Computer science explores the science and principles that underlie computing. The program provides broad training in the field, along with the opportunity to focus on specific areas such as artificial intelligence, human-computer interaction, computing theory, and programming languages. Our state-of-the-art facilities help our programs keep up with the evolving demands of the industry. Whether you plan to one day work as a software developer or a systems analyst, an information architect or a database administrator, as a Queen's Computer Science graduate you will be well-prepared for any number of careers in the technology industry and beyond.

**TOP 5 REASONS to study COMPUTING**

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

**ALUMNI JOBS**

- 9% of alumni work in **PHARMACEUTICALS**
- 15% of alumni work in **INSURANCE**
- 18% of alumni work in **BANKING & INVESTMENT**
- 21% of alumni work in **EDUCATION**

**alumni STORY**

Susan Bartlett is a Queen’s University alumna with a BSc from the School of Computing. 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.

**2018-19 thresholds**

- **2.6 cGPA** AUTOMATIC ACCEPTANCE
  - min B in CISC 12#
- **2.3 cGPA** PENDING LIST
  - min B- in CISC 12#

*Thresholds are made on a competitive basis and are updated annually. For the latest information please visit: QUartsci.com
COMPUTER SCIENCE

SPECIALIZATION BACHELOR OF COMPUTING (HONOURS)

1ST YEAR

GET THE COURSES YOU NEED

In first year you will have the chance to explore the foundations of Computer Science along with some electives.

See the back page for specific courses to consider.

Get the courses you need.

Attend Majors Night in the Winter term to learn more about Plan options.

GET RELEVANT EXPERIENCE

Join teams or clubs on campus such as the Mostly Autonomous Sailboat Team (MAST). Participate in Open Source Development projects. Join the Queen's ACM Programming team. See the AMS Clubs Directory or the Queen's Get Involved page for more ideas.

GET CONNECTED WITH THE COMMUNITY

Volunteer on or off campus with different community organizations such as Women in the School of Computing Group. Offer your services to a non-profit organization. Organize after school programming or the Queen's Get Involved page for more ideas.

GET THINKING GLOBALLY

Prepare for work or studies in a multi-cultural environment by taking QCIC's Intercultural Competency Certificate, and research possible immigration regulations.

Speak to a QUIC advisor to get involved in their programs, events, and training opportunities.

GET READY FOR LIFE AFTER GRADUATION

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.

What will I learn?

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

- 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

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 animator
- Biomedical computing
- Biotechnician
- Computer programmer
- Cryptographer
- Database administrator
- Game development/design
- Graphic artist
- Information architect
- Robotics
- Software architect
- Software developer
- Software tester
- Sound designer
- Systems analyst
- Web developer

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

1ST YEAR

In first year you will have the chance to explore the foundations of Computer Science along with some electives.

See the back page for specific courses to consider.

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2ND YEAR

Start going deeper into the discipline of Computer Science, while considering a certificate such as Entrepreneurship, Innovation and Creativity. Attend Degree in the Fall term to learn more about Certificates and Internship options.

Want to make sure your academics are where you want them to be? Visit SAIS (Student Academic Support Services) and the Writing Centre for some help.

3RD YEAR

A chance to start grouping courses in areas of interest, or to keep it more general and explore many areas of Computer Science. Meet with an Academic Advisor to make sure you are on track and have planned out your courses for next year — for some ideas, see the back page.

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 certificate(s).

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.

Consider joining professional associations like Canadian Information Processing Society, IEEE Computer Society, and the Association for Computing Machinery (ACM).

Look into summer jobs by talking to the dept. or Career Services about work through SWEP or Work-Study. Join the COMPSA Site Services team to develop websites. Be a COMPSA tutor.

Join groups on LinkedIn reflecting specific careers or topics of interest in Computing.

Consider entrepreneurial opportunities via competitions, Hour of Code, or local FIRST Robotic teams. Consider entrepreneurial opportunities via programs like the Queen’s Innovation Connector Summer Initiative (QICSI).

Volunteer on or off campus with different community organizations such as Women in the School of Computing Group. Offer your services to a non-profit organization. Organize after school programming or the Queen’s Get Involved page for more ideas.

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Make a decision about Plan options.

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Join groups on LinkedIn reflecting specific careers or topics of interest in Computing.

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 Innovation Connector Summer Initiative (QICSI).

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Sample Year by Year

1ST YEAR
- CISC 121/3.0
- CISC 124/3.0
- (CISC 102/3.0 and MATH 112/3.0) or (CISC 102/3.0 and MATH 111/6.0) or MATH 110/6.0
- MATH 120/6.0 or MATH 121/6.0
- 12.0 units of electives

2ND YEAR
- STAT 263/3.0 or 3.0 units from STAT_Options
- CISC 203/3.0
- CISC 204/3.0
- CISC 220/3.0
- CISC 221/3.0
- CISC 223/3.0
- CISC 235/3.0
- CISC 260/3.0
- 6.0 units from CSCI options

3RD YEAR
- CISC 322/3.0 or CISC 326/3.0
- CISC 324/3.0
- CISC 340/3.0
- CISC 365/3.0
- 18.0 units from CSCI options

4TH YEAR
- CISC 497/3.0
- CISC 499/3.0 or CISC 500/6.0
- 21.0 units from CSCI options
- 3.0 units of electives

Note that degree requirements are revised regularly. The most current requirements, including course lists and options, are found in the Academic Calendar at: QUartsci.com/academic-calendar