

Going to graduate school in mathematics or statistics – Craig L. Zirbel – zirbel@bgsu.edu

Why go to graduate school?

- Read the handout on mathematics careers, available at www-math.bgsu.edu/~zirbel/CareersInMathematics.pdf
- They pay you to go, they pay your tuition, student loans are deferred, you teach for them
- BGSU offers \$13,000 a year to master's students. Ohio State offers \$17,000 a year to new students; but it is harder to get into their graduate program than their undergraduate program!
- The master's degree is a good professional degree in applied math
- The PhD is the professional degree in statistics, but a master's is also very workable
- A master's is good for teaching at a community college or some universities

Is graduate school for me?

- For a master's degree, it is enough to be doing very well in your math courses and to want to take more
- For a PhD, you have to really want to do research.
- Graduate school is not easy, you have to work hard, think hard, push yourself
- Ask your professors what they think, and what schools they think you should apply to

How to prepare for graduate school

- Do well in your classes
- Take additional classes at the 4000 level
- Impress your professors so they can write good letters for you
- Join the Putnam team or mathematical modeling team
- Do some research as an undergraduate, maybe in an REU (Research Experience for Undergraduates)
- Read widely about math or stat, for example the MAA Monthly, the AMS Notices, Amstat news, IMS, etc.

How to apply to graduate school

- Deadlines are in early January (January 2 at Ohio State, January 31 at BGSU)
- Take the GRE; google GRE to find local testing centers (in Maumee and at the University of Toledo). Schedule a time to take it.
- There is a general test and a math subject test that the stronger schools want you to take
- You will be writing at least one essay about why you want to go.
- This is what Ohio State wants:
 - Statement of Intent.
 - Three letters of recommendation (on official letterhead). Download and use the university Reference Form. If the reference letters and reference forms have been submitted electronically on the Graduate Admissions page above they do not need to be sent in.
 - Curriculum Vitae or Resume (up to two pages).
 - List of the textbooks used, chapters covered, and grades received for your most recent courses in Analysis and Algebra.
 - The official/original transcripts from each undergraduate and graduate institution you attended.
 - Copies of the GRE General, GRE Subject, and TOEFL scores that you also submitted to Admissions.

Where should you apply?

- Apply to a range of schools. You may get accepted to some but only get financial support at one.
- Ask your professors where they think you will be competitive

Online resources:

- Harvard University, for their undergraduates: <http://www.math.harvard.edu/pamphlets/gradsch.html>
- A collection of articles on going to graduate school: <http://www.phds.org/graduate-school/should-you-go>

What to do in the summer before you start

- This is an excellent time to get a head start on your classes.
- Ask what textbooks will be used, and order them ahead of time and start reading them. Basically rewrite each page, which is slow but effective.