Why GRADUATE STUDIES in NEUROSCIENCE?

Graduate students and their work are an important part of an ongoing research process that provides the community with ways of understanding natural, cultural, imaginative, social and technological phenomena. The multidisciplinary graduate program in Neuroscience is educating the next generation of leaders who will build on the progress in reducing the impact of neurological disorders. Top students from across North America and beyond come to the Centre to learn in a collaborative environment where they can learn from the best minds in the field. The Neuroscience graduate program is firmly rooted in research because our objective is to produce highly-trained graduates who will continue our efforts to prevent and treat neurological diseases. The program offers studies spanning the full spectrum of neuroscience research, from cellular/molecular to clinical studies.

Why QUEEN’S?

At the forefront of discovery and innovation is the Centre for Neuroscience Studies (CNS) at Queen’s University. A hub of multidisciplinary research and teaching aimed at improving the understanding of the brain, how it works and how new therapies and diagnoses can play an important role in the prevention and treatment of diseases like Parkinson’s, Alzheimer’s, Stroke, Obesity, Fetal Alcohol Spectrum Disorder, Schizophrenia, Behavioral Disorders, and Depression.

The Centre for Neuroscience Studies (CNS) welcomes applications from students from a variety of different academic backgrounds. It offers an interdisciplinary program recruiting expertise from a wide range of research areas and backgrounds, ranging from the use of cellular/molecular and genetic approaches to those that emphasize neuronal systems, whole organism and clinical studies.

“Right from the day I started at the Centre for Neuroscience Studies, it felt like family. The camaraderie and support you get is amazing.”

– Alicia Peltsch, PhD

Program STRUCTURE

MSc (2 years, full time): Course work, research project, thesis, and defense.

Research AREAS

The CNS has four research areas of strength in Decision Making and Adaptive Control, Mood Disorders, Neurodegeneration and Pain. There are also many other neuroscience topics studied under the umbrella of the CNS. Our research spans cellular molecular research, systems, behavioural, cognitive and clinical applications.

Visit the Neuroscience website to learn more about faculty members and their research areas. When you find a faculty member with similar research interests to yours, contact them and tell them about your interest in graduate work and related experience.
Neuroscience MSc Map

Getting Started

- Achieve Your Academic Goals
  - Start with key priorities like developing your relationship with your supervisor, forming your committee, completing WHMIS hazard training, and doing your coursework.
  - Find your way through the academic process with help from the CNS and the School of Graduate Studies and Postdoctoral Affairs.
  - Complete the MSc Thesis Form Part 1.

- Maximize Research Impact
  - Start to think about the audiences for your research.
  - If you will be continuing graduate studies, apply for funding from sources such as CIHR, NSERC, SSHRC, OGS, and the Heart and Stroke Foundation.
  - Ask supervisor about potential industry partnerships and MITACS awards.

- Build Skills and Experience
  - Consider positions in student services, the SGPS, or media outlets like the Queen’s Journal, CFRC, and the SGSPA Blog. Look in the AMS Clubs Directory for more ideas.
  - Serve on departmental, faculty or university committees. Talk to the Society of Graduate and Professional Students for tips on getting involved.
  - Get involved in one of the many leadership opportunities in the CNS.

- Engage with Your Community
  - Explore how you can connect with your community through experiential opportunities on- and off-campus.
  - Consider volunteering with different community organizations, such as the Neuroscience Outreach Program.
  - Attend the seminar series put on by the Centre for Neuroscience Studies.

- Launch Your Career
  - Finding a career that fits starts with knowing yourself. Get help by taking a Career Services workshop or meeting with a career counsellor. Check out books like So What Are You Going to do With That? or Planning a Scientific Career in Industry.
  - Start reading publications like University Affairs and the Chronicle of Higher Education. Browse non-academic labour market websites. Stay on the lookout for special events like School of Graduate Studies and Postdoctoral Affairs Career Week to explore your career pathways.

Intermediate Stage

- Achieve Your Academic Goals
  - Complete your coursework; begin to research and write your thesis.
  - Take the Lab Safety Training course and ADDA training.
  - Complete MSc Thesis Form Part 2.

- Maximize Research Impact
  - Attend or present at a local, national or international research conference in your field of expertise.
  - Participate in the 3 Minute Thesis (3MT) competition.
  - Expand your research audience through social media.
  - Set up a meeting with the School of Graduate Studies and Postdoctoral Affairs to go on Grad Chat to discuss your research interests.

- Build Skills and Experience
  - Start keeping an eportfolio of your skills, experiences, and competencies.
  - Use a Research Assistant or Teaching Assistant position to develop your research or teaching skills.
  - For help with teaching, get support from the Centre for Teaching and Learning.
  - Enrol in SGS902 or the PUTL Certificate for more professional development in teaching and learning.

- Engage with Your Community
  - Participate in your graduate and professional community through activities such as graduate student outbreaks programs, organizing conferences, and research groups.
  - Prepare for work or studies in a multi-cultural environment by taking the Intercultural Awareness Training Certificate hosted by QUIC and FDII.
  - If you are an international student interested in staying in Canada, consider speaking with an International Student Advisor.

- Launch Your Career
  - Explore different careers of interest by using Careers Connects on LinkedIn to connect with Queen’s alumni. Check out Career Cruising for more information.
  - If you are considering a PhD, explore programs of interest reach out to faculty, and apply to PhD programs and external scholarships.

Wrapping Up

- Achieve Your Academic Goals
  - Present your research to Neuroscience graduate students and faculty.
  - Complete and defend your Master’s research thesis.

- Maximize Research Impact
  - Consider publishing elements of your research. Learn from the School of Graduate Studies and Postdoctoral Affairs professional development publishing workshop.
  - Attend a major conference in your field, such as the Canadian Neuroscience Meeting, or the Society for Neuroscience’s Annual Meeting. There are many to choose from, so talk to your supervisor for advice on which ones would be most relevant.

- Build Skills and Experience
  - Practice articulating the skills you have been developing in settings outside the university, such as casual conversation, networking, and interviews. Get help from a Career Services workshop.

- Engage with Your Community
  - Do some targeted networking with people working in careers of interest. Through Careers Connects on LinkedIn, the Queen’s Alumni Association, professional associations, and at conferences. Get help from a Career Services workshop.
  - Consider joining one of the many professional associations like the Society for Neuroscience, or the Canadian Association for Neuroscience.

- Launch Your Career
  - Participate in hiring committees and attend job talks. Start focusing on areas of interest. Research organizations of interest and start putting together your CV or resume for potential positions of interest. Get help from Career Services with job searching, resumes, and interviews.

What Will I Learn?

- A graduate degree in Neuroscience can equip you with:
  - Knowledge and technical skills
  - Effective communication skills in multiple forms for diverse audiences
  - Information management: prioritize, organize, and synthesize large amounts of information
  - Time management: meet deadlines and manage responsibilities despite competing demands
  - Project management: develop ideas, gather information, analyze, critically appraise findings, draw and act on conclusions
  - Creativity and innovation
  - Perseverance
  - Independence and experience as a collaborative worker
  - Awareness, an understanding of sound ethical practices, social responsibility, responsible research and cultural sensitivity
  - Professionalism in all aspects of work, research, and interactions
  - Leadership: initiative and vision leading people and discussion

Where Can I Go?

- A Master’s degree in Neuroscience can take your career in many directions. Many of our MSc students choose to continue their academic inquiry with a PhD. Our Master’s students are equipped with a strong foundation for careers in:
  - Biomedical industry
  - Biotechnology companies
  - Clinical trials
  - Health Canada
  - Medical school
  - Outreach education
  - Pharmaceutical companies
  - Post-doctoral study or academia
  - Scientific writing

How to use this map

Use the 5 rows of the map to explore possibilities and plan for success in the five overlapping areas of career and academics. The map just offers suggestions - you don’t have to do it all! To make your own custom map, use the My Grad Map tool.
Application FAQs

What do I need to know to APPLY?

ACADEMIC REQUIREMENTS
- Honours Bachelor’s degree in Arts or Science, Applied Science, degree of Doctor of Medicine, or equivalent.
- Grade requirements: B in the second, third and fourth years of an Honours Bachelor’s degree.

ADDITIONAL REQUIREMENTS
- Statement of Interest.
- Current CV.
- If English is not a native language, prospective students must meet the English language proficiency requirements in writing, speaking, reading, and listening. The following minimum scores are required: (1) TOEFL ibT: Writing (24/30); Speaking (22/30); Reading (22/30); Listening (20/30). Applicants must have the minimum score in each test as well as the minimum overall score, or (2) IELTS: 7.0 (academic module overall band score and a 7.0 for each test band), or (3) PTE Academics: 65, or (4) CAEL CE -70 (minimum overall score).

KEY DATES & DEADLINES
- Application due: To be eligible for internal awards, applications must be submitted by February 1st. Applications received after the deadline will be accepted based on supervisor availability.

Before you start your application, please review the Graduate studies application process.

What about FUNDING?

Master's students in Neurosciences are offered a minimum funding of $21,000 per year. As part of the minimum funding package, you may serve as a Teaching Assistant, but it is not guaranteed. Applicants to the Centre for Neuroscience program with external funding awards will have a greater opportunity of being accepted to the program.

Apply for external funding from OGS, CIHR/NSERC and other sources. Queen's will automatically issue a $5,000 top-up to Master's winners of federal government tri-council awards. See the School of Graduate Studies and Postdoctoral Affairs information on awards and scholarships for more.