

# Mathematics HBSc

Department of Computer and Mathematical Sciences

## SERVICES AT UTSC THAT SUPPORT YOU:

To learn about resources and departments that can support you, download the UTSC Student Experience app or visit [uoft.me/StARTNow](https://uoft.me/StARTNow)

### Diversity & Inclusion

The University of Toronto Scarborough commits to intentionally foster a welcoming and supportive environment for students, faculty, and staff where diversity is valued, and every member of the community feels a sense of belonging on campus.

[utsc.utoronto.ca/edo/](https://utsc.utoronto.ca/edo/)

### Academic Integrity

The university community supports an environment of academic integrity; these are values that include honesty, trust, fairness, respect and responsibility. Learn about the university's academic rules and how to avoid accidental plagiarism by attending an Academic Integrity Matters (AIM) workshop.

[academicintegrity.utoronto.ca/](https://academicintegrity.utoronto.ca/)

### Healthy Campus

UTSC provides supportive environments, resources and services to empower students to maintain their overall physical and mental health and foster their academic success.

[uoft.me/healthycampus/](https://uoft.me/healthycampus/)

### Co-Curricular Record

The co-curricular record is an official institutional document that recognizes your involvement outside the classroom as a significant part of your U of T experience.

[clnx.utoronto.ca/ccr](https://clnx.utoronto.ca/ccr)

## DID YOU KNOW...

The US Bureau of Labor reports that between 2018 and 2028 the job market for mathematicians is expected to grow by 30%



## FUTURE STUDENTS

For admission requirements to UTSC, check out the U of T Scarborough Viewbook or contact:

**Admissions & Student Recruitment**  
University of Toronto Scarborough  
Room HL104, Main Floor, Highland Hall  
416-287-7529  
[admissions@utsc.utoronto.ca](mailto:admissions@utsc.utoronto.ca)

## CURRENT STUDENTS

**Departmental Contact**  
Susan Calanza, [susan.calanza@utoronto.ca](mailto:susan.calanza@utoronto.ca),  
(647-601-4645)

**Mathematics Librarian**  
Mariana Jardim,  
[mariana.jardim@utoronto.ca](mailto:mariana.jardim@utoronto.ca), 416-208-2987

**Academic Advising & Career Centre**  
Room AC213 | 416-287-7561

**Department of Student Life**  
Room SL157 | 416-208-4760

**Association of Mathematical and Computer Science Students**, <https://www.amacss.org/>

## Glossary of acronyms:

AA&CC - Academic Advising & Career Centre  
AMACSS - Association of Mathematical and Computer Science Students  
CLNx – Career & Co-Curricular Learning Network  
CCR - Co-Curricular Record  
CTL - Centre for Teaching & Learning  
DSL - Department of Student Life  
ISC - International Student Centre  
SCSU - Scarborough Campus Students' Union

# Mathematics HBSc

Department of Computer and Mathematical Sciences

Specialist

Major

Minor

The Major program provides a solid foundation in basic areas of mathematics, especially those with applications in other disciplines. Students will be able to develop a thorough understanding of the foundational principles of Mathematics, and will also learn more about its relationships with other sciences. With depth and rigor, mathematics provides an outstanding foundation for further study in any area of academic inquiry, and myriad possible career paths, including, for example, engineering, finance, biotechnology, telecommunications and information technology.

**Complementary Programs:** Statistics, Computer Science, Applied Statistics, Economics, Physics, Management, Environmental Science, Natural Science and many more.

## Make the most of your time at UTSC!

We want to help you maximize your university experience, so we've pulled together information and suggestions to get you started, although there are many more! As you review the chart on the inside pages, note that many of the suggestions need not be restricted to the year they are listed. In fact, activities such as joining a student club, engaging with faculty and seeking opportunities to gain experience should occur in each year of your study.

## Check out future career opportunities and skills acquired from completing this program:

### Competencies & Skills

- Developing computational methods and applying mathematical theories and techniques to solve practical problems in business, engineering, the sciences, or other fields.
- Developing mathematical or statistical models of phenomena to use for analysis or for computational simulation.

### Careers for Graduates

- Quantitative Analyst in Corporations
- Business Intelligence Specialist in Telecommunications
- Business Analyst in Financial Services
- Logistics Analyst in Manufacturing
- Supply Chain Analyst in Wholesale Services
- Application Developer in Technology Consulting
- Technical Analyst in Software Development

### Further Education

- Mathematics (Pure)
- Applied Mathematics
- Actuarial Science
- Combinatorics (Cryptography)
- Biostatistics
- Management and Accounting
- Management and Operations
- Business Administration



Connect with Alumni at events on **CLNx** and through **Partners in Leadership**, **10,000 Coffees**, **LinkedIn** and more!

For more information go to:  
[uoft.me/alumni-services](https://uoft.me/alumni-services)

**NEED HELP CHOOSING YOUR PROGRAM?**

See [uoft.me/choosing](https://uoft.me/choosing)

**DISCLAIMER:** Please refer to the calendar for the most current and accurate information on programs and degrees: [utsc.calendar.utoronto.ca](https://utsc.calendar.utoronto.ca)

# Mathematics HBSc Major Program Pathway

## HOW TO USE THIS PROGRAM PATHWAY

Read through each year; investigate what appeals to you here and in other Program Pathways that apply to you. Note that this Pathway is only a suggestion. **For the most up to date information, please check the UTSC Calendar.**

### YEAR 1 (0 - 3.5 Credits)

### YEAR 2 (4 - 8.5 Credits)

### YEAR 3 (9 - 13.5 Credits)

### YEAR 4 or FINAL YEAR (14 - 20 Credits)

#### CHOOSE YOUR COURSES WISELY

- 2.5 Foundational courses: CSCA08H3, [CSCA67H3 or MATA67H3], MATA22H3, MATA31H3, MATA37H3.
- Explore different kinds of courses; this will also help with fulfilling breadth requirements and electives.
- Use Degree Explorer to plan your courses and program of interest.

- 2.5 Foundational courses: MATB24H3, MATB41H3, MATB42H3, MATB44H3, MATB52H3.
- Students are urged to take a writing course in first or second year (see list of courses in the Calendar).
- 1.0 credit from Elective courses: MATB61H3, STAB57H3, MATD50H3, any C- or D-level MAT, STA, or CSC course, excluding STAC32H3/C53H3/D29H3 (year 2 to 4).

- 0.5 Foundational course from: MATC01H3 or MATC15H3.
- 1.0 credit of Further analysis courses from: MATB43H3, MATC27H3, MATC34H3, MATC46H3, MATD35H3, MATD46H3, MATD67H3.
- Use Degree Explorer to ensure you are on track with your degree.

- 1.0 credit of Further algebra, geometry, and discrete math courses from: MATC01H3, MATC09H3, MATC15H3, MATC32H3, MATC44H3, MATC63H3, MATD01H3, MATD02H3.
- Use Degree Explorer to ensure you are on track to graduate.
- Register your "Intent to Graduate" on ACORN by the deadline.

#### DEVELOP YOUR ACADEMIC & RESEARCH SKILLS

- Attend CTL's Facilitated Study Groups to help you understand the course content.
- Get writing support at CTL's Writing Centre.
- Schedule an appointment with your Program Librarian for in-depth research assistance with your assignments.

- Further develop your general academic skills by attending workshops offered by the Academic Advising & Career Centre (AA&CC) and Centre for Teaching & Learning (CTL).
- Visit CTL's Math & Statistics Learning Centre for tutoring services.

- Consider competing for the UTSC Library Undergraduate Research Prize or Poster Forum.
- Check the department website for summer research and scholarship opportunities.

- Apply for an Academic Travel Fund through Department of Student Life (DSL) to research, present at a conference, or engage with the international academic community.

#### APPLY THEORY TO PRACTICE

- Attend the UTSC Faculty Mix & Mingle Fair to connect with professors and learn more about their specialties.
- Start building your Co-Curricular Record (CCR) and search for Experiential Learning opportunities.

- Get involved in relevant opportunities on and/or off campus; apply to Work Study, or other part-time and summer jobs on CLNx.

- Build on your skills and knowledge through relevant events offered through your department, student groups, DSL and the AA&CC.

- Attend the Summer & Full-time Job Fair in January to meet with potential employers looking to hire students for summer and full-time positions relevant to your field.

#### BECOME AN ENGAGED CITIZEN (LOCALLY & GLOBALLY)

- Get involved with the Association of Mathematical and Computer Science Students (AMACSS); also explore other relevant student clubs and activities on campus.
- Explore DSL programs that will build your leadership skills by getting involved in the community.

- Check CLNx to search for Work Study or volunteer positions on campus to gain experience and to get involved.

- Run for an elected position in AMACSS or another student group or club.
- Look into volunteering or working overseas to expand your network through International Student Centre's (ISC) Global Learning programs.

- Participate in the AA&CC's Partners in Leadership program to learn and network with an alumni mentor about transitioning to work or further education.

#### PLAN FOR YOUR FUTURE CAREER

- Volunteer with organizations to explore your interests; check listings on CLNx.
- Attend the Get Experience Fair in September and register with SCSU's Volunteer Network Program to explore opportunities.

- Considering grad school? Speak to professors and advisors early so you are on track.
- Explore careers through the AA&CC's Job Shadowing and In The Field programs.

- Plan a career path with a staff member at the AA&CC.
- Check CLNx for networking events and employer information sessions to attend.
- Attend the Graduate & Professional School Fair in September.

- Attend the AA&CC's Get Hired job search conference in April/May.
- Attend a Jobs for Grads orientation for a job search "crash course" and for access to full-time job listings.
- Get your personal statement reviewed in the AA&CC.