Computer Science HBSc
Department of Computer and Mathematical Sciences

Computer Science is a fast paced and exciting field. After a short 2 or 3 decades, computer science now pervades in virtually every other academic discipline. In the Computer Science program, students will have the chance to prepare for graduate studies and professional work in any field of application for Information Technology. Students will explore a wide range of subjects and problem areas by looking at theoretical computer science, numerical analysis, data management systems, computer graphics and artificial intelligence, systems, and software engineering. This program provides fundamental knowledge of the foundations of computer science: modern computer software and hardware, theoretical aspects of computer science, and relevant areas of mathematics and statistics. This program is intended to be combined with other programs.


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

Competencies & Skills
- Computational thinking and problem solving.
- Solid understanding of algorithms, data structures, and software design principles.
- Ability to identify computational problems, select appropriate tools for solving them, and build a solution that is technically sound and effectively solves the problem.

Careers for Graduates
- Software Engineer in any field of application of computer science
- Information Technology consultant
- Systems Designer
- Data modelling and visualization
- Mobile App Developer
- Entrepreneurship and high-tech innovation
- Computer security

Further Education
- Computer Science
- Computer Engineering
- Biomedical Engineering
- Bioinformatics
- Financial Engineering
- Business Administration
- Project Management
- Knowledge/Skills Certifications

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.

NEED HELP CHOOSING YOUR PROGRAM?
See uoft.me/choosing

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

See also co-op option
# Computer Science 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)

- **3.0 core credits as follows:** CSCA08H3, CSCA48H3, CSCA67H3, MATA22H3, MATA31H3, MATA37H3.
- **2.0 elective credits:** Explore courses in other disciplines; this will also help to fulfill degree-level breadth requirements.
- Use Degree Explorer to plan your courses and program of interest.

### YEAR 2 (4 - 8.5 Credits)

- **3.0 core credits as follows:** CSCB07H3, CSCB09H3, CSCB36H3, CSCB58H3, CSCB63H3, and 0.5 credit from: MATB24H3, STAB52H3.
- Students are urged to take a writing course in first or second year (see list of courses in the Calendar).
- Meet with the Department Academic Advisor or CS Program Supervisor to ensure you are on track with your degree.

### YEAR 3 (9 - 13.5 Credits)

- **1.0 core credit in numerical computation and theory of computing:** CSCC37H3, and 0.5 credit from: CSCC63H3, CSCC73H3.
- **1.0 CSC elective credit:** Choose any two C- or D-level CSC courses other than CSCD03H3 (Year 3 or 4).
- Use Degree Explorer to ensure you are on track with your degree.

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

- Ensure you have fulfilled your degree-level breadth requirements.
- Use Degree Explorer to ensure you are on track to graduate.
- Register your “Intent to Graduate” on ACORN by the Registrar’s deadline.

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**CHOOSE YOUR COURSES WISELY**

- 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.

**DEVELOP YOUR ACADEMIC & RESEARCH SKILLS**

- 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.
- Check the department website for summer research and scholarship opportunities.

**APPLY THEORY TO PRACTICE**

- Attend the UTSC Centre for Teaching & Learning (CTL).
- 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.
- Get involved in relevant opportunities on and/or off campus; apply to Work Study, or other part-time and summer jobs on CLNx.

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

- Join the Association of Mathematics and Computer Science Students (AMACSS) and get involved in their events.
- Volunteer in DSL’s Alternative Reading Week to gain experience and knowledge about social change and community development.
- Meet with the Department Academic Advisor or CS Program Supervisor to ensure you are on track with your degree.
- Use Degree Explorer to ensure you are on track with your degree.

**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.
- 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.
- 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.
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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

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/

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/

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/

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/ccc

DID YOU KNOW...
According to the U.S. Bureau of Labor Statistics, by 2020 there will be 1.4 million new computer science jobs.

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

CURRENT STUDENTS
Departmental Contact
Susan Calanza,
susan.calanza@utoronto.ca, 647-601-4645

Computer Science Librarian
Mariana Jardim,
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

DISCLAIMER: Please refer to the calendar for the most current and accurate information on programs and degrees: utsc.calendar.utoronto.ca