


# Computing PhD Map

## Applying to and Navigating Graduate Studies

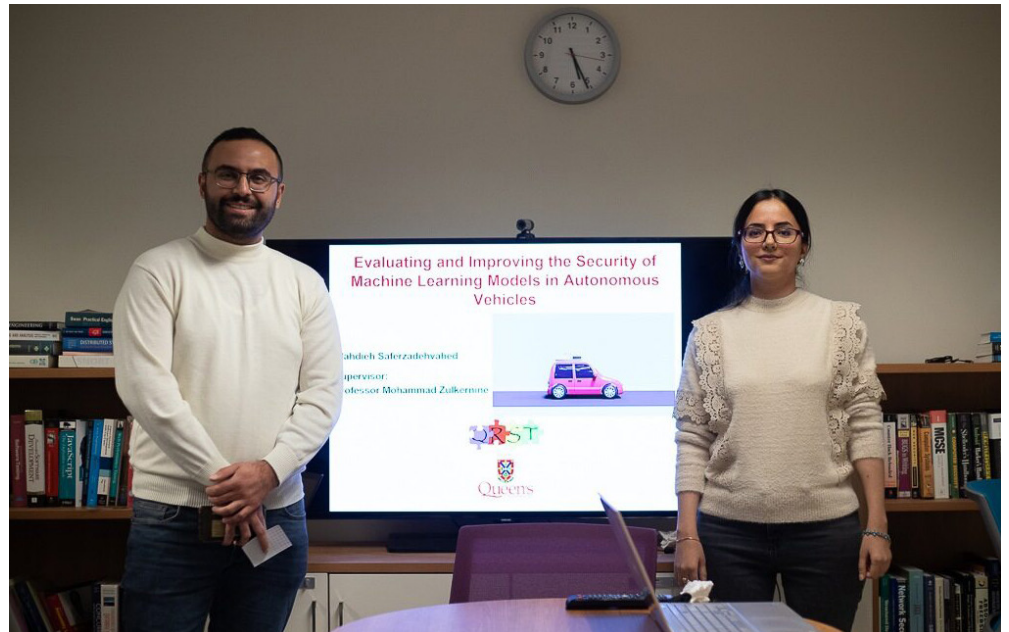
GRAD MAP FOR PHD STUDENTS 

### Why GRADUATE STUDIES in COMPUTING?

The School of Computing is active in research on a broad range of topics, with a strong research record. 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.”

– Dr. Eric Rapos, Alumni



### 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

PhD (4 years): Course work, topic proposal, comprehensive exam, research, thesis writing, thesis defence.

### RESEARCH Areas

- Artificial Intelligence
- Biomedical Computing
- Data Analytics
- Human Computer Interaction and Gaming
- Security
- Software Engineering
- Systems and Networks
- Theory of Computation

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 them and tell them about your interest in graduate work and related experience.



**GRADUATE STUDIES AND POSTDOCTORAL AFFAIRS**

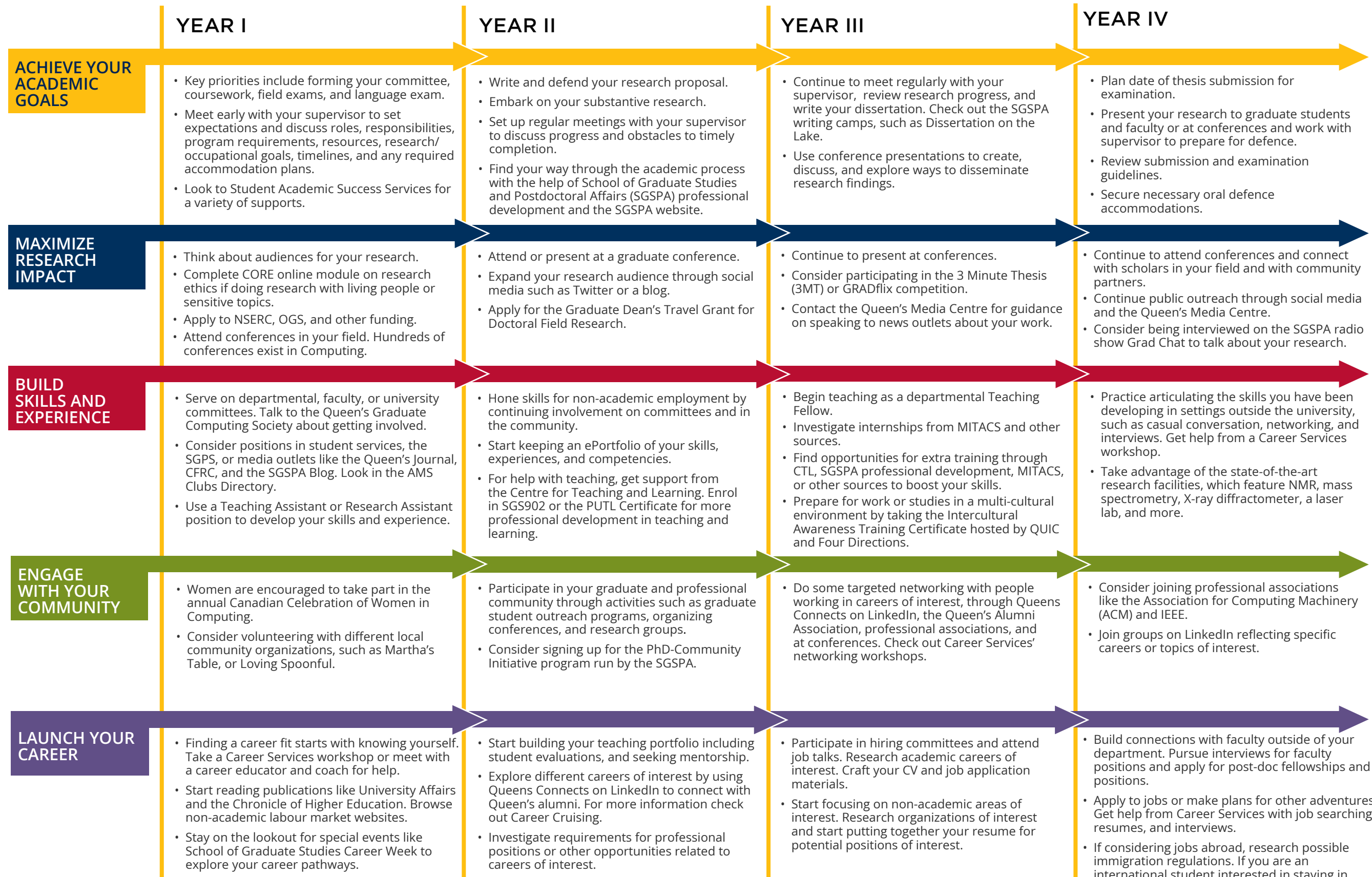
[queensu.ca/grad-postdoc](https://queensu.ca/grad-postdoc)

# Computing PhD Map

DOCTOR OF PHILOSOPHY

## 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. To make your own custom map, use the My Grad Map tool: [careers.queensu.ca/gradmaps](https://careers.queensu.ca/gradmaps).



## Knowledge & Workplace Skills

A graduate degree in Computing 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

## Career Possibilities

A PhD in Computing can take your career in many directions. In Canada, less than 40% of all PhDs will work in post-secondary education – the majority will work in industry, government, or non-profits.

- Biomedical Engineer/Bioinformatics specialist
- Computer Systems/Database Manager
- Machine Learning/AI Analyst
- Industrial Analyst
- Management positions in public, private and non-profit organizations
- Operations Research Specialist
- Systems Analyst/Operating Systems Programmer
- Systems Software Developer
- Telecommunications/Networks Engineer

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

# Graduate Studies FAQs

## How do I make the most of my time at Queen's?

Use the Grad Map to plan for success in five overlapping areas of your career and academic life. Everyone's journey is different - the ideas on the maps are just suggestions to help you explore possibilities. For more support with your professional development, take advantage of the SGSPA professional development framework and the new Professional Development Plan (PDP) process to set customized goals to help you get career ready when you graduate.

## 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 SGSPA website 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

- MSc in Computing Science or a closely-related field.
- **Grade requirements:** minimum first class standing (A average).

### ADDITIONAL REQUIREMENTS

- Official transcripts from all post-secondary institutions, two academic letters of recommendation, CV and Statement of interest.
- Correspond with potential supervisors.
- For non-native English speakers, meet the following English proficiency requirements: TOEFL iBT: Writing (24), Speaking (22), Reading (22), Listening (20); IELTS: 7 (minimum overall score, academic module); PTE Academic: 65 (minimum overall score); CAEL CE: 70 (minimum overall score).

### 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?

The minimum funding guarantee for Computing PhD students is \$23,500 per year. This financial support is renewable in years 2-4, provided the student maintains satisfactory progress. The funding package may consist of external graduate awards (such as NSERC, VECTOR Scholarship, OGS), graduate research fellowships, and internal fellowships. If a student receives a teaching assistantship, it serves as an additional top-up to the minimum guaranteed funding.

We encourage all students to apply for external funding from OGS, NSERC, and other sources. For the 2025-26 academic year, Queen's will automatically issue a one time \$5,000 award to Doctoral students who have won federal government tri-council awards. For more information, see the School of Graduate Studies and Postdoctoral Affairs' information on awards and scholarships.

