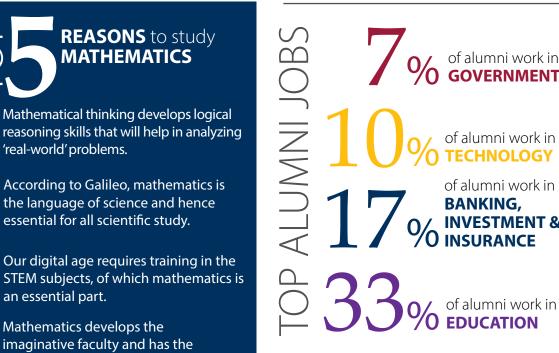
# **Mathematics**

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.



of alumni work in **ECHNOLOGY** of alumni work in BANKING, INVESTMENT & INSURANCE

of alumni work in EDUCATION

### major 2024-2025

Thresholds are made on a competitive basis and are updated annually. To see the thresholds for all programs as well as the latest information, please visit quartsci.com/ planselection

add a CERTIFICATE to your degree

**Data** Analytics

Disability and **Physical Activity** 

Employment Relations

Entrepreneurship, **Innovation** and Creativity

French for **Professionals** 

Geographic Information Science

Global Action and Engagement

Indigenous Languages and Cultures

International Studies

Media Studies

Sexual and Gender Diversity

**Urban Planning** Studies

QUartsci.com/certs

ervices, Queen's University, 2019 - 2020

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.

aesthetic quality of the humanities.

analyze complex systems.

The concepts and skills that are gained

in the study of Mathematics help you to

### Acquire Skills. Gain Experience. Go Global. That is a degree from Queen's. queensu.ca/mathstat

# 2024-2025 Mathematics Major MAP\*

BACHELOR OF SCIENCE (HONOURS): MAJOR, MEDIAL, MINOR, SPECIALIZATION

	1ST YEAR	2ND YEAR	3RD YEAR		4TH OR FI
CETTUE				>	
GET THE COURSES YOU NEED	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.	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.	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.	ISHIP	In fourth year yo participate in re lead to Graduate path. Make sure for your major a certificate(s).
		>	>	>Z Z	
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.	Consider applying to do a 12-16 month QUIP internship between your third and fourth year. Consider entrepreneurial opportunities via programs like the Queen's Innovation Connector Summer Initiative (QICSI).	QUIP INTE	Investigate requestigate requestigate requestion other opportuning assess what expegaps with voluncheck out the Caneck of the subminuted systems of the system
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.	12-16 MON'	Consider joining the Canadian Ap Society, the Can the Statistical So Join groups on I careers or topics
				>∢	
GET THINKING GLOBALLY	Prepare for work or studies in a multi-cultural environment by taking QUIC's Inercultural Competency Certificate, 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.	Build your intercultural competence by getting involved with other cultures or by practicing or improving your language skills.	CONSIDER	International stu Canada can spec Advisor.
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 <i>Great Jobs for Math Majors</i> . For more information check out Career Cruising 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 for other advent Services with jol Grad School app

\* 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.

The coronavirus pandemic may impact how some activities are delivered in 2021-2022. Please check directly with the host of any activity on the map for the latest information.



### FINAL YEAR

r you will have the chance to research-based courses that can late School or to your future career ure to finish up all your courses or and your optional minor and/or

equirements for full-time jobs or unities related to careers of interest. experience you're lacking and fill in lunteering, clubs, or internships – e Career Services skills workshop for

mitting your work to an te journal like Inquiry@Queen's.

ing professional associations like Applied and Industrial Mathematics Canadian Mathematical Society, and I Society of Canada.

on LinkedIn reflecting specific bics of interest in Mathematics.

students interested in staying in peak with an International Student

or future education, or make plans entures. Get help from Career job searching, resumes, interviews, 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 openess and a willingness to try multiple approaches
- Ability to work independently and in a team on a project
- Oral and written comunication 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.

# **Mathematics**

#### 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

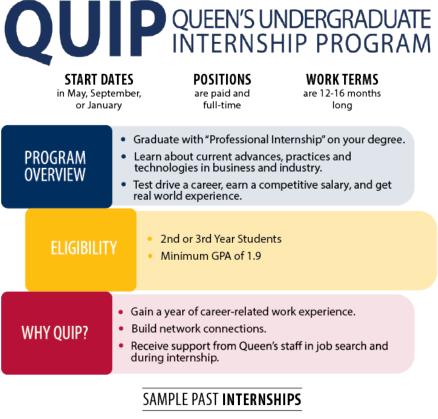
Queen's provides you with a broad range of support services from your first point of contact with the university through to graduation. At Queen's, you are never alone. We have many offices dedicated to helping you learn, think and do.

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.





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



### Planning Logistics Technical Intern Communications & Econom Market Research Intern

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

## 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. city in lave closer than you think 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 London / 7 hrs degree that is globally CANADA **Oueen's** Beijing / 15 hrs recognized among Dubai / 14 hr the best. Vancouver / 5 hrs Calgary / 4 hrs

San Francisco / 5.5 hrs

Denver/3 hrs

Dallas / 3.5 hrs

UNITED New York / 1.5 hrs STATES

Atlanta / 2 hrs

Toronto

Kingston

Halifax / 2 hrs

Bermuda / 2 hrs