Why GRADUATE STUDIES in COMPUTING?

The School of Computing is active in research on a broad range of topics, with an strong research record. Research areas include: Biomedical Computing, Cloud Computing, Databases, Data Mining, Mobile Networks, Software Engineering, Human-Machine Learning, Algorithms, Computational Linguistics, Theoretical Computer Science, Computational Geometry, Graph Theory, Artificial Intelligence, Parallel Systems, and Programming Languages. We are finding methods to make data more secure, software more reliable, and computers more intelligent.

“The cutting-edge research, world-renowned supervisors, unparalleled social experience, and a devotion to school life […] result in nothing short of awesome.”
– Eric Rapos, PhD student

Why QUEEN’S?

The Queen’s School of Computing offers a graduate program that is unique in its quality, diversity, innovation and reach. Our faculty and students are engaged in research projects that span the spectrum of traditional computer science, while at the same time exploring areas never visited before. Some of us are discovering properties of certain computers that are radically different from the ones we have today, in the sense that a bit is the spin of an atom, or a register is a strand of DNA. Others are building organic interfaces for humans to communicate with computers. At Queen’s you will find a School reputed for its academic excellence and the wonderful atmosphere it enjoys.

Program STRUCTURE

The Master’s of Computing is offered in 3 methods of completion:

- MSc (4-6 terms): course work and thesis
- MSc (2-3 terms): course work and project
- MSc (2 terms): course work

RESEARCH Areas

- Theory
- Software
- Databases and Cloud Computing
- Biomedical Computing
- Data Mining
- Mobile Computer Networking
- Game Development and Human Computer Interaction

We encourage you to identify an area of research interest and contact a potential supervisor before applying.

Visit the School of Computing website to read faculty profiles and learn more about faculty members research areas. When you find a faculty member with similar research interests to yours, contact him/her and tell them about your interest in graduate work and related experience.
**GETTING STARTED**

- **ACHIEVE YOUR ACADEMIC GOALS**
  - Start with key priorities like developing your relationship with your supervisor, exploring possible research problems, and doing your coursework.
  - Find your way through the academic process with help from departmental and **Expanding Horizons** professional development workshops, the Departmental Grad Chair and the **SGS Habitat**.

- **MAXIMIZE RESEARCH IMPACT**
  - Start to think about the audiences for your research.
  - If you will be continuing graduate studies, apply for NSERC and DGS funding.

- **BUILD SKILLS AND EXPERIENCE**
  - Consider positions in student services, the **SGPS**, or media outlets like the **Queen’s Journal**, **CFRC** and the **SGS Blog**. Look in the **AMS Clubs Directory** for more ideas.
  - Serve on departmental, faculty or university committees. Talk to the **Queen’s Graduate Computing Society** for tips on getting involved.
  - Check out professional Development workshops from **Expanding Horizons** and the Computing Department.

- **ENGAGE WITH YOUR COMMUNITY**
  - Explore how you can connect with your community through experiential opportunities on- and off-campus.
  - Consider volunteering with different local community organizations, such as **Martha’s Table** or **Loving Spoonful**.
  - Enjoy a hot beverage on Tuesday and Thursday coffee breaks with faculty and peers.
  - Women are encouraged to take part in the annual **Canadian Celebration of Women in Computing (CAN-CWiC)**.

- **LAUNCH YOUR CAREER**
  - Finding a career that fits starts with knowing yourself. Get help by taking a Career Services career planning workshop, or meeting with a career counselor. Check out books like *What Are You Going to Do With That?* from the Career Resource Area for advice on various career options.
  - 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 Graduate Students’ **Career Week** to explore your career options.
  - Check admission test deadlines if needed for further studies.

**INTERMEDIATE STAGE**

- **Achieve Your Academic Goals**
  - Complete your coursework; begin to research and write your thesis or begin working on your project.

- **Expertise and Research**
  - Attend or present at a graduate conference such as the **Queen’s Graduate Computing Society Conference**.
  - Consider participating in the **3 Minute Thesis (3MT)** competition.
  - Expand your research audience through social media such as Twitter or a blog.

- **Maximize Research Impact**
  - 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**. Enroll in **SGS091** or the **PUTL** certificate for more professional development in teaching and learning.

- **Build Skills and Experience**
  - Participate in your graduate and professional community through activities such as graduate student outreach programs, organizing conferences, and research groups like **Material Matters**.
  - Prepare for work or studies in a multi-cultural environment by taking QUAC’s **Intercultural Competency Certificate**.
  - If you are an International student interested in staying in Canada, consider speaking with an **International Student Advisor**.

- **Engage With Your Community**
  - Do some targeted networking with people working in careers of interest, through **QueensConnects**. Meet fellow students, Department faculty, and apply to PhD programs and external scholarships.
  - Consider participating in the **Competition of the Queen’s Matching Fund**. Get help from a **Career Services workshop**.
  - Check out opportunities for extra training through **CTL**, **Expanding Horizons**, **SGS** or **other sources** to boost your skills.

**WRAPPING UP**

- **Achieve Your Academic Goals**
  - Complete and defend your thesis or present your project.

- **Expertise and Research**
  - Consider publication options for your research.
  - Attend a conference or workshop, such as the **International Conference on Software Engineering (ICSE)**, **SPICE Medical Imaging conference**, **Conference on Human Factors in Computing Systems (CHI)** or the **Canadian Conference on Computational Geometry (CCCG)**.

- **Maximize Research Impact**
  - 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**.
  - Check out opportunities for extra training through **CTL**, **Expanding Horizons**, **SGS** or **other sources** to boost your skills.

**WHAT WILL I LEARN?**

A graduate degree in Computing can equip you with valuable and versatile skills, such as:

- 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 social, ethical, political, economic, and professional responsibilities, research outcomes, 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 Computing 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:

- Systems Software Developer
- Telecommunications/Network Engineer
- Biomedical Engineer/Biomedical specialist
- Special Effects/Graphics Specialist
- Computer Systems/Database Manager
- Operations Research Specialist
- Systems Analyst/Operating Systems Programmer
- Management positions in public, private and non-profit organizations

Taking time to explore career options, build experience, and network can help you make a smooth transition to the world of work after graduation.
**Graduate Studies FAQs**

**How do I use this map?**

Whether you are considering or have embarked on graduate studies at Queen's, use this map to plan for success in five overlapping areas of your career and academic life. The map helps you explore possibilities, set goals and track your individual accomplishments. Everyone's journey is different – the guide offers options for finding your way at Queen's and setting the foundation for your future. To make your own customized map, use the online [My Grad Map](#) tool.

**Where can I get help?**

Queen's provides you with a broad range of support services from your first point of contact with the university through to graduation. Ranging from help with academics and careers, to physical, emotional, or spiritual resources – our welcoming environment offers the programs and services you need to be successful, both academically and personally. Check out the [SGS HABITAT](#) for available resources.

**What is the community like?**

At Queen's, graduate students from all disciplines learn and discover in a close-knit intellectual community. You will find friends, peers and support among the graduate students enrolled in Queen's more than 130 graduate programs within 50+ departments & research centres. With the world’s best scholars, prize-winning professional development opportunities, excellent funding packages and life in the affordable, historic waterfront city of Kingston, Queen's offers a wonderful environment for graduate studies. Queen's is an integral part of the Kingston community, with the campus nestled in the core of the city, only a 10-minute walk to downtown with its shopping, dining and waterfront. For more about Kingston's history and culture, see Queen's University's [Discover Kingston](#) page.

---

**Application FAQs**

**What do I need to know to APPLY?**

**ACADEMIC REQUIREMENTS**

- Undergraduate degree with a concentration in Computing Science.
- Candidates with high academic standing in an undergraduate degree other than computing science, who have some computing science background may be admitted as graduate preparatory students.
- **Grade requirements**: minimum upper second class standing (B+ average).

**ADDITIONAL REQUIREMENTS**

- If English is not a native language, prospective students must meet the [English language proficiency requirements](#) in writing, speaking, reading, and listening. The School of Graduate Studies requires the following minimum scores:
  - TOEFL (paper-based): 550,
  - TOEFL iBT: Writing (24/30); Speaking (22/30); Reading (22/30);
  - Listening (20/30), for a total of 88/120 (applicants must have the minimum score in each test as well as the minimum overall score), or
  - IELTS: 7.0 (academic module overall band score), or
  - PTE Academics: 65.

**KEY DATES & DEADLINES**

- **Application due**: January 15th for both September and January admissions.
- **Notification of acceptance**: Between February and June.

Before you start your application, please review the [Graduate studies application process](#).

**What about FUNDING?**

MSc students in the research stream receive minimum funding of $19,500 per year. The other streams (course work and project) are funded by the student.

Apply for external funding from OGS, NSERC and other sources. Queen’s will automatically issue a $5,000 top-up to Masters winners of federal government tri-council awards. For more information, see the School of Graduate Studies' information on [awards and scholarships](#).

---

[1] Debby Robertson, Graduate Assistant  
(613) 533-6781  
debby@cs.queensu.ca  
cs.queensu.ca