

# Computer Security Specialist

*By: Aliza & Yashna*

# Job Description



## WHAT IS IT?

- ❖ Train users and promotes security awareness to improve server and network efficiency and ensure system security
- ❖ Confer with users to talk about issues like computer data access needs, security violations, and programming changes.
- ❖ Modify computer security files to incorporate new software, change individual access status, or correct errors
- ❖ Coordinate implementation of computer system plan with establishment personnel and outside vendors
- ❖ Monitor the use of data files and regulate access to safeguard information in computer files
- ❖ Perform risk assessments and execute tests of data processing system to ensure functioning of data processing activities and security measures
- ❖ Stay a step ahead of cyber attackers
- ❖ Stay up to date on the latest methods attackers are using to infiltrate computer systems and on IT security
- ❖ research new security technology to decide what will most effectively protect their organization. This may involve attending cybersecurity conferences to hear firsthand accounts of other professionals who have experienced new types of attacks.
- ❖ Working conditions are good (work in pleasant, well-maintained offices, usually work a forty-hour week or more)
- ❖ Might work unpredictable hours and be on constant to handle emergencies
- ❖ Job can be very stressful because of high level of responsibility
- ❖ Have the same risks as other computer workers (eyestrain, carpal tunnel syndrome, and backache)
- ❖ Customers of computer security specialists are companies and their managers, as the the managers are responsible for keeping their company's information assets safe. Customers can also be the government, as they need protection too (CSI)

# Career Opportunities

- ❖ In Ontario, the salary expectations for a computer security specialist is \$46,157 – \$110,218
- ❖ Also, the job outlook is excellent (3 out of 3 stars on myBlueprint)
- ❖ Employment growth is high and will keep increasing in the future
- ❖ If you are thinking about going into this field, you will likely have a successful career and future



# Technology Connections

- ❖ The types of computers used are PCs and laptops
- ❖ The different languages that are good for cyber security issues and which are used by computer security specialists are
  - Python
  - C
  - Javascript
  - PHP
  - Bash
  - Agda, Haskell, Coq/Inria
  - C++
  - Assembly
  - And Many More!



# *Program Requirements*

- ❖ Ontario Secondary School Diploma (OSSD)
- ❖ May also require grade 12 English and specific math and science credits
- ❖ A senior level credit in Business and Computer Studies is recommended
- ❖ Three additional U or M courses
- ❖ A minimum math average of 75% and no math grade below 65%



## College Programs

❖ Colleges that have programs

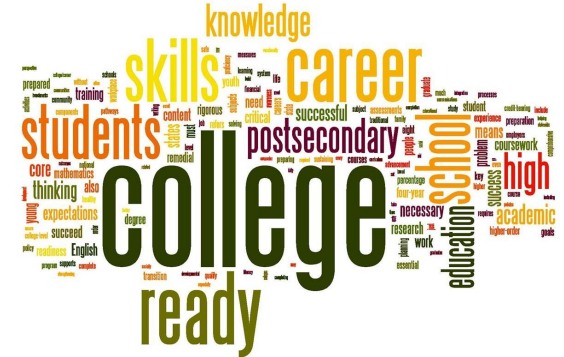
- Conestoga
- Durham
- Fanshawe
- Fleming
- George Brown
- Georgian
- La Cité
- Mohawk
- Seneca
- Sheridan

❖ Type of programs offered

- Co-Op
- Distance Education
- Optional Co-Op
- Regular

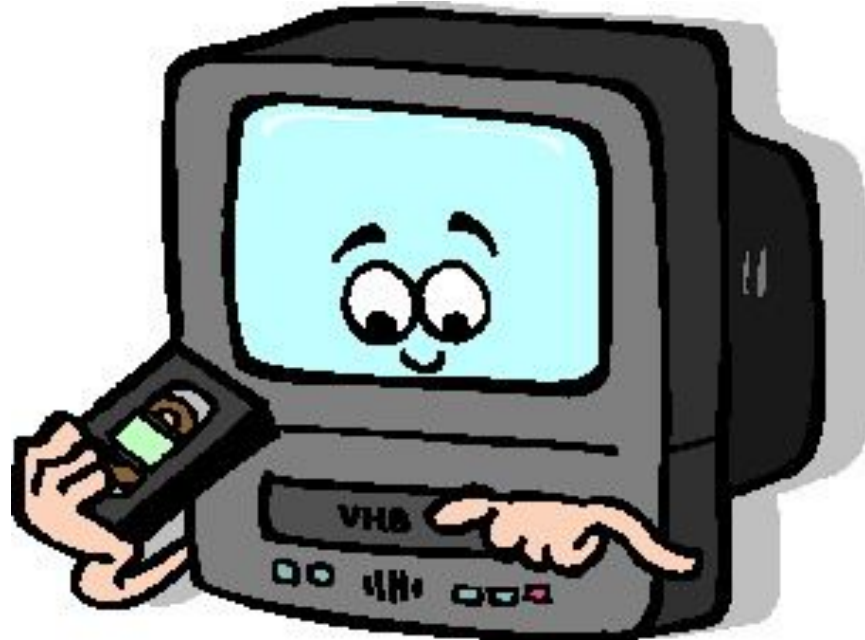
## ❖ Programs Offered at Colleges

- Computer Application Security
- Information Systems Security
- Cyber Security
- Information Security Management
- Network and Security Architecture
- Computer Security and Investigations
- Network and System Security Analysis
- Information Systems Security
- Computer Security Technician
- Technologie de L'information - Sécurité Informatique
- Computer Systems Technology - Network Engineering and Security Analyst
- Cyber Security Analytics
- Bachelor of Technology - Informatics and Security
- Bachelor of Applied Information Sciences



# Video!!

<https://www.youtube.com/watch?v=kMleRJ5bIuA>



# Works Cited

- ❖ <https://job-descriptions.careerplanner.com/Computer-Security-Specialists.cfm>
- ❖ <http://careers.stateuniversity.com/pages/200/Computer-Security-Specialist.html>
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