually better to go someplace different, but if Berkeley can offer the most to you, that's the best way to go about it.