

# CYT - Cybersecurity and Threat Management

Version 45

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## Program Overview:

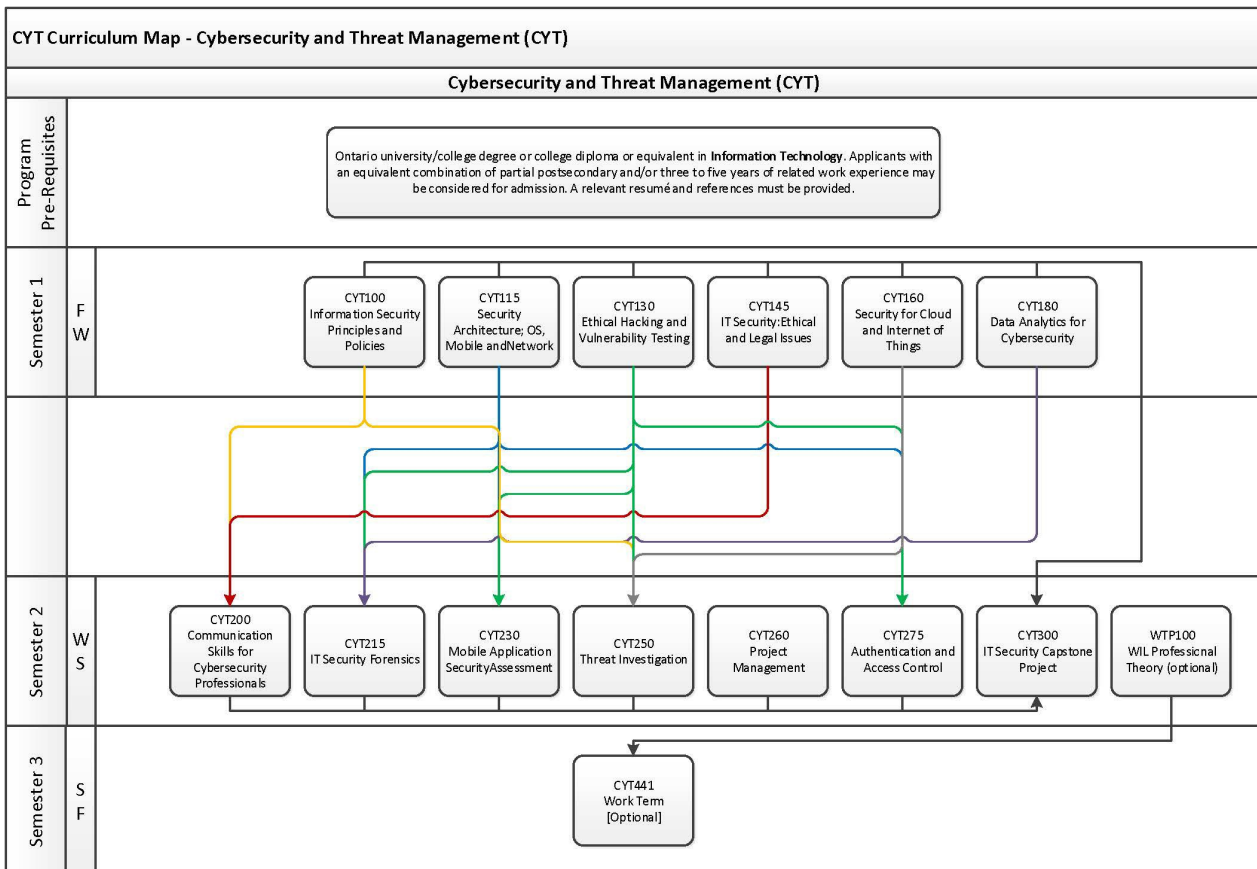
As digital innovation continues to rapidly advance, it is becoming increasingly difficult for organizations to keep up with the changing nature of cybersecurity threats.

With a shortage of cybersecurity professionals across Canada, this program was designed and developed with leading financial services organizations to meet the need for individuals with the specialized skills to secure, protect and defend mobile and network infrastructures, preventing fraud, data breaches, and other vulnerabilities.

As a graduate of this eight-month Cybersecurity and Threat Management program, you will be equipped with cutting-edge best practices and skills in communication, information security, project management, problem-solving and more. Students in this program will be required to attend courses at both Newnham Campus and Seneca Downtown, as well as online.

Program Code:	CYT
Credential Awarded:	Graduate Certificate
Campus:	Newnham
Duration:	2 academic semesters (8 months)
Start Dates:	Fall, Winter *Start dates are subject to change

## Program Map:



F = Fall  
W = Winter

## Program Curriculum and Pre-Requisite Planner

### PDF of Program Map

#### Program Learning Outcomes:

The graduate has reliably demonstrated the ability to:

- Identify, analyze, design, develop, implement, verify and document the requirements for a computing environment.
- Diagnose, troubleshoot, document and monitor technical problems using appropriate methodologies and tools.
- Analyze, design, implement and maintain secure computing environments.
- Analyze, develop and maintain robust computing system solutions through validation testing and industry best practices.
- Communicate and collaborate with team members and stakeholders to ensure effective working relationship.
- Select and apply strategies for personal and professional development to enhance work performance.
- Apply project management principles and tools when responding to requirements and monitoring projects within a computing environment.
- Adhere to ethical, social media, legal, regulatory and economic requirements and/or principles in the development and management of the computing solutions and systems.
- Investigate emerging trends to respond to technical challenges.
- Analyze, plan, design, implement and administer computer systems and cloud solutions.
- Research, design, deploy, configure, troubleshoot, maintain, upgrade, and decommission computing system infrastructures.
- Select and apply scripting tools and programming languages to automate routine tasks.
- Install, monitor, optimize and administer a database management system in response to specified requirements.
- Design, implement, and administer technical support processes for computing system infrastructures that aligns with industry best practice.

#### Potential Career Pathways:

When you graduate from this program, Cybersecurity and Threat Management offers multiple streams of career opportunities for our graduates, such as:

- Information Security Analyst
- Threat Analyst
- Cyber Security Analyst
- Ethical Hacker
- IT Systems and Network Administrator

#### Optional Work Term:

Students meeting all academic requirements may have the opportunity to complete an optional work term(s) in a formal work environment. The work term(s) is similar in length to an academic semester and typically involves full-time work hours that may be paid or unpaid. In programs with limited work term opportunities, additional academic requirements and a passing grade on a communication assessment may be required for eligibility. Eligibility for participation does not guarantee a work position will be secured. Additional fees are required for those participating in the optional work term stream regardless of success in securing a work position. The industry capstone project and optional work term will give you hands-on experience and position you for a career in one of the world's fastest-growing fields.

- Successful completion of all first-semester required courses
- A minimum semester GPA of 3.5\*
- Students must be in good academic standing

\*Note: These are the minimum requirements only to apply and do not automatically confirm acceptance. This program is over-subscribed with limited spots available. GPA will be much higher.

*When to apply?*

Semester 1 (Fall, Winter)

Work-Integrated Learning Model			
	January	May	September
Year 1	Semester 1	Semester 2	Work Term

For more information regarding your optional WIL term, please contact your respective **Student Adviser**.

### Admissions Requirements for Future Students:

- Ontario university/college degree, college diploma, advanced diploma or equivalent in an area of Information Technology: computer engineering, software, hardware, networking or a related discipline.
- Applicants with a degree or diploma in another discipline with demonstrated knowledge of IT Networking will be considered for Admission.
- Applicants with significant related work experience that is the equivalent of the above may be considered for Admission. A relevant resume and references must be provided.
- **English proficiency** at the post secondary level.

Canadian citizens or permanent residents educated outside of Canada must provide a World Education Services (WES) or ICAS Canada credential evaluation.



### More Information About This Program

\*Edited 09/2024\*

tags : cyt, gradcert

