Mathematics

Mathematicians discover and study structures that are fascinating in themselves and that have a surprising ability to help us make sense of many facets of the world: the physical, the biological, the economic, the artistic, the psychological, and the philosophical. By designing and analyzing mathematical models, we increase our understanding of natural processes and human events.

Rhodes Scholar Nithum Thain completed his BScH in Math, scoring a perfect GPA while being the captain of the fencing team at Queen’s, where he won two provincial gold medals. He has enjoyed a wide range of professional opportunities – starting off at Empire Avenue as the VP of Research, working on the algorithms that ran their online gaming platform, and followed by working as a Business Development Analyst at createLIVE.

That is a degree from Queen’s.

queensu.ca/mathstat
**BACHELOR OF SCIENCE (HONOURS): MAJOR, MEDIAL, MINOR, SPECIALIZATION**

**FOR LIFE AFTER**

**GET READY**

**GLOBALLY**

**GET THINKING**

**COMMUNITY**

**EXPERIENCE**

**YOU NEED**

**GET THE COURSES YOU NEED**

1ST YEAR

- In first year you will have the chance to explore the foundations of Mathematics along with some electives.
- Attend Majors Night in the Winter term to learn more about Plan options.

2ND YEAR

- Start going deeper into the discipline of Mathematics, while considering a minor and/or certificate such as Entrepreneurship, Innovation and Creativity.
- Attend Degree + in the Fall term to learn more about Certificates and Internship options.
- Want to make sure your academics are where you want them to be? Visit SASS (Student Academic Support Services) and the Writing Centre for some help.

3RD YEAR

- A chance to start grouping courses in areas of interest, or to keep it more general and explore many areas of Mathematics. Meet with an Academic Advisor to make sure you are on track and have planned out your courses for next year.

4TH OR FINAL YEAR

- In fourth year you will have the chance to participate in research-based courses that can lead to Graduate School or to your future career path. Make sure to finish up all your courses for your major and your optional minor and/or certificate(s).

**GET RELEVANT EXPERIENCE**

- Join teams or clubs on campus such as the Queen’s Math Club, Putnam team, and the Math Investigations Program.
- See the AMS Clubs Directory or the Queen’s Get Involved page for more ideas.

- Look into summer jobs by talking to the dept. or Career Services about work through SWEP or NSERC.
- Take more responsibility within different clubs or extracurriculars.

**GET CONNECTED WITH THE COMMUNITY**

- Volunteer on or off campus with different community organizations such as Best Buddies.
- Get involved with the Mathematics and Statistics Departmental Student Council (DSC).

- Do targeted networking with alumni working in careers of interest by joining the LinkedIn group Queen’s Connects. Check out Career Services networking workshops. Connect with professors at events or workshops hosted by the DSC.

**GET THINKING GLOBALLY**

- Prepare for work or studies in a multi-cultural environment by taking QUIC’s Intercultural Competency Certifications and research possible immigration regulations.
- Speak to a QUIC advisor to get involved in their programs, events, and training opportunities.

- Is an exchange in your future? Start thinking about where you would like to study abroad. Apply in January for a third year exchange through the International Programs Office.
- Apply for the Math in Moscow Scholarship or the Budapest Semesters in Mathematics.

**GET READY FOR LIFE AFTER GRADUATION**

- Grappling with program decisions? Go to Majors Night or get some help wondering about career options from Career Services.
- Build your transferable skills in time management, problem-solving, writing and more with Student Academic Success Services.

- Explore different careers of interest by reading books in the Career Services Career Advising and Resource Area, such as the Great Jobs for Math Majors. For more information check out Career Coaching or by finding and connecting with alumni on LinkedIn.

- Start focusing on areas of interest. Research any further education requirements for careers of interest. If needed, prepare to take any required tests (like the LSAT or GMAT) and get help thinking about Grad School from Career Services.

- Apply to jobs or future education, or make plans for other adventures. Get help from Career Services with job searching, resumes, interviews, Grad School applications, or other decisions.

What will I learn?

- A degree in Math can equip you with
  - Logical reasoning and problem solving to apply analytical and critical reasoning to solve problems
  - Ability to solve problems by applying analytical and critical reasoning
  - Understand strong evidence to produce trustworthy data and provide mathematical evidence for conjectures and generalizations
  - Knowledge of a broad range of mathematical fields and methods
  - Ability to create mathematical models
  - Pattern recognition to explore examples and recognize patterns
  - Persistence to approach problem solving with openness and a willingness to try multiple approaches
  - Ability to work independently and in a team on a project
  - Oral and written communication to communicate quantitative ideas with clarity and coherence through writing and speaking

Where can I go?

A degree in Math can take your career in many directions. Many students choose to continue their academic inquiry with a Master’s. Our students are equipped with a strong foundation for careers in:

- Accounting
- Aerospace
- Auditing
- Banking
- Cryptanalyst
- Data scientist
- Education
- Financial analysis
- Mathematician
- Risk analyst

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

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

*This map is intended to provide suggestions for activities and careers, but everyone’s abilities, experiences, and constraints are different. Build your own Major Map using our online My Major Map tool.
MAJOR MAP

How to use this map

Use the 5 rows of the map to explore possibilities and plan for success in the five overlapping areas of career and academics. The map just offers suggestions – you don’t have to do it all! To make your own custom map, use the My Major Map tool.

Get started thinking about the future now – where do you want to go after your degree? Having tentative goals (like careers or grad school) while working through your degree can help with short-term decisions about courses and experiences, but also help you keep motivated for success.

Get the help you need

Queen’s provides you with a broad range of support services from your first point of contact with the university through to graduation. At Queen’s, you are never alone. We have many offices dedicated to helping you learn, think and do.

Ranging from help with academics and careers, to physical, emotional, or spiritual resources – our welcoming living and learning environment offers the programs and services you need to be successful, both academically and personally. Queen’s wants you to succeed! Check out the Student Affairs website for available resources.

MATHEMATICS
AND STATISTICS
DEPARTMENT OF
Faculty of Arts and Science
Jeffrey Hall, Room 310
48 University Avenue
613-533-2390
mathstat.ugchair@queensu.ca
queensu.ca/mathstat

Why study in Kingston?

For over 175 years, our community has been more than a collection of bright minds – Queen’s has attracted students with an ambitious spirit. Queen’s has the highest retention rates, the highest graduation rates, and one of the highest employment rates among recent graduates. We are a research intensive university focused on the undergraduate experience. The BBC has identified Kingston as one of the GREATEST UNIVERSITY TOWNS in the world – and it is often awarded the safest city in Canada. It is a university city at the core; just a quick drive to Toronto, Montreal, Ottawa and even New York. A university with more clubs per capita than any other university in Canada, and a city with more restaurants per capita than any other city in North America – you will have the experience of a lifetime at Queen’s – and graduate with a degree that is globally recognized among the best.

For more information, contact quip@queensu.ca or visit the Program Website.