MAKE THE MOST OF YOUR TIME AT UTM!

Programs of Study (POSt)

- Specialist Program ERSPE1025 Astronomical Sciences (Science)
- Major Program ERMAJ2204 Astronomy (Science)

Check out…

Get ready to delve into astrophysics! In AST320H1, you'll learn about the formation, equilibrium and evolution of the universe, as well as about clusters of galaxies, galaxies, clusters of stars, gas clouds and stars. Have a soft spot for quantum mechanics? Check out JCP321H5, an introduction to the concepts of quantum chemistry and physics.

What can I do with my degree?

The career you choose will depend on your experience and interests. Visit the Career Centre to explore your career options.

Careers for Graduates: Spectral software developer; Radar indicator inspector; Science librarian; Planetarium guide; Science educator; Data scientist; Meteorologist; Optical technician; Laboratory technician; Astronomer.

Workplaces: Communications technology; Government; Scientific instrumentation manufacturing companies; Museums; Observatories and planetariums; Research centres; Space industry.
ASTRONOMICAL SCIENCES

SPECIALIST Program Plan

1ST YEAR
Choose a program of study (Subject POS) once you complete 4.0 credits. Use the Degree Explorer Planner and the Academic Calendar to plan your degree.
Start strong and get informed with utmONE and LAUNCH through the Office of Student Transition. Join a RGASC Peer Facilitated Study Group.

2ND YEAR
Enrol in courses AST221H5(G), 222H5(G); MAT232H5/233H5, 236H5, 244H5; PHY241H5, 242H5; JCP221HS and JCP245HS.
Consider applying for Research Opportunity Program (ROP) courses AST299Y and AST999Y. Visit the EEO website for ROP Course Prerequisites. Attend the RGASC’s P.A.R.T. to enhance your research skills.

BUILD YOUR ACADEMICS*

Access the Co-Curricular Record (CCR). Search for opportunities beyond the classroom, and keep track of your accomplishments.
Attend the Get Experience Fair through the Career Centre (CC) to learn about on- and off-campus opportunities.

BUILD SKILLS
Use the Career Learning Network (CLN) to find postings for on- and off-campus work and volunteer opportunities.
Work on-campus through the Work-Study program. View position descriptions on the CLN.

BUILD A NETWORK
Networking simply means talking to people and developing relationships with them. Start by joining the Erindale Chemical and Physical Societies (ECCP). Make sure to go to the ECCP’s Meet the Pros Night.
Visit the UTM Library Reference Desk.

BUILD A GLOBAL MINDSET
Visit the International Education Centre (IEC) to explore different cultures through food, music, and sport or through sight-seeing around the GTA.

PLAN FOR YOUR FUTURE
Attend the Program Selection & Career Options workshop offered by the Office of the Registrar and the CC.
Check out Careers by Major at the CC to see potential career options.

HOW TO USE THIS PROGRAM PLAN
Read through each year. Investigate what appeals to you here and in any other Program Plans that apply to you.
Visit www.utm.utoronto.ca/program-plans to create your own plan using My Program Plan. Update your plan yearly.

3RD YEAR
Enrol in courses AST320H1(G); CSC108H5; JCP321H5, 322H5; MAT311H5, 334H5; PHY325H5 and 347H5.
Throughout your undergraduate degree:
• use the Degree Explorer to ensure you complete your degree and program requirements.
• see the Office of the Registrar and the CPS Academic Counsellor for assistance.

Explore your interests. Why not pass on your passion for science? Be a UTM Let’s Talk Science Outreach volunteer to support educators and help youth form positive attitudes towards the role that STEM plays in their lives and futures.

4TH OR FINAL YEAR
Enrol in AST425Y1(G), JCP421H5, PHY451H5, and STA220H5/256H5.
Senior students complete a research project. Speak to the CPS Academic Counsellor to discover available opportunities.
Log on to ACORN and request graduation.

Establish a professional presence on social media (e.g. LinkedIn Facebook, Twitter or blogs).
Learn about local issues! Consider a CSE Alternative Reading Week (ARW) to become engaged with the local community.

Check out the Royal Astronomical Society of Canada Mississauga Centre or Earthshine, an organization that develops and runs astronomy education and public outreach activities in Mississauga.
Go to a conference such as the Canadian Space Summit.

Market your skills to employers. Get your resume critiqued at the CC. Attend the CC workshop Now That I'm Graduating What's Next?
Write a strong application for further education. Attend the CC's Mastering the Personal Statement workshop.

*Consult the Academic Calendar for greater detail on course requirements, program notes and degree requirements.

Rewards: visit www.utm.utoronto.ca/program-plans for the online version and links.
Skills developed in Astronomical Sciences

To be competitive in the job market, it is essential that you can explain your skills to an employer. Visit the Career Centre to learn how to articulate and market the following skills.

**Problem-solving:** analyze data and interpret observations and see relationships among factors.

**Communication:** explain complex concepts and theories to others and clearly explain scientific research and write reports.

**Research:** define a problem; establish hypotheses; apply and integrate fundamental scientific principles; gather scientific data; and review scientific literature.

**Computational:** measure distances and sizes; perform complex calculations; and interpret images.

Get involved

Check out student organizations on campus. Here are a few:

- Erindale Chemical and Physical Sciences Society (ECPS)
- UTM Student Union (UTMSU)
- UTM Athletics Council (UTMAC)

For a listing of clubs on campus visit www.utm.utoronto.ca/clubs.

Services that support you

- AccessAbility Resource Centre (AARC)
- Career Centre (CC)
- Centre for Student Engagement (CSE)
- Academic Counsellor, Department of Chemical & Physical Sciences
- Experiential Education Office (EEO)
- Health & Counselling Centre (HCC)
- Indigenous Centre (IC)
- International Education Centre (IEC)
- Office of Student Transition (OST)
- Office of the Registrar (OR)
- Recreation, Athletics and Wellness Centre (RAWC)
- Robert Gillespie Academic Skills Centre (RGASC)
- UTM Library, Hazel McCallion Academic Learning Centre (HMALC)

Department of Chemical & Physical Sciences

William Davis Building, 4037A University of Toronto Mississauga 3359 Mississauga Rd Mississauga ON Canada L5L 1C6

905-828-5351; 905-828-3800 cpscounsellor.utm@utoronto.ca www.utm.utoronto.ca/cps

FUTURE STUDENTS

Admission to UTM

All program areas require an Ontario Secondary School Diploma, or equivalent, with six Grade 12 U/M courses, or equivalent, including English. Your admission average is calculated using English plus your next best five courses. The Grade 12 prerequisites for Astronomical Sciences are Advanced Functions and Physics. The approximate average required for admission is mid- to high-70s. More information is available at utm.utoronto.ca/viewbook.

NOTE: During the application process, applicants will select the Chemical & Physical Sciences admissions category but will not officially be admitted to a formal program of study (Specialist, Major, and/or Minor) until after first year.

Sneak Peek

Would you like to understand more fully the celestial phenomena visible to the naked eye? AST110H5 gives a quantitative, scientific introduction to observing objects that can be seen with the naked eye or with binoculars. Discover the beauty of proofs in MAT102H5! You will learn to understand, use and develop precise expressions of mathematical ideas, including definitions and theorems.

In CPS, our students have access to new, state-of-the-art teaching laboratories and are involved in cutting-edge research projects in our research labs.

Student Recruitment & Admissions

Innovation Complex, Room 1270 University of Toronto Mississauga 3359 Mississauga Rd Mississauga ON Canada L5L 1C6

905-828-5400 www.utm.utoronto.ca/prospective