A Master's degree in Mathematics and Statistics or Mathematics and Engineering can take your career in many directions. Many of our MSc students choose to continue their academic inquiry with a PhD. Our Master's students are equipped with a strong foundation for careers in:

- Academia
- Biostatistics
- Clinical Data Analysis
- Business Analysis
- Finance

Taking time to explore career options, build experience, and network can help you have a smooth transition to the world of work after graduation.

**M.Sc. Career Outcomes in the Physical Sciences**

- Government, Nonprofit, Community, Public Service 23%
- Business & Corporate 28%
- Faculty, Teaching, Research 49%

**How do I USE THIS MAP?**

Whether you are considering or have embarked on graduate studies at Queen's, use this map to plan for success in five overlapping areas of your career and academic life. The map helps you explore possibilities, set goals and track your individual accomplishments. Everyone's journey is different – the guide offers options for finding your way at Queen's and setting the foundation for your future. To make your own customized map, use the online [My Grad Map](#) tool.

**Why GRADUATE STUDIES IN MATHEMATICS?**

A graduate degree in mathematics and statistics is essential for anyone aspiring to research or academic positions, and is very useful for those who want to assume a leadership role in government, business and industry. A Master's degree in mathematics and statistics prepares students for a wide variety of research and industry career options.

**Why QUEEN'S?**

"The graduate mathematics community at Queen's is vibrant, international, and intellectually stimulating." – John Treilhard, MSc

Queen's is an ideal place to pursue graduate study in Mathematics. We have an outstanding group of faculty researchers who are internationally recognized in their fields of specialization. They represent a wide variety of areas including pure mathematics (number theory, algebra, algebraic geometry, combinatorics, operator algebras, random matrices and dynamical systems), mathematical physics, applied mathematics, and more.

Queens University's Discover Kingston page offers a wonderful environment for graduate studies.

**Why KINGSTON?**

Described by students as both "quaint" and "eclectic," Kingston is big enough to provide all the conveniences of modern life, and small enough for students, staff, and faculty to feel instantly comfortable and at home.

Queen's is an integral part of the Kingston community, with the campus nestled in the core of the city, only a 10-minute walk to downtown with its shopping, dining and waterfront. For more about Kingston’s history and culture, see Queen’s University’s Discover Kingston page.

**Program STRUCTURE**

- MSc Pattern I (18-24 months) course work and a research thesis.
- MSc Pattern II (12 months) course work and research project.
- M.A.Sc (18-24 months) course work and a research thesis.

**RESEARCH Areas**

- M.Sc.
  - Algebra and Number Theory
  - Analysis, Geometry and Topology
  - Applied Mathematics
  - Mathematics and Engineering
  - Probability and Statistics

- M.A.Sc.
  - Mathematics and Engineering

Faculty research interests can be found at the Graduate Faculty page.

**School of Graduate Studies**

Create an impact

[www.queensu.ca/sgs](www.queensu.ca/sgs)
GETTING STARTED

- Start with key priorities like developing your relationship with your supervisor and doing your coursework.
- Find your way through the academic process with help from departmental and Expanding Horizons professional development workshops, the department Grad Chair and the SGS Habitat.

INTERMEDIATE STAGE

- Complete your coursework; begin to research and write your project or thesis.
- Attend the weekly Math & Stats Department Colloquium.

WRAPPING UP

- Complete and defend your project or thesis.

ACHIEVE YOUR ACADEMIC GOALS

- Start to think about the audiences for your research.
- If you will be continuing graduate studies explore graduate programs and apply for external scholarships such as NSERC or CGS.

MAXIMIZE RESEARCH IMPACT

- Attend or present at a graduate conference.
- Consider participating in the 3 Minute Thesis (3MT) competition.
- Expand your research audience through social media such as Twitter or a blog.

BUILD SKILLS AND EXPERIENCE

- Consider volunteering with different community organizations, such as Math Quest, a math camp for girls.
- If you are an international student interested in staying in Canada, consider speaking with an International Student Advisor.

ENGAGE WITH YOUR COMMUNITY

- Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups like Material Matters.
- Prepare for work or studies in a multi-cultural environment by taking QUIC’s Intercultural Competency Certificate.
- If you are an international student interested in staying in Canada, consider speaking with an International Student Advisor.

LAUNCH YOUR CAREER

- Explore different careers of interest by reading alumni profiles on the SGS website, and using Queen’sConnects on LinkedIn to connect with Queen’s alumni, or find alumni in various careers through Ask an Alum.
- Use a Research Assistant or Teaching Assistant position to develop your communication and teaching skills.
- Consider positions in student services, the department Grad Chair and the SGS Habitat.

EMPLOYABILITY SKILLS

- Knowledge and technical skills in area of specialization.
- Communication: effective and clear in written, oral and multimedia forms, for diverse audiences.
- Information management: prioritize, organize and synthesize large amounts of information.
- Time management: meet deadlines and responsibilities despite competing demands.
- Project management: develop ideas, gather information, analyze, critically appraise findings, draw and act on conclusions.
- Creativity and innovation: address complex, multifaceted challenges.
- Perseverance: work through challenges to achieve desired outcome.
- Independence and experience as a collaborative worker.
- Awareness and understanding of sound ethical practices, social responsibility, responsible research and cultural sensitivity.
- Professionalism: in all aspects of work, research, and interactions.
- Leadership: initiative and vision leading people and discussions.

Visit careers.queensu.ca/gradmaps for the online version with links!