ABBOTSFORD
SCHOOL DISTRICT
INTERNATIONAL PROGRAM
BRITISH COLUMBIA, CANADA

paloalto
NETWORKS

CYBER SECURITY

The Abbotsford School District has partnered with Palo Alto Networks to train students in Cybersecurity. With business cyber-attacks on the rise, analysts forecast a global shortage of 3.5 million cyber security professionals by 2021. A career in cybersecurity is not only in demand, it is also rewarding and challenging. As a Palo Alto Certified Cybersecurity Professional you get the opportunity to work in a constantly evolving environment. Specialists deal with cutting edge technologies and systems that serve millions and millions of users. Applications for cybersecurity can span from robots, to cars, to websites to corporate or government networks… the possibilities are endless.

Upon completion of the 2 year program, students may choose to write an industry recognized Palo Alto Networks Certified Cybersecurity Associate exam.

Students take 4 courses over 2 years, earning highschool and university credit.

- In second semester of grade 11, students take Cyber Literacy and CIS 11 (Palo Alto 1&2).
- In the first semester of grade 12 students take CIS 12 (Palo Alto 3) and University CIS190
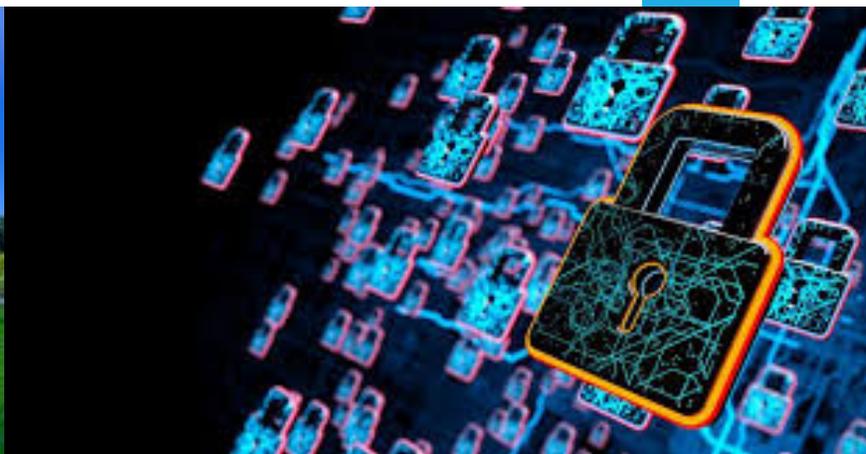
PROGRAM DETAILS

COURSE 1: CYBERSECURITY FOUNDATIONS
Introduction to how vulnerabilities impact enterprise level IT infrastructure systems. Covers methods hackers use such as Threats, Malware, Spamming, Botnets, DDOS, Ransom Ware, APTs, and Phishing, wireless and advanced threat techniques such as ransomware. Looks at effective network security models such as perimeter - based, positive control, zero trust, least privilege, and unit - level trust across information systems. Introduction to endpoint security, HIPS, Configuration Management, Next Generation Firewalls, IDS/IPS, VPN, DLP, UTM, Threat Intelligence and how these technologies are leveraged to effectively secure perimeter and internal networks.

COURSE 2: CYBERSECURITY GATEWAY
Fundamentals of networking: understanding the general concepts involved in maintaining a secure network computing environment. Course will cover general networking fundamentals and implement basic networking configuration techniques.

COURSE 3: CYBERSECURITY ESSENTIALS
Fundamentals of cybersecurity and general security concepts / maintaining a secure network computing environment. Course looks at the nature and scope of today's cybersecurity challenges, strategies for network defense, as well as detailed information about next - generation cybersecurity solutions.
 Instruction in how to deploy a variety of security methodologies as well as technologies and concepts used for implementing a secure network environment.

COURSE 3: Essential Labs
Cybersecurity Design Principles / Next Generation Firewalls / Cryptography, PKI, and Certificate Protection / Advanced Endpoint Protection / Threat Prevention and Intelligence / Mobile/Cloud Security