Computing

Computer science is one of the top degrees in North America in terms of career opportunities. That's a good reason to study it - but it's not the only reason. It is also one of the most exciting and diverse subjects of study today, particularly at the Queen's School of Computing. Whether you're interested in software design, artificial intelligence, cybersecurity, or fundamental computation, we can offer you a vast range of courses to fit your interests – and that's only scratching the surface. Combine a Computing Major with a Minor in another discipline or take one of our more focused Specializations. The combinations are endless and will prepare you for today's fast-paced digital world, no matter what career you choose.

REASONS To

- Computing is one of the top degrees for career opportunities in North America.
- Learn from outstanding professors who are internationally recognized experts and committed educators.
- Gain the skills and theoretical knowledge you'll need to excel as a computer scientist.
- Take courses which reflect the sweeping uses of computing in all aspects of modern life.
- Test the waters and explore your passions outside of computing while still immersed in our diverse multidisciplinary offerings.

Alumni Story

Susan Bartlett is a Queen's University alumna with a BSc in Software Design and a BA in English Literature. Through skills honed at Queen's, Susan leads teams of designers, researchers, and business strategists to deliver innovative solutions at Bridgeable. She is passionate about understanding the complex interactions people have with the world around them.

RECENT ALUMNI PLACEMENTS

ADOBE™ AMAZON™ APPLE™ CBC/RADIO- $\mathsf{CANADA}^\mathsf{TM}$ CISCO SYSTEMS™ **ELECTRONIC ARTS™** FACEBOOK™ GOOGLE™ IBM™ MICROSOFT™ NASA™ ORACLE™ SICKKIDS HOSPITAL™ **STATISTICS** CANADA™ **SYMANTEC™**

TORONTO-







CFRTIFICATE

Data Analytics

Disability and Physical Activity

Employment Relations

Geographic Information Science

Indigenous Languages and Cultures

Sexual and Gender Diversity

Urban Planning Studies

OUartsci.com/

Plan 2025-26 **Thresholds**

Thresholds are made on a competitive basis and are updated annually. To see the thresholds for all programs as well as the latest information, please visit quartsci.com/planselection

Interested in finding out how to augment your degree with Experiential Learning? Check in with your department to learn more about what opportunities and resources are available for you!

Acquire Skills. Gain Experience. Go Global.

That is a degree from Queen's.

Computing MAJOR MAP

BACHELOR OF COMPUTING: HONOURS DEGREE (SPECIALIZATION/MAJOR/MINOR) OR GENERAL DEGREE



	1ST YEAR	2ND YEAR	3RD YEAR		4TH OR FINAL YEAR
GET THE COURSES YOU NEED	First year is a good time to consider which area of computer science you would like to study, while learning the foundations of computer science and taking electives. We offer 7 main pathways to a Computing degree (or BA in the case of Computing and the Creative Arts). Attend Majors Night in the Winter term to learn more about which path is right for you. Interested in getting a head start in learning and working in a digital world? Take ASCX 150 and develop future-ready skills!	Start going deeper into the discipline of computer science, while considering a minor and/or certificate such as Entrepreneurship, Innovation and Creativity. Learn more about Certificates and Internship options. Want to make sure your academics are where you want them to be? Visit SASS (Student Academic Success Services) for some help.	A chance to start grouping courses in areas of interest. This is where you will begin to dive deeper into your chosen area of computer science. Meet with an Academic Advisor to make sure you are on track to complete your degree plan and have planned out your courses for next year.	NTERNSHIP	In fourth year you will have the chance to participate in research-based courses that can lead to Graduate School or to your future career path. Make sure to finish up all your courses for your major and your optional minor and/or certificate(s).
GET RELEVANT EXPERIENCE	Join teams or clubs on campus. Participate in Open Source Development projects. See the AMS Clubs Directory or the Queen's Get Involved page for more ideas. Clubs and teams offer invaluable learning opportunities and look great on your resume!	Talk to the School and their faculty about research opportunities through <u>Undergraduate Summer Research Assistantships</u> (NSERC/USRAs). Look into summer jobs through the department or Career Services about work through <u>SWEP</u> or <u>Work-Study</u> . Join the <u>COMPSA Site Services team</u> to develop websites. Be a <u>COMPSA tutor</u> .	Stay during the summer as an assistant to a faculty member. Consider applying to the 12-16 month Queen's Undergraduate Internship Program through Career Services. Consult the School's FAQ and consider applying.	NTH QUIP I	Investigate requirements for full-time jobs or other opportunities related to careers of interest. Assess what experience you're lacking and fill in gaps with volunteering, clubs, or internships – check out the Career Services skills workshop for help.
GET ENGAGED WITH THE COMMUNITY	Volunteer on- or off-campus with different community organizations such as Queen's Women in Computing (QWiC). Offer your services to a non-profit organization. Organize after school programming or robotics clubs in the local elementary or secondary schools.	Get involved with the Computing Students. Association (COMPSA). Consider volunteering with initiatives such as high school programming competitions, Hour of Code, or local FIRST Robotic teams. Consider entrepreneurial opportunities via programs like the Queen's Founders and Innovators Initiative (QFII).	Connect with professors at events or workshops hosted by the School, COMPSA and QWiC. Connect with alumni through LinkedIn. Attend conferences like the Canadian Celebration of Women in Computing (CANCWIC).	A 12-16 MO	Consider joining professional associations like Canadian Information Processing Society, IEEE Computer Society, and the Association for Computing Machinery (ACM). Join groups on LinkedIn reflecting specific careers or topics of interest in Computing.
GET ENGAGED GLOBALLY	Prepare for work or studies in a multi-cultural environment by taking QUIC's Intercultural Awareness Certificate and research possible immigration regulations. Speak to a QUIC advisor to get involved in their programs, events, and training opportunities.	Is an exchange in your future? Start thinking about where you would like to study abroad. Apply in January for a third year exchange through the International Programs Office.	Build your intercultural competence by getting involved with other cultures or by practicing or improving your language skills.	CONSIDER	International students interested in staying in Canada can speak with an International Student Advisor.
GET CAREER				>	
READY	Grappling with program decisions? Go to Majors Night or get some help wondering about career options from Career Services. Build your transferable skills in time management, organization, writing, and more with Student Academic Success Services.	Explore careers of interest in the Career Services Information Area. For more information check out <u>Career Cruising</u> or by finding and connecting with alumni on LinkedIn. Find impactful work that aligns with your values using the <u>Queen's Career Guide to the UN</u>	Start focusing on areas of interest. Research education requirements for careers of interest. If needed, prepare to take any required tests (like the MCAT or GMAT) and get help thinking about Grad School from Career Services.		Apply to jobs or future education, or make plans for other adventures. Get help from <u>Career Services</u> with job searching, resumes, interviews, Grad School applications, or other decisions.

Sustainable Development Goals

Knowledge & Workplace

A degree in Computing can equip you with:

- Ability to design, develop and maintain software systems
- Oral and written communication to summarize complex ideas and present data in visual formats
- Ability to model and solve a diverse range of problems
- Critical thinking and systematic problem-solving approaches
- Proficiency in mathematics and
- logical computational thinking Resource and time management
- Project management

Career Possibilities

A degree in Computing can take your career in many directions. Many students choose to continue their academic inquiry with a Master's. Our students are equipped with a strong foundation for careers in:

- 3D animation
- Artificial intelligence
- Biotech
- Computer programming
- Computing and the creative arts
- Cognitive science
- Cryptography and cybersecurity
- Data analytics
- Database administration
- Game development/design
- Software architecture
- Software development
- Software testing
- Systems administration
- Web development

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

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 Major Map tool.

Computing



Get started thinking about the future now – where do you want to go after your degree? Having tentative goals (like careers or grad school) while working through your degree can help with short-term decisions about courses and experiences, but also help you keep motivated for success.

Get the help you need

Queen's provides you with a broad range of support services from your first point of contact with the university through to graduation. At Queen's, you are never alone. We have many offices dedicated to helping you learn, think and do.

Ranging from help with academics and careers, to physical, emotional, or spiritual resources – our welcoming living and learning environment offers the programs and services you need to be successful, both academically and personally. Queen's wants you to succeed! Check out the Student Affairs website for available resources.



School of Computing Goodwin Hall 25 Union Street 613-533-6050 cs.queensu.ca

QUEEN'S UNDERGRADUATE INTERNSHIP PROGRAM

START DATES

in May, September, or January

POSITIONS

are paid and full-time

WORK TERMS

are 12-16 months long

PROGRAM OVERVIEW

- Graduate with "Professional Internship" on your degree
- Learn about current advances, practices and technologies in business and industry
- Explore a career path, earn a salary, and build workplace skills

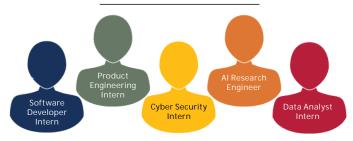
LIGIBILITY

- Complete 1st year before you register
- Complete 2nd or 3rd year before your internship
- Minimum GPA of 1.9
- Return to Queen's after your internship to finish your degree

WHY QUIP?

- Gain a year of career-related work experience
- Build network connections
- Receive support from Queen's staff in job search and during internship

SAMPLE PAST INTERNSHIPS



For more information, contact quip@queensu.ca or visit the Program Website.

Why study in Kingston?

Since 1841, our community has been more than a collection of bright minds – Queen's has attracted students with an ambitious spirit. Queen's has the highest retention rates, the highest graduation rates, and one of the highest employment rates among recent graduates. We are a research intensive university focused on the undergraduate experience. The BBC has identified Kingston as one of the GREATEST UNIVERSITY TOWNS in the world – and it is often awarded the safest city in Canada. It is a university city at the core; just a quick drive

