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, game development, or biomedical 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.

**TOP 5 Reasons To Study Computing**

1. 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.
2. Gain the skills and theoretical knowledge you’ll need to excel as a computer scientist.
3. Take courses which reflect the sweeping uses of computing in all aspects of modern life.
4. Test the waters and explore your passions outside of computing while still immersed in our diverse multidisciplinary offerings.

**TOP ALUMNI JOBS**

Our alumni go on to work for...

- ADOBE
- AMAZON
- APPLE
- CBC/RADIO-CANADA
- CISCO SYSTEMS
- ELECTRONIC ARTS
- FACEBOOK
- GOOGLE
- IBM
- MICROSOFT
- NASA
- ORACLE
- SICKKIDS HOSPITAL
- STATISTICS CANADA
- SYMANTEC
- TORONTO-DOMINION BANK

**2022-23 Plan 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

**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.

**Acquire Skills. Gain Experience. Go Global.**

That is a degree from Queen's.
# Computing MAJOR MAP

## BACHELOR OF COMPUTING (HONOURS): MAJOR, MINOR, SPECIALIZATION

### 1ST YEAR
- 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 8 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.
- Volunteer on or off campus with different community organizations such as Queen’s Women in Computing (CAN-CWIC), Queen’s ACM Programming (QAST), or local FIRST Robotic teams. Consider joining professional associations such as the **Association for Computing Machinery (ACM)**
- Prepare for work or studies in a multi-cultural environment by taking QUIC’s **Entrepreneurship, Innovation and Creativity**. Attend **Degree 1** in the Fall term to learn more about **Certificates** and **Internship** options.
- Get involved with the **Computing Students Association (COMPISA)**. 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 Innovation Connector Summer Initiative (QCSCI)**.

### 2ND YEAR
- Start going deeper into the discipline of computer science, while considering a minor and/or certificate such as **Entrepreneurship, Innovation and Creativity**. Attend **Degree 2** in the Fall term to learn more about **Certificates** and **Internship** options.
- Look into summer jobs by talking to the dept. or Career Services about work through **SWEP** or **Work Study**. Join the **COMPISA Site Services Team** to develop websites. Be a **COMPISA Tutor**.
- 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**.

### 3RD YEAR
- 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.
- Explore careers of interest by reading books in the Career Services Information Area, such as Careers in High Tech. For more information check out **Career Cruising or by finding and connecting with alumni on LinkedIn**.
- 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**.
- Is an exchange in your future? Start thinking about where you would like to go. Apply in January for a third year exchange through the **International Programs Office**.
- **Queen’s Undergraduate Internship**. Join groups on LinkedIn reflecting specific careers or topics of interest in Computing.

### 4TH OR FINAL YEAR
- 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).
- **Queen’s Innovation Connector Summer Initiative (QCSCI)**. Join the ** Autonomous Sailboat Team**, **Queen’s ACM Programming**, **SWEP**, **Queen’s Connects**, **Canadian Celebration of Computing**, **Canadian Information Processing Society, IEEE Computer Society**, and the **Association for Computing Machinery (ACM)**
- Participate in **Open Source Development**. Join teams or clubs on campus such as the Queen’s Autonomous Sailboat Team (QAST).
- Volunteer on or off campus with different community organizations such as Queen’s Women in Computing (CAN-CWIC). Offer your services to a non-profit organization. Organize after school programming or robotics clubs in the local elementary or secondary schools.
- Volunteer off campus with different community organizations such as Queen’s Women in Computing (QWiC). 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 Innovation Connector Summer Initiative (QCSCI).
- 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 workshops for help.
- Consider joining professional associations like **Canadian Information Processing Society, IEEE Computer Society, and the Association for Computing Machinery (ACM)**. Attend conferences like the **Canadian Celebration of Women in Computing (CAN-CWIC)**.
- Connect with professors at events or workshops hosted by the School, COMPISA and QWiC. Connect with alumni by joining the LinkedIn group Queen’s Connects. Attend conferences like the **Canadian Celebration of Women in Computing (CAN-CWIC)**.
- **School’s FAQ**. For more information check **Queen’s Internship Program**.
- Attend **Queen’s Connects**.
- Join groups on LinkedIn reflecting specific careers or topics of interest in Computing.
- **International students interested in staying in Canada** can speak with an **International Student Advisor**.
- Explore careers of interest by reading books in the Career Services Information Area, such as Careers in High Tech. For more information check out **Career Cruising or by finding and connecting with alumni on LinkedIn**.
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### GET THE COURSES YOU NEED
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### GET RELEVANT EXPERIENCE
- Get involved with the **Computing Students Association (COMPISA)**. 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 Innovation Connector Summer Initiative (QCSCI).
- Talk to the School and their faculty about research opportunities through Undergraduate Summer Research Assistantships (USRA) / Summer Employment Program through Career Services. Consult the **SAS Research Opportunities Application Guide** and consider applying.
- Work with Queen’s Get Relevant Experience Program to develop websites. Be a **COMPISA Tutor**.

### GET CONNECTED WITH THE COMMUNITY
- Volunteer on or off campus with different community organizations such as Queen’s Women in Computing (QWiC). 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 Innovation Connector Summer Initiative (QCSCI).
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### GET THINKING GLOBALLY
- 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**.
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- Build your transferable skills in time management, organization, writing and more with **Student Academic Success Services**.

### GET READY FOR LIFE AFTER GRADUATION
- Apply to jobs or future education, or make plans for other adventures. Get help from Career Services with job searching, resumes, interviews, **Grad School applications**, or other decisions.
- 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**.

### WHERE CAN I GO?
- 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
  - and much more!
- 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 3 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.

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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.

Why study in Kingston?

For 175 years, 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 to Toronto, Montreal, Ottawa and even New York. A university with more clubs per capita than any other university in Canada, and a city with more restaurants per capita than any other city in North America – you will have the experience of a lifetime at Queen’s – and graduate with a degree that is globally recognized among the best.