# **NEUROSCIENCE (HBSc)**

Department of Psychological and Brain Sciences

**Neuroscience** is the field that explores neurobiological, physiological, genetic, and epigenetic contributions to behaviour. This emerging discipline represents an integrative approach to the study of behaviour that brings together the tremendous gains in knowledge that have been made in the past few decades. The program combines courses in psychology and biology to provide excellent preparation for graduate studies in the neurosciences.

### MAKE THE MOST OF YOUR TIME AT UTM!

We want to help you maximize your university experience, so we've pulled together information and interesting 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 mentioned. In fact, activities such as joining an academic society, engaging with faculty and seeking opportunities to gain experience should occur in each year of your study at UTM. Read through the chart and create your own plan using My Program Plan found at www.utm.utoronto.ca/program-plans

### **Program of Study (POSt)**

• Specialist Program ERSPE2470 Neuroscience (Science)

### Check out...

What is neuroplasticity? Find out in PSY397H5 – a course that examines how brain structures are organized in response to internal and external factors. How do we understand psychological disorders from a biological perspective? Enrol in PSY346H5 and discover the role of genetics, brain structures, and biochemistry in various disorders, along with the implications for prevention or treatment.

### 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.

**Career Paths for graduates**: Research technician; Neuropsychologist; Researcher; Medical careers; Veterinarian; Science educator.

**Workplaces**: Educational institutions; Medical/health organizations; Government; Research centres, Industrial research and development.



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

**HOW TO USE THIS PROGRAM PLAN** 

		1 <sup>st</sup> YEAR	2 <sup>ND</sup> YEAR	3 <sup>RD</sup> YEAR	4 <sup>th</sup> OR FINAL YEAR
	PLAN YOUR ACADEMICS*	Enrol in PSY100Y5; BI0152H5, BI0153H5; CHM110H5, CHM120H5; and (MAT132H5, MAT134H5).  Use <b>Degree Explorer</b> and the <b>Academic Calendar</b> to plan your degree. After completion of 4.0 crdeits you may apply for a <b>program of study</b> (Subject POSt) such as a double major in Psychology & Biology.  Develop academic skills and strategies by enrolling in a	Enrol in (PSY201H5, PSY202H5) or equivalent, and PSY290H5. One of the following: BIO202H5/ BIO205H5/ BIO206H5/ BIO207H5/ PSY210H5/ PSY270H5/ PSY274H5/ PSY280H5. See <b>Academic Calendar</b> for suggested prerequisites for upper years. Apply to the Specialist once 8.0 credits have been completed.  Consider applying for <b>Research Opportunity Program (ROP)</b>	Attain 1.0 credit from each of the following three streams: Behavioural Neuroscience; Molecular/Cellular Biology; and Neurobiology. See the <b>Academic Calendar</b> to view course listings for these categories. Students interested in taking PSY400Y5 are advised to take PSY309H5.  Throughout your undergraduate degree:  • Use <b>Degree Explorer</b> to ensure you complete your degree and	Enrol in one seminar from courses: BIO403H5, BIO404H5, BIO406H5, BIO407H5, BIO408H5, PSY490H5, PSY495H5 and PSY480H5. Enrol in one thesis/ research project from courses: BIO481Y5, PSY400Y5 and PSY403H5/ PSY404H5/ PSY405H5/ PSY406H5/ PSY499H5.  Log on to ACORN and request graduation.
		utmONE First-Year Foundations Course. Build community and gain academic support through LAUNCH. Join a RGASC Peer Facilitated Study Group.	courses in Psychology or Biology. Visit the EEU website for <b>ROP Course Prerequisites</b> . Attend the RGASC's <b>PART</b> to enhance your research skills.	program requirements.  See the Office of the Registrar and the Psychology Academic Advisor for assistance.	
	BUILD	Use the <b>Co-Curricular Record (CCR)</b> . Search for opportunities beyond the classroom, and keep track of your accomplishments.	Use the <b>Career &amp; Co-Curricular Learning Network (CLNx)</b> to find postings for on- and off-campus work and volunteer opportunities.	Get experience in a research lab! Explore higher-year Research Opportunity Program (ROP) offerings in Psychology and Biology.	Design and execute an independent senior thesis! Apply for PSY400Y5. Speak to the <b>Psychology Academic Advisor</b> for application information.
	SKILLS	Attend the <b>Get Hired Fair</b> through the Career Centre (CC) to learn about on- and off-campus opportunities.  Attend the <b>Experiential Education Fair</b> to learn about forcredit EL opportunities.	Work on-campus through the <b>Work-Study program</b> . View position descriptions on the CLNx.	Apply to become an Experiential Education Unit <b>Student Ambassador</b> and earn a CCR notation.	
	BUILD A NETWORK	Networking simply means talking to people and developing relationships with them. Start by joining the <b>Psychology Association of Undergraduate Students of Erindale</b> ( <b>P.A.U.S.E</b> ). For upcoming events and workshops, make sure to follow the social media platforms associated with the Psychology Department:  utm.pause on IG  utmpsychology on IG and X	Do you have a professor you want to connect with? Ask them a question during office hours. Discuss an assignment. Go over lecture material. Don't be shy! Learn Tips On How to Approach a Professor available through the Experiential Education Unit (EEU).  It's always a good idea to visit the UTM Library Reference Desk.	Establish a professional presence on social media (e.g., LinkedIn).  Attend the Psychology department's "GReAT Talks" (Graduate, REsearcher, And Trainee) or the Perception, Cognition and Language Research Talk Series to mingle and learn about new psychological discoveries.	Go to the Canadian Society for Brain, Behaviour and Cognitive Science Conference or the Animal Behaviour Society Conference.  Curious about grad school? Connect with a grad student through the CSE's Grad Connect program to get the inside scoop.
	BUILD A GLOBAL MINDSET	Engage with the many programs offered by the International Education Centre (IEC), whether you are an international or domestic student. Consider joining the Canada Eh? day trips or English Language Conversation Circles to deepen your global mindset.  First-year international students can also take advantage of THRIVE-IN, a one-day conference dedicated to helping you start your UTM journey successfully.	Participate in International Education Week and engage in programs like Global and Intercultural Fluency Training Series (GIFTS) to build on your leadership and communication skills in global citizenship.  Learn about and prepare for a future UTM Abroad Experience through the IEC to strengthen and enhance your intercultural skill set, and learn about other cultures while sharing your own!	Expanding your intercultural awareness and developing intercultural skills will help you in your academics, personal growth and are highly sought out by employers.  Earn credits overseas! Apply to study for a summer term, or year at one of 170+ universities. Speak to the IEC for details about Course Based Exchange, funding and travel safety. Attend Global Learning Week to learn about the various opportunities available to you!	Engage in programs like <b>ISTEP</b> and <b>THRIVE</b> to support your transition out of the University!
-	PLAN FOR YOUR FUTURE	Start by exploring the <b>UTM Career Centre Model</b> —a chance to reflect and choose what's right for you with guided support. Access <b>MyCareerCentre</b> 24/7 for flexible, interactive career learning at your own pace.  Connect with support in-person: Drop-in to an <b>Academic &amp; Career Planning Session</b> to chat with Advisors and Career Counsellors. Visit the Career Corner in the <b>Student Services Hub</b> to chat with a Peer Career Assistant about resources that fit your goals.	Explore your options with the CC's <b>Job Shadow Program</b> , <b>In the Field</b> , or a one-on-one with a <b>Career Counsellor</b> .  Thinking about grad school? Attend the <b>Graduate &amp; Professional School Fair</b> , research application requirements, admission tests, and explore funding options.  Getting ready for work? Join workshops, drop-ins, and networking events to build experience and confidently share your skills – Register on <b>CLNx</b> .	Need job search support? Book a coaching appointment with an <b>Employment Strategist</b> for personalized guidance.  Ready to take the next step for grad school, visit the Pursue Learning section on <b>MyCareerCentre</b> and drop-in to chat with a <b>Career Counsellor</b> about grad school prep tips.  Want to grow your network? Attend the Career Centre Networking Series and Let's Talk About events — Register on <b>CLNx</b> .	Join the <b>Now That I'm Graduating, What's Next?</b> session to start building your job search plan. Attend the <b>Sweats to Suits Job Search Conference</b> and discover diverse career pathways.  Work with the <b>Employment Strategist</b> team to review your resume and prep for interviews.  Still figuring things out? Meet with a <b>Career Counsellor</b> to create a career plan and attend a <b>Career Wellness</b> session to support your well-being along the way.

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

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# **NEUROSCIENCE**

## Skills developed in Neuroscience

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:

**Communication:** Write and speak effectively, as well as inform and explain ideas.

**Research:** Design experiments and conduct studies; assemble and analyze data; make observations and comparisons to arrive at valid conclusions

**Critical thinking & problem-solving:** Make critical decisions under stressful situations, as well as perceive and understand individual differences.

**Investigative:** Understand and identify neurological diseases.

**Technical:** Perform laboratory procedures, maintain laboratory equipment and instrumentation; ensure compliance with ethics policies and best practices for research.

### Services that support you

- Accessibility Services (AS)
- Career Centre (CC)
- Centre for Student Engagement (CSE)
- Equity, Diveristy & Inclusion Office (FDIO)
- Experiential Education Unit (EEU)
- Health & Counselling Centre (HCC)
- International Education Centre (IEC)
- 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 Psychological** and Brain Sciences

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Academic Advisor: 905-828-3755 www.utm.utoronto.ca/psychology

### **Admission to UTM**

**FUTURE STUDENTS** 

All program areas require an Ontario Secondary School Diploma, or equivalent, with six Grade 12 U/M courses, or equivalent, including English. The admission average is calculated with English plus the next best five courses. The Grade 12 prerequisites this program are Advanced Functions, Biology and Chemistry. 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 Psychology admissions category, but will not officially be admitted to a formal program of study until after second year (Specialist).

### **Sneak Peek**

What are the principles underlying the study of the nervous system and behaviour? Find out in PSY290H5. What's in your genes? Take BIO207H5 to find out about the principles of Mendelian inheritance and modern genetics.

## 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/future-students

### **Get involved**

Check out the 100+ student organizations on campus. Here are a few:

- Psychology Association of Undergraduate Students of Erindale (P.A.U.S.E).
- Erindale Biology Society (EBS)
- UTM Student Union (UTMSU)
- UTM Athletics Council (UTMAC)

For a listing of clubs on campus visit the **Student Groups and Societies Directory** 

