

Conservation and Biodiversity^(HBSc)

Specialist

Major

Minor

Department of Biological Sciences

The Conservation and Biodiversity programs provide a foundation for understanding how ecology and evolution shape organismal features and the structure and function of communities and ecosystems. Topics covered range from the structure and function of ecosystems to the evolution of behaviour, morphology, and physiology. These programs will show how ecological and evolutionary perspectives can be used to understand and predict the outcome of dynamic interactions among organisms, populations, species, and communities. Students will be: well trained to take positions in government agencies, consulting firms or NGO's; able to continue graduate studies in science for academic careers; able to pursue careers in business or law related to environmental issues, stewardship and sustainable development.

Complementary Programs: Specialist: Not applicable.

Major: Environmental Science and International Development Studies programs.

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

- Explore how organisms interact with the environment
- Conduct and design experiments
- Observe and make measurements on organisms
- Inspect specimens
- Collect, analyze and interpret data
- Utilize laboratory equipment
- Make projections from data

Careers for Graduates

- Conservation Officer in Government Services (TRCA, Parks Canada, Toronto Zoo, Oceans and Fisheries, ROM, etc.)
- Careers in the Ministry of Natural Resources
- Environmental Consultant in NGO's (The Nature Conservancy, Ontario Nature, David Suzuki Foundation)
- University Researcher
- Lab Technician in Industry

Further Education

- Graduate Studies
- Public Policy
- Environmental Science
- Sustainability
- Law School
- Education
- Medical School
- Project Management
- Energy Management
- Environmental Technology



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

**NEED HELP CHOOSING
YOUR PROGRAM?**

See uoft.me/choosing

Conservation and Biodiversity (HBSc) Specialist & 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.**

CHOOSE YOUR COURSES WISELY

YEAR 1 (0 - 3.5 Credits)

- 1.0 Biology credit: BIOA01H3, BIOA02H3.
- 1.0 Chemistry credit: CHMA10H3, CHMA11H3.
- 1.0 Math credit: MATA29H3 and MATA35H3 OR MATA30H3 and MATA36H3.
- 0.5 Physics credit from: PHYA10H3, PHYA11H3.
- 0.5 Computer Science credit from: CSCA08H3, CSCA20H3, PSCB57H3.
- Use Degree Explorer and the UTSC Calendar to plan your degree.

YEAR 2 (4 - 8.5 Credits)

- 3.0 credits of Biology Core courses: BIOB10H3, BIOB11H3, BIOB34H3, [BIOB38H3 or BIOB31H3], BIOB50H3, BIOB51H3.
- 0.5 credit of BIO Core Labs: BIOB52H3.
- 0.5 credit in STATS from: STAB22H3, PSYB07H3.
- Use Degree Explorer and meet with your Program Advisor to plan your courses and program.

YEAR 3 (9 - 13.5 Credits)

- 1.0 credit of Ecology & Evolution Foundation courses from: BIOC16H3, BIOC50H3, BIOC59H3, BIOC61H3.
- 4.5 credits of C- and D-level Ecology and Evolution courses and Organismal Biology courses; at least 1.0 credit must be at the D-level (see UTSC Calendar for specific course lists).

YEAR 4 or FINAL YEAR (14 - 20 Credits)

- Consider taking a Senior Research course from: BIOD95H3, BIOD98Y3, BIOD99Y3.
- Ensure you have fulfilled your breadth requirements.
- 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 Biology Students Association (BioSA) BioAID Review Sessions for guidance with writing lab reports.
- Contact the UTSC Library for in-depth research assistance for your assignments; writing support is also available at the CTL Writing Centre.

- Seek support from professors and TAs during office hours.
- Check the Research Catalogue on CLNx for possible research opportunities.
- Consider doing a directed research course (BIOB98).

- Consider entering the following Research Awards Contests: UTSC Library Undergraduate Research Prize, Mitacs Globalink, NSERC USRA, TD Undergraduate Research Opportunity Fellowship.
- Continue to build your volunteer and work experience.
- Consider directed research courses: BIOB98, BIOC99.

- Apply for an Academic Travel Fund via DSL to research, present at a conference, or engage with the international academic community.
- Attend the weekly Biology Seminar Series (Fridays 12pm).
- Take upper-level directed research courses (BIOC99, BIOD98, BIOD95).
- Submit to UTSC’s Journal of Natural Sciences.

APPLY THEORY TO PRACTICE

- Attend the Professor/Graduate Student Mix & Mingles to meet many of the professors & TAs you will encounter as you progress through your degree.
- Start building your Co-Curricular Record (CCR) and search for Experiential Learning and Work-Integrated Learning opportunities on the Career & Co-Curricular Learning Network (CLNx).

- Take part in Conversation with Biologists, an event where students can interact with leading scientists and learn about their research and career trajectory.
- Consider Work Study jobs for possible research opportunities.

- Continue to build on your skills and knowledge through relevant events offered through your department, student groups, DSL and the AA&CC.
- Consider being a peer reviewer for the Journal of Natural Sciences.

- Participate in Ontario’s Synapse Life Science Competition: www.synapselifescience.com
- Consider being an editor for the Journal of Natural Sciences.

BECOME AN ENGAGED CITIZEN (LOCALLY & GLOBALLY)

- Join BioSA and ECO; attend their activities and events.
- Build confidence and self-esteem through Department of Student Life’s (DSL) LEAD program.
- Join UTSC Parks Canada Club; volunteer and go on their field trips.
- Volunteer with Campus Farm, Rouge Park, Toronto Zoo, Toronto Botanical Gardens.

- Volunteer with Let’s Talk Science.
- Consider completing ISC’s Global Citizenship Certificate and look into their Global Learning opportunities.
- Join: Toronto Field Naturalists, Ornithological Club, Mycological Society.
- Volunteer: David Suzuki Foundation, UTSC Green Roofs, Cornell Birds, TRCA.

- Attend Diversity in Medicine Seminar (for future medical students).
- Volunteer with DSL to be a First Year Peer Advisor. Consider other DSL activities such as intern with an NGO with the Queen Elizabeth II Diamond Jubilee Scholarship Program.
- Attend a Café Scientifique in your local community.
- Join: Toronto Field Naturalists, Ornithological Club, Mycological Society.

- 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.
- Consider joining the executive team of the UTSC Parks Canada Club; volunteer for their events and get to know people in your industry of interest.

PLAN FOR YOUR FUTURE CAREER

- Volunteer with organizations to explore your interest in industries related to your program of study; check listings on CLNx.
- Attend the UTSC Get Experience Fair in September or register with Scarborough Campus Student Union’s (SCSU) Volunteer Network Program.

- Gain experience by applying for a summer, part-time or Work Study position via CLNx.
- If you are considering grad school, speak to professors and program advisors early so you know what to keep in mind.
- Explore careers through AA&CC’s Job Shadowing and In The Field programs.
- Apply for DSL’s All-In Leadership program.

- Speak with a staff member at the AA&CC to plan a potential career path.
- Check CLNx for networking events and employer information sessions.
- Attend the Graduate & Professional School Fair in September.
- Join a conference like TEDxUTSC or International Development Conference to develop professional skills.

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Department of Biological 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

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/ccr

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

Jennifer Campbell,
jac.campbell@utoronto.ca,
416-287-7404, SW421D

Conservation and Biodiversity Librarian

Sarah Guay, sarah.guay@utoronto.ca,
416-287-7497

Academic Advising & Career Centre

Room AC213 | 416-287-7561

Department of Student Life

Room SL157 | 416-208-4760

BioSA - Biology Students Association at UTSC, thebiosa.org

DID YOU KNOW...

ECO UTSC is an environmentalist group at UTSC which serves to increase local environmental sustainability at the UTSC.



Glossary of acronyms:

AA&CC - Academic Advising & Career Centre
CLNx - Career & Co-Curricular Learning Network
CTL - Centre for Teaching & Learning
DSL - Department of Student Life
ECO - EnviroCare Organization UTSC
ESA - The Ecological Society of America
ISC - International Student Centre
BioSA - Biology Students Association at UTSC
SCSU - Scarborough Campus Students Union
TRCA - Toronto Regional Conservation Authority