Physical Sciences (HBSc)
Department of Physical & Environmental Sciences

The Physical Sciences Major is intended for students desiring a general background in the physical sciences with emphasis in the area of astronomy, physics and physical chemistry. It is intended for students who want to combine physical skills with work in other subjects, and those who do not intend to pursue graduate studies.

Complementary Programs: Major programs in Mathematical Sciences, Chemistry, Biochemistry

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
• Apply physical principles to problems and formulate solutions
• Integrate theoretical approaches
• Mathematical and computational modelling
• Design and execute experiments

Careers for Graduates
• Researcher in Academia or Industry
• Financial Industry
• Data Science
• Education
• Policy and Data Analyst in Government

Further Education
• Teacher Education
• Finance
• Engineering
• Nuclear Medicine

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
### Physical Sciences (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)

- **3.5 credits as follows:** PHYA10H3, PHYA21H3, CHMA10H3, CHMA11H3, MATA30H3, MATA23H3, [MATA36H3 or MATA37H3].
- Explore different kinds of courses; this will also help with fulfilling breadth requirements and electives.
- Use Degree Explorer and the UTSC Calendar to plan your courses and program.

#### YEAR 2 (4 - 8.5 Credits)

- **2.5 credits from:** PHYB10H3, PHYB21H3, PHYB52H3, PHYB54H3, PHYB56H3, MATAB4H3, MATAB42H3, MATAB44H3, ASTB23H3, CHMB20H3, CHMB21H3, STAB22H3.
- Use Degree Explorer and meet with your Program Advisor to ensure you are on track with your degree.
- Check the Research Catalogue and jobs on CLNx for possible research opportunities.
- Drop by the Math & Statistics Learning Centre to have your course-related questions answered.
- Check out Global Research Abroad opportunities through the International Student Centre (ISC) to gain valuable international and research experiences.

#### YEAR 3 (9 - 13.5 Credits)

- **2.0 credits from (taken in year 3 to 4):** ASTC25H3, MATC34H3, MATC66H3, PHYC50H3, PHYC56H3, PHYC11H3, PHYC54H3, PHYD37H3, PHYD38H3, PSCB57H3, PSCD02H3, PHYD26H3, PSCD50H3, [PHYD01H3 or PHYD72H3].
- Use Degree Explorer to ensure you are on track with your degree.
- Consider running for an elected position in EPSA or another campus club.
- Become a tutor at the Physics Aid Centre.
- 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.

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

- Consider an independent research project with a faculty member (PHYD01 or PHYD72).
- 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.
- Apply for the Academic Travel Fund through DSL to conduct research, present at a conference, or engage with the academic community internationally.
- Consider research courses in physics (or other disciplines).
- Participate in the AA&CC's Partners in Leadership program to learn and network with an alumni mentor about transitioning into the work field or further education.
- Attend the AA&CC's Get Hired job search conference in April/May.
- Attend Jobs for Grads orientation for a job search “crash course” and for access to full-time job listings.
- Discuss grad school plans early with staff at the AA&CC and your professors; get your Personal Statement reviewed in the AA&CC.

#### CHOOSE YOUR COURSES WISELY

- Attend Facilitated Study Groups.
- Use the Physics Aid Centre for support.
- Schedule an appointment with your Program Librarian for in-depth library research assistance.
- Writing support is available at the Centre for Teaching & Learning (CTL) Writing Centre.
- 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.

#### DEVELOP YOUR ACADEMIC & RESEARCH SKILLS

- Attend the UTSC Get Experience Fair in September and register with SCSU’s Volunteer Network Program to explore opportunities.
- Attend the UTSC Faculty Mix & Mingle Fair for in-depth library research assistance.
- Join the Environmental and Physical Sciences Students’ Association (EPSA) and search for Experiential Learning opportunities, such as the Summer Abroad, Explore, or Student Exchange Programs.
- Volunteer in DSL's Alternative Reading Week program to gain experience and knowledge about social change and community development.
- Volunteer with organizations to explore your interests; check listings on CLNx.
- Attend the UTSC Get Experience Fair in September and register with SCSU’s Volunteer Network Program to explore opportunities.

#### APPLY THEORY TO PRACTICE

- Check out Global Research Abroad opportunities through the International Student Centre (ISC) to gain valuable international and research experiences.
- Look into ISC’s Global Learning opportunities, such as the Summer Abroad, Explore, or Student Exchange Programs.
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#### BECOME AN ENGAGED CITIZEN (LOCALLY & GLOBALLY)

- Gain experience by applying for a summer, part-time or Work Study position via CLNx.
- Consider applying to professor and advisors early so you are on track.
- Explore careers through the AA&CC’s Job Shadowing and In The Field programs.
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#### PLAN FOR YOUR FUTURE CAREER

- Consider an independent research project with a faculty member (PHYD01 or PHYD72).
- 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.
- Consider an independent research project with a faculty member (PHYD01 or PHYD72).
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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.
ufact.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
Prof. Salam Tawfiq,
salam.tawfiq@utoronto.ca

Physical Sciences Librarian
Sarah Forbes, s.forbes@utoronto.ca,
416-287-5616

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

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

Environmental & Physical Sciences Students’ Association (EPSA)
https://www.myepsa.ca/

Glossary of acronyms:
AA&CC - Academic Advising & Career Centre
CLNx – Career & Co-Curricular Learning Network
CCR - Co-Curricular Record
CTL - Centre for Teaching and Learning
DSL - Department of Student Life
EPSA - Environmental and Physical Sciences Students’ Association
ISC - International Student Centre
iSPEAC - invited Speakers in Physics, Environmental science, And Chemistry

DID YOU KNOW...
This is a highly flexible program that gives students opportunities to engage in physics, chemistry, and astronomy.

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