

CYBERSECURITY (CSEC)

Train to battle cybercrime and protect businesses

Cybercrime costs the world trillions of dollars each year. Become one of the good guys and train to keep computer systems and wireless networks safe from security risks. As an ethical hacker, you'll learn how to protect computers, applications, and networks from unauthorized and malicious users or software. You'll cover key cybersecurity concepts of infrastructure security configuration, information system security, risk management and cybersecurity policies, as well as legal and ethical aspects of the industry.

As a graduate, you will be prepared to work as part of an IT support or security team.

Program highlights

- Cambrian is a Palo Alto Cybersecurity Academy with curriculum aligned to the National Initiative for Cybersecurity Education (NICE) framework
- Gain a comprehensive understanding of cyberattacks
- Cover key cybersecurity concepts
- Solve real-world problems with a capstone project
- Grads can challenge various industry certifications

Program of study for 2024-25 Academic Year

Semester 1		Credits
CSC 1003	Communication for Cybersecurity Professionals	3
CSC 1006	Security Issues and Trends	3
CSC 1020	CSEC Infrastructure	3
CSC 1024	CSEC Programming	3
CSC 1021	Network Defence	3
CSC 1022	Business Contingency Planning	3
CSC 1023	CSEC Policies and Compliance	3
Credits		21
Semester 2		Credits
CSC 1012	Cybersecurity Capstone	6
CSC 1011	Mobile Wireless Security	3
CSC 1015	Sys Operations and Cloud Sec	3
CSC 1016	CSEC Tool Development	3
CSC 1017	IT Security Forensics	3
CSC 1018	Ethical Hacking	3
CSC 1019	Malware Dev and Analysis	3
Credits		24
Total Credits		45

Note:

Part-time students will be provided with a pathway to complete this program on a part-time basis.

Admission requirements

Applicants must be graduates of a diploma, advanced diploma, or degree program from an Ontario College or equivalent.

OR

Applicant must possess five years of work experience in a related field (or combination of education and work experience) as judged by the College to be equivalent. Applicants must submit a resume detailing their related experience and a cover letter outlining their competencies and preparedness for the program.

Program delivery

2023-2024

Spring term start

SEMESTER 1: Spring 2024

SEMESTER 2: Fall 2024

2024-2025

Fall term start

SEMESTER 1: Fall 2024

SEMESTER 2: Winter 2025

Winter term start

SEMESTER 1: Winter 2025

SEMESTER 2: Spring 2025

Spring term start

SEMESTER 1: Spring 2025

SEMESTER 2: Fall 2025

Registration to practice/additional testing

Graduates may challenge the following industry certifications:

- Palo Alto Networks Certified Cybersecurity Entry-level Technician (PCNSA)
- Palo Alto Networks Certified Network Security Administrator (PCNSE)
- EC-Council Certified Ethical Hacker (CEH)
- EC-Council Certified Network Defender (CND)

Specific program pathways

College or university degree opportunities

If you are a graduate of this program, you may continue your studies at a college or university and you may receive credit(s) for your prior college education. Refer to Cambrian's college and university agreement (<https://cambriancollege.ca/supports-services/articulation-agreements/>) details for further information.

Employment opportunities

Graduates of this one-year graduate certificate program will be positioned to pursue positions in a wide range of public and private organizations in roles such as:

- information systems security analysts
- advisors
- consultants
- specialists
- educators
- network technicians
- network administrators

Contacts

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2 Cybersecurity (CSEC)

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INTERNATIONAL ADMISSIONS

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