

Information on Graduate Studies in **Mathematics & Statistics**

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[a copy of this presentation is available at
<https://ms.mcmaster.ca/bprotas/graduate.shtml>]

Why go to Grad School?

- Love of the subject
- Enhanced job opportunities — advanced degrees useful in
 - Academia
 - Industry
 - Government

What do graduates do after finishing?

- M.Sc. programs feed into Ph.D. programs
- M.Sc. degrees offer advanced training in analytical and quantitative skills essential in e.g., financial math, statistics, big data, scientific computing
- some M.Sc. graduates go to professional schools (law, business, teachers' college, etc.)
- Ph.D. graduates often target academic jobs, but are also successful in industry and government

Where to go to grad school?

- big versus small universities
- critical mass in your field of research interest
- which country?
Canada, United States, UK, France, Germany, Australia, Spain, Brazil, ...

Consider Grad School at Mac!

- Research and training opportunities in
 - core areas of pure and applied mathematics
 - statistics and big data
 - financial math
 - math biology
 - scientific computing and computational science
- Project and thesis M.Sc. in Mathematics
 - project-based M.Sc. in less than 12 months!
- Gain knowledge and experience before going on to professional program or Ph.D.
- Possible joint-degree (“cotutelle”) programs

How do I get into grad school?

- *Apply!* Lots of information available online:
 - websites, social media, Graduate Ambassadors
 - Email grad advisors and potential supervisors, directors of specialized programs, etc.
- Most require a B+ honours degree (average based on math courses taken in last one or two years)
- Admission to some program can be very competitive
minimum grade averages are not indicative
- It helps a lot to approach potential supervisors in parallel with submitting an application
- Strong research potential is important, especially for Ph.D.
try to build up credentials (project courses, USRAs, etc.)!

Typical Application Checklist

- Statement of research interests
- Reference letters (at least 2) from *professors knowledgeable about your mathematical abilities*
 - invest time in allowing professors to get to know you so that they can provide meaningful information!
- GRE (Graduate Record Examinations) scores (for the US)
- Transcripts
- Application fee

What to expect in Grad School?

- Courses, TA responsibilities, seminars, ...
- Research may start right away or within a year — finding a supervisor is essential!
- At McMaster: possible transfer directly from M.Sc. to Ph.D.
- Direct entry to Ph.D. programs common in the US
- Comprehensive or qualifying exams are common in most Ph.D. programs

Scholarships

- NSERC CGS–M (www.nserc.ca)
 - Canadian/PR
 - A- (80%) average minimum in each of last 2 years
 - value: approx. \$17,500

- OGS (osap.gov.on.ca)
 - Canadian/PR
 - A- (80%) average minimum in each of last 2 years
 - value: approx. \$15,000 (\$5,000 per term)

- MITACS, Commonwealth, Canada-US Fulbright, French Embassy, etc.

- Universities often top-up these awards

Important Deadlines

- **November to January** — grad school application deadlines
- **February 1** — application at McMaster
- **December 1** — NSERC CGS-M (no internal application)
- no deadline for OGS (part of grad school application)
- GRE registration deadline for subject test is early September

- Application Procedure for McMaster (Mathematics & Statistics)

<https://www.math.mcmaster.ca/index.php/graduate-studies/application-procedure.html>

- School of Graduate Studies

<https://graduate.mcmaster.ca/>



I am always happy to meet with you to discuss any questions you might have.

⇒ book an on-line appointment via Email

**GOOD LUCK WITH YOUR APPLICATIONS AND
HOPE TO SEE YOU IN OUR GRADUATE PROGRAM!**