

Graduate School Information

- General Information
 - Masters vs. Ph.D.
 - * A masters takes 2-3 years, a PhD takes 5-7 years
 - * Different programs emphasize different degrees. If you want a Masters only, don't end up in a program where you'll be a second class citizen.
 - * PhD programs will give you a masters after you've jumped through appropriate hoops.
 - Money
 - * In a PhD program you should **expect** a tuition remission, health insurance, and a job as a teaching assistant or research assistant that will pay your expenses. You might get a fellowship that gives you money for free, but these are hard to come by. Masters programs are more hit-or-miss in terms of money.
 - * You won't be rolling in the dough on a TA or RA, but you'll live. Plus, you can still get loans!!
- Fall semester of your senior year
 - Get advice
 - * Talk to your prof's, other students, your family and friends, and surf the web.
 - * Take a look at www.phds.org
 - * Once you get a list of schools that you're interested in, contact the graduate advisor, contact current grad students, visit the campus.
 - Take the GRE's (www.ets.org)
 - * Virtually everyone is required to take the general GRE exam. Get study guides if necessary. For math folks, the quantitative and analytical sections are relatively straightforward.
 - * Pure and applied math students are likely to have to take the subject exam in mathematics. This is a hard exam. Contact Prof. Hamilton to get involved with a study group for this year's exam.
 - * It would be best if you could avoid taking both the general exam and the subject exam in the same day. Eight hours of testing is bad enough, but the exam that really counts is the afternoon one and you're totally wasted by then.
 - Apply
 - * Things to think about: location, size of program, areas of faculty expertise, financial package, average amount of time it takes students to graduate, what students do once they graduate, are the grad students happy?
 - * Ask professors for letters of recommendation. Do this as early as possible.
 - * Write a statement of interest. Be as specific as possible about why you want to go to grad school, but don't fret about the fact that you don't know if you'd rather study representation theory of compact Lie groups, or v_1 -periodic homotopy theory.
- What to expect once you're there
 - Classes and lots of homework
 - * You generally take three classes in your field and absolutely nothing outside of your field.
 - * First year courses generally have homework, but after that you are expected to do what it takes to learn the material.
 - Exams: generally you take a set of preliminary exams after your first year of graduate school. Sometimes this can stretch into your second and third years, but expect to pass them relatively early in your career.
 - Get an advisor. How to do this will become clear as you enter your second or third year of a program.
 - Masters programs sometimes, but not always, require a thesis. The masters level thesis is not anywhere near as serious as a PhD dissertation and is nothing to fear.
 - If you're in a masters program, you're pretty much done after you take some courses, pass some exams, and maybe write a thesis. If you're in a PhD program, the fun has only just begun. You'll take more exams: generally you take an oral exam on your area of specialty. Once you pass this, you are an official candidate for the PhD.
 - Write a dissertation: no big deal.