A world-class cybersecurity training & dual-certification program

Program Package

Toronto Metropolitan University

ROGERS cybersecure catalyst

Program Overview

CLIC (Certifications for Leadership in Cybersecurity) is an intensive cybersecurity training and certification program designed to give you the skills you need to launch a career in cybersecurity or elevate your career with cybersecurity skills.

The most rigorous cybersecurity training program in Canada, CLIC offers students the opportunity to earn two globally-recognized SANS GIAC certifications, hone your skills in the Catalyst Cyber Range, gain career mentorship from leading cyber experts, and connect with major employers in the sector.

The program is open to anyone with an interest in cybersecurity and looking for a rewarding and challenging career.

CLIC is delivered through a strategic partnership between Rogers Cybersecure Catalyst and SANS Institute — a world leader in cybersecurity training and certification.

SANS GIAC certifications are the highest and most rigorous assurance of cybersecurity knowledge and skills; graduates with these qualifications are in high demand.

Certifications you will earn:

- GIAC Foundational Cybersecurity Technologies (GFACT)
- GIAC Security Essentials Certification (GSEC)

Program Fee

- Visit cybersecurecatalyst.ca/clic for the latest information on program fees.
- Visit cybersecurecatalyst.ca/clic-financing to learn more about the financing options available for CLIC.

82%
of organizations prefer hiring candidates with SANS GIAC certifications

94%
of cybersecurity practitioners believe SANS GIAC certifications have better prepared them for their current role

3.5M
unfilled cybersecurity jobs globally

Curriculum

Course
SANS SEC275 - Security Foundations

Certification
GIAC Foundational Cybersecurity Technologies (GFACT)

In SEC275, you will learn practical skills related to computers, technology, and security foundations that are crucial to starting a cybersecurity career. It offers a comprehensive array of innovative, hands-on labs, practical exercises, and classroom exercises that go well beyond what would normally be offered in a cybersecurity foundational course. The labs were created by cybersecurity experts using the latest technology, techniques, and concepts.

By the end of the course, you will have acquired sufficient theoretical understanding and applied practical skills to speak the same language as industry professionals. **You will develop fundamental skills and knowledge in key IT subject areas, such as:**

- Computer Components & Concepts
- Operating Systems, Containers, & Virtualization
- Linux
- Networking Fundamentals
- The Web: Search Engine & Servers
- Practical Programming – Python and C
- Windows Foundations
- Advanced Computer Hardware (e.g., CPU & Memory)
- Encryption
- Introduction to Basic Security Concepts
- Introduction to Forensics
- Introduction to Reconnaissance, Exploitation, and Privilege Escalation
- Introduction to Network & Computer Infiltration (e.g., Lateral Movement)

Course
SANS SEC401 - Security Essentials - Network, Endpoint, and Cloud

Certification
GIAC Security Essentials (GSEC)

Whether you are new to information security or a seasoned practitioner with a specialized focus, SEC401 will provide the essential information security skills and techniques you need to protect and secure your critical information and technology assets, whether on-premise or in the cloud. SEC401 will also show you how to directly apply the concepts learned into a winning defensive strategy, all in the terms of the modern adversary. SEC401 also has 18hrs+ hands-on training embedded in it to help you master the content and gain a deeper understanding of the concepts.

Some of the key focus areas of SEC401 are:

- Network Security and Cloud Essentials
- Vulnerability management and Response
- Data Security Technologies
- Windows and Azure Security
- Linux, AWS and Mac Security

Cybersecurity Professional Practice Course

The Cybersecurity Professional Practice Course provides you with a broadened understanding of the cybersecurity landscape and a recognition that cybersecurity issues go far beyond technology.

You will learn how cybersecurity impacts business operations, decision-making, strategic planning, and assessments of overall corporate risk and governance.

The Professional Practice Course is designed to provide critical industry and organizational foundations that complement the technical training you have received, and provide you with an advantage as you enter and progress in your cybersecurity career.

You will take part in interactive sessions that are rooted in feedback from employers and the industry, providing insights into organizational cybersecurity. The sessions will also offer opportunities to hone desired competencies such as business acumen, analytical and strategic thinking, compliance, communications, and teamwork.

Topics and Sessions Include:

- Cybersecurity Organizational Strategy;
- Cybersecurity and Compliance;
- Cybersecurity Ethics;
- Cybersecurity Global Contexts;
- Communicating Cybersecurity Issues;
- Business Perspectives in Cybersecurity;
- Onboarding Into a Cyber Team.

Experiential Learning: Catalyst Cyber Range

CLIC students get hands-on experience in the Catalyst Cyber Range — an interactive, simulated representation of an organization's networks, systems, tools, and applications that are connected in a virtual environment. Cyber events and scenarios run inside the virtual environment, allowing Cyber Range participants to react and respond to various cyber threats in the ultra-realistic platform.

You will take part in an Incident Response + Ransomware scenario where you will experience both sides of a breach, building your readiness for cyberattacks using a holistic approach. You will start by acting like a hacker, breaking into multiple servers and/or domain controllers. You will then respond to theattack using commercial firewalls and tools. You will also learn how to detect and identify specific characteristics of an attack.

This workshop will give you the opportunity to:

- Experience an actual cybersecurity incident (safely);
- Gain hands-on experience using commercial tools;
- Prepare for job interviews with practical experience;
- Put your skills to the test.

All Catalyst Cyber Range workshops are led by an experienced cybersecurity trainer and include an orientation and debrief to ensure you get the most out of your session.

The experience offers an immersive and ultra-realistic experiential learning opportunity that will ensure you are well-prepared to enter the cybersecurity workforce.

Career Outcomes

The Catalyst is a key source of top talent for many of the leading cybersecurity employers in Canada. CLIC will give you the skills you need to work in a number of cyber roles, including:

- Cybersecurity Consultant
- Triage Security Analyst
- Information Security Analyst
- Governance, Risk and Compliance Analyst
- IT/Security Project Manager

- Security Operations Center (SOC) Analyst
- Security Awareness & Education Specialist
- Technical Writer
- Computer Network Analyst/Technician
- Concierge Security Analyst

Since 2020, the Catalyst has trained over 700 cyber professionals who have gone on to work in more than 160 of the leading private and public sector organizations in Canada.

Career Support & Alumni Network

As a CLIC student, you will have access to our dedicated Career Support team who will work with you throughout the program with the following:

- Resume writing and critiquing
- Interview preparation and mock interviews
- One-on-one coaching
- Connection with employers
- Employer recruitment events
- Exclusive access to our large alumni network of cybersecurity professionals

As a Catalyst alumn, you will be joining one of the foremost networks of cybersecurity professionals in Canada.

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The Catalyst program is training the next generation of cyber security leaders: ones who complement diversity in thinking with cyber security fundamentals and a strong passion and dedication to defend against cyber threats.

Sundeep Sandhu
Vice-President
Cyber Security, Rogers communications

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Catalyst is our preferred hiring partner for top-level cybersecurity candidates.

Rob Watson
Senior VP, Security Services
eSentire

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I know when I hire a Catalyst grad, they are coming with world-class foundational knowledge. This makes mentorship and training easy. They have a very solid foundational knowledge of what is needed to secure our clients' organization and their technologies.

Nik Alleyne
Director of Business Development
Sirius Solutions

Optional Advanced Training

As a CLIC graduate, you may also choose to pursue further learning in cybersecurity by taking additional SANS courses and earning GIAC certifications at a discounted rate.

Questions?

Visit our website: **cybersecurecatalyst.ca/clic**

Get in touch with us: **catalysttraining@torontomu.ca**

Toronto Metropolitan University

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