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.

**Specialization (Computing) Bachelor of Computing (Honours) CSCI-P-BCH**

Computer science 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.

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.

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

SPECIALIZATION MAP

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. 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 robotics clubs in the local elementary or secondary schools.

GET THINKING GLOBALLY

Prepare for work or studies in a multi-cultural environment by taking QUIC’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.

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 SASS (Student Academic Support Services) and the Writing Centre for some help.

GET RELEVANT EXPERIENCE

Talk to the School and their faculty about research opportunities through Undergraduate Summer Research Assistantships (NSERC/USRA). Look into summer jobs by talking to the dept. or Career Services about work through SWEP or Work Study. Join the COMPSA Info Services team to develop websites. Be a COMPSA tutor.

GET CONNECTED WITH THE COMMUNITY

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).

GET THINKING GLOBALLY

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.

GET READY FOR LIFE, AFTER GRADUATION

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.

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.

GET RELEVANT EXPERIENCE

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.

GET CONNECTED WITH THE COMMUNITY

Connect with professors at events or workshops hosted by the School, COMPSA and WISC. Connect with alumni by joining the LinkedIn group Queen’s Connects, Attend conferences like the Canadian Celebration of Women in Computing (CAN-CWIC).

GET THINKING GLOBALLY

Build your intercultural competence by getting involved with other cultures or by practicing or improving your language skills.

GET READY FOR LIFE, AFTER GRADUATION

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.

4TH OR FINAL YEAR

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

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.

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