

# NEUROSCIENCE (HBSc)

*Department of Psychology*

**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](http://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.



# NEUROSCIENCE

## SPECIALIST Program Plan

## 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](http://www.utm.utoronto.ca/program-plans) to create your own plan using [My Program Plan](#). Update your plan yearly.



	1 <sup>ST</sup> YEAR	2 <sup>ND</sup> YEAR
PLAN YOUR ACADEMICS*	<p>Enrol in PSY100Y5; BIO152H5, 153H5; CHM110H5, 120H5; and (MAT132H5, 134H5).</p> <p>Use the <b>Degree Explorer</b> and the <b>Academic Calendar</b> to plan your degree. After completion of 4.0 credits you may apply for a program of study (Subject POST) such as a double major in Psychology &amp; Biology.</p> <p>Start strong and get informed with <b>utmONE</b> and <b>LAUNCH</b> through the Centre for Student Engagement (CSE). Join a RGASC <b>Peer Facilitated Study Group</b>.</p>	<p>Enrol in (PSY201H5, 202H5)/ (STA220H5, 221H5)/ (STA215H5, BIO360H5) or equivalent; BIO202H5, 206H5, 207H5; and PSY290H5. One of the following: PSY210H5, 270H5, 274H5, 280H5. See <b>Second Year Notes</b> for suggested prerequisites for upper years. Apply to the Specialist once 8.0 credits have been completed.</p> <p>Consider applying for <b>Research Opportunity Program (ROP)</b> courses in Psychology or Biology. Visit the EEU website for <b>ROP Course Prerequisites</b>. Attend the RGASC's <b>P.A.R.T.</b> to enhance your research skills.</p>
BUILD SKILLS	<p>Use the <b>Co-Curricular Record (CCR)</b>. Search for opportunities beyond the classroom, and keep track of your accomplishments.</p> <p>Attend the <b>Get Experience Fair</b> through the Career Centre (CC) to learn about on- and off-campus opportunities.</p>	<p>Use the <b>Career Learning Network (CLNx)</b> to find postings for on- and off-campus work and volunteer opportunities.</p> <p>Work on-campus through the <b>Work-Study program</b>. View position descriptions on the CLNx.</p>
BUILD A NETWORK	<p>Networking simply means talking to people and developing relationships with them. Start by joining the <b>Psychology Association of Undergraduate Students of Erindale (P.A.U.S.E)</b>. Make sure to go to P.A.U.S.E's <b>Professors Meet &amp; Greet</b>.</p> <p>Visit the <b>Psychology Undergraduate Meeting Place (P.U.M.P. Room)</b> in Deerfield Hall, room 2039. Visit the UTM Library <b>Reference Desk</b>.</p>	<p>Do you have a professor you really like or connect with? Ask them a question during office hours. Discuss an assignment. Go over lecture material. Don't be shy! Learn <b>Tips On How to Approach a Professor</b> available through the Experiential Education Unit (EEU).</p>
BUILD A GLOBAL MINDSET	<p><b>Attend events held by the International Education Centre (IEC)</b>, whether you are an international or domestic student. Explore your culture and other cultures through weekly/regular conversations, <b>Language Conversation Circles</b>, debates, and activities to enhance your global and intercultural mindset.</p>	<p>Engage in programs like the <b>Global and Intercultural Fluency Training Series (GIFTS)</b> or learn about and prepare for a future <b>UTM Abroad Experience</b> through the IEC to strengthen and enhance your intercultural skill set, and learn about other cultures while sharing your own!</p>
PLAN FOR YOUR FUTURE	<p>Attend the <b>Program Selection &amp; Career Options</b> workshop offered by the Office of the Registrar and the CC.</p> <p>Check out <b>Careers by Major</b> at the CC to see potential career options.</p>	<p>Explore careers through the CC's <b>Job Shadowing Program</b> and register through CLN for sessions <b>Put Your Psychology Degree to Work</b> and <b>Grad School in Psychology</b> sponsored by the department.</p> <p>Considering <b>further education</b>? Attend the CC's <b>Graduate and Professional Schools Fair</b>. Talk to professors – they are potential mentors and references.</p>

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

3 <sup>RD</sup> YEAR	4 <sup>TH</sup> OR FINAL YEAR
<p>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.</p> <p>Throughout your undergraduate degree:</p> <ul style="list-style-type: none"> <li>use the <b>Degree Explorer</b> to ensure you complete your degree and program requirements.</li> <li>see the <b>Office of the Registrar</b> and the <b>Psychology Academic Counsellor</b> for assistance.</li> </ul>	<p>Enrol in one seminar from courses: BIO403H5, 404H5, 406H5, 407H5, 408H5, PSY490H5 and 495H5. Enrol in one thesis/ research project from courses: BIO481Y5, PSY400Y5 and 403H5/ 404H5/ 405H5/ 406H5/ 499H5.</p> <p>Log on to ACORN and request graduation.</p>
<p>Get experience in a research lab! Explore higher-year Research Opportunity Program (ROP) offerings in Psychology and Biology.</p> <p>Interested in mental health education? Join the Health &amp; Counselling Centre's <b>Mental Health &amp; Safety</b> team.</p>	<p>Design and execute an independent senior thesis! Apply for PSY400Y5. Speak to the <b>Psychology Academic Counsellor</b> for application information.</p>
<p>Establish a professional presence on social media (e.g., LinkedIn).</p> <p>Attend the Psychology department's <b>Colloquium Series</b>, <b>Departmental Brown Bag Series</b> and the Biology department's <b>Seminar Series</b> to mingle and learn about new scientific discoveries.</p>	<p>Go to the <b>Canadian Society for Brain, Behaviour and Cognitive Science Conference</b> or the <b>Animal Behaviour Society Conference</b>.</p> <p>Curious about grad school? Connect with a grad student through the CSE's <b>Grad Connect</b> program to get the inside scoop.</p>
<p><b>Earn credits overseas!</b> Apply to study for a summer, term or year at one of 140+ universities. The Psychology department has identified partners which are most relevant to our students. Speak to the IEC for details about <b>Course Based Exchange</b>, funding and travel safety.</p>	<p>Learn about working abroad. Read up on worldwide employment trends and industry outlooks through <b>GoInGlobal</b>. Attend the <b>Go Global Expo</b>. See if you are eligible for <b>International Experience Canada</b>.</p>
<p>What's your next step after undergrad?</p> <p>Entering the workforce? Evaluate your career options through a CC <b>Career Counselling appointment</b>. Create a job search strategy — book a CC <b>Employment Strategies appointment</b>.</p> <p>Considering further education? Research application requirements, prepare for admission tests (GRE, LSAT, MCAT), and research funding options (OGS, NSERC).</p>	<p>Market your skills to employers. Get your <b>resume critiqued</b> at the CC. Attend the CC workshop <b>Now That I'm Graduating What's Next?</b></p> <p>Write a strong application for further education. Attend the CC's <b>Mastering the Personal Statement</b> workshop.</p>

Revised on: 7/10/2020

# 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.

## 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 [www.utm.utoronto.ca/clubs](http://www.utm.utoronto.ca/clubs).

## Services that support you

- Accessibility Services (AS)
- Career Centre (CC)
- Centre for Student Engagement (CSE)
- Experiential Education Unit (EEU)
- Health & Counselling Centre (HCC)
- Indigenous Centre (IC)
- 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 Psychology

Deerfield Hall, 4th Floor, Room 4098  
University of Toronto Mississauga  
3359 Mississauga Rd  
Mississauga ON Canada L5L 1C6

Academic Counsellor: 905-828-3958  
Faculty Advisor: 905-828-5414

[www.utm.utoronto.ca/psychology](http://www.utm.utoronto.ca/psychology)

## 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. 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](http://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](http://www.utm.utoronto.ca/future-students)

