Honours Bachelor of Computer Science - Cloud Computing



Meet our students

Our students have a strong foundation in cloud computing, data analytics, game engineering and network engineering. Students specializing in cloud computing complete six specialized courses (336 training hours) prior to their co-op term. This program strikes a balance between theory and practice allowing students to gain a deeper understanding of software, databases, services, data storage and more-over the Internet.

Learn more about the classes these students take by visiting the program webpage.

Core competencies and skills

- Developing software applications using C#, C++, Java, Swift, Python, JavaScript and more, using industry-grade frameworks and tools.
- Developing advanced web applications that leverage the cloud and the Internet of Things solutions with adapted machine learning algorithms as needed.
- Determining solutions using problem-solving principles, logic, and systematic methodologies.
- Developing cloud-based distributed databases using modern programming models and cloud storage services.
- Developing a private cloud through the use of various virtualization tools.
- Employing security policies, procedures, technologies, and best practices to protect data and infrastructure in cloud systems.

- Creating software systems and reusable software modules in accordance with technical requirements, organizational standards, user-orientated design principles and societal considerations.
- Collaborating when working in software engineering and multidisciplinary teams.
- Communicating professionally and meeting client needs and project due dates.
- Researching new knowledge and technologies within the computer science field.

Work term availability

• Students onboard in the summer (May) and can pursue 4–16-month work terms.

Note: Students who secure an 8-month or longer placement may be eligible for tax credit.

Work term capabilities

- Designing, implementing, testing, and deploying software systems for various application domains and secure enterprise-grade information systems.
- Formulating solutions to computational problems using a variety of strategies, including common problem-solving paradigms, ad hoc analysis, and critical thinking.
- Synthesizing principles and theories of computer science and software engineering for application to different computing paradigms.
- Securing and protecting cloud assets and implementing access control mechanisms to mitigate threat levels and upholding privacy of information by identifying threats, risks, and vulnerabilities.
- Designing effective user interfaces using human-computer interaction principles.
- Evaluating risks in different case studies and determining effective strategies for mitigation to the cloud.
- Designing small cloud-scale applications.

Employer resources

- Employer webpage
- <u>Program information</u>
- Program course schedule

Post a job

To post a job, log in to our online platform Sheridan Works.

Don't have an account? Create one today using our **Employer Registration Guide**.