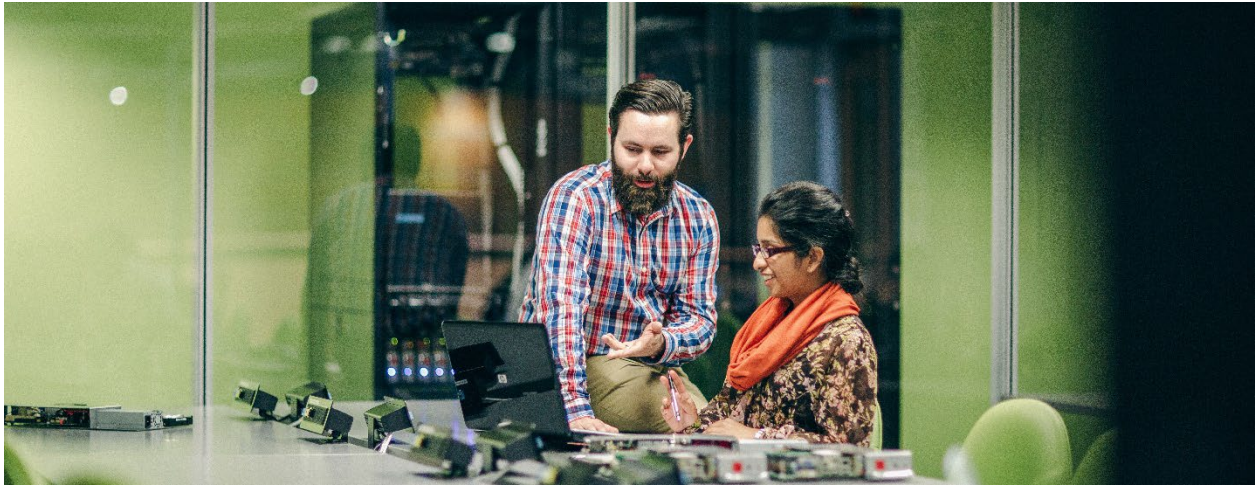# Honours Bachelor of Information Sciences - Cyber Security

Meet our students

Throughout this one-of-a-kind program, our students gain extensive preparation for a career in this rapidly growing field. During their studies, these students cover all aspects of cyber security, including computer security, IS intrusion detection and prevention, network security, ethical hacking, malware analysis and database security. In addition to industry-specific skills, our students gain the hands-on experience and workplace skills needed to succeed in any organization.

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

Core competencies and skills

- Managing the security lifecycle of computer systems, databases, and networks, which includes analysis, design, and maintenance.
- Analyzing and evaluating corporate information security requirements.
- Understanding of the algorithms and data structures underpinning information systems.
- Developing distributed multitiered applications.
- Applying knowledge of low-level aspects of computer systems (ex. Computer architecture, operating systems' design, systems programming).
- Administrating Oracle databases.
- Using object oriented and procedural languages (Python, C/C++), as well as various scripting languages.
- Utilizing CCNA level network skills.

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Work term availability

- Summer (May – August)
- Fall (September – December)

Note: Some students will be available for an 8-month work term from May – December.

Work term capabilities

- Creating security solutions including components of hardware, software, and personnel.
- Identifying and prioritizing threats/risks to the business information system.
- Providing guidance to management in the design of an information security system.
- Using computer architecture and operating systems design principles, and theory of algorithms and data structures in security related projects.
- Creating secure software applications using structured, scripting, and low-level programming techniques and methodologies.
- Performing code analysis and testing for security issues.
- Executing digital forensics and collecting electronic evidence, respecting best practices.
- Developing enterprise applications using Sun and Python technologies.
- Developing, securing, and maintaining computer systems to meet user requirements.

Employer resources

- Employer webpage
- Program information
- Program course schedule

Post a job

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

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