

Centre de la sécurité des télécommunications

# CANADIAN CENTRE FOR CYBER SECURITY

Teacher Resources Package
November 2020

TLP:WHITE





# **FOREWORD**

The *Teacher Resources Package* is an UNCLASSIFIED publication. The guide provides information about many of the resources available for teachers teaching cyber security and information technology material. The intent is not to recommend any resources, but to provide a listing of different sources that may help advance an individual's career in the field of cyber security.

Disclaimer: The Canadian Centre for Cyber Security and the Communications Security Establishment do not endorse or recommend any of the resources listed in this document. Information provided is intended to be a general summary of publicly available information.

# **REVISION HISTORY**

| Revision | Amendments     | Date          |
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| 1        | First release. | November 2020 |
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# **TABLE OF CONTENTS**

| 1 In | Introduction                        |    |  |
|------|-------------------------------------|----|--|
| 1.1  |                                     |    |  |
| 1.2  | Purpose                             | 4  |  |
| 2 El | Elementary and Highschool Resources | 5  |  |
| 2.1  | Kindergarten to Grade 6             | 5  |  |
| 2.2  | Grade 7 to Grade 12                 | 6  |  |
| 3 Pc | Post-Secondary Resources            | 9  |  |
| 4 G  | Government Based Resources          | 11 |  |
| 4.1  | Government of Canada Resources      | 11 |  |
| 4.2  | Resources from Canadian Allies      | 11 |  |
| 5 A  | Additional Resources                | 13 |  |
| 5.1  | Blogs                               | 13 |  |
| 5.2  | Videos and Webinars                 | 13 |  |
| 5.3  | Podcasts                            | 14 |  |
| 5.4  | Online Games                        | 15 |  |

# 1 INTRODUCTION

There continues to be a growing demand for qualified cyber security professionals and practitioners in Canada and around the world. With the increasing need for cyber security professionals, the need for cyber security-based curricula is also increasing. The right skills and knowledge can give you an advantage over other job candidates. Organizations are looking for talent with superior training and real-world experience.

The resources package for teachers is a valuable tool for teachers and professors to engage students in cyber security content and help them learn about new innovations, tools, and resources they could use to further their knowledge and skills in STEM. It has a list of resources coming from government, industry, and private sector that offer a form of complimentary training and information to further knowledge and skills in STEM including cyber security for students in all levels.

#### 1.1 CANADIAN CENTRE FOR CYBER SECURITY

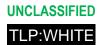
The Canadian Centre for Cyber Security (Cyber Centre) was officially launched in October 2018. The Cyber Centre's Academic Outreach and Engagement team works with universities, colleges, educational associations, education ministerial boards and private sector educators to build cyber security talent and capacity in Canada. The team also works with educators to enhance the community's understanding of cyber security. Its mission is to ensure Canada is a global leader in cyber security by elevating cyber education.

#### 1.2 PURPOSE

The primary audience for this guide is teachers or professors who are either starting to teach or enhance their current cyber security and information technology-based curriculum. This guide will also benefit students who are looking to access more cyber security resources if they are interested in pursuing cyber security as well.

The Cyber Centre and the Communications Security Establishment do not endorse or recommend any of the resources listed in this document. Information provided is only intended to be a general summary of publicly available information.

Every effort has been made to ensure accuracy of information, however, due to the dynamic nature of cyber security, this package will be reviewed on a regular basis to ensure it reflects the most current resources. New resources and other suggested changes can be submitted by email to contact@cyber.gc.ca.



### 2 ELEMENTARY AND HIGHSCHOOL RESOURCES

#### 2.1 KINDERGARTEN TO GRADE 6

**Common Sense Education:** All students need digital citizenship skills to participate fully in their communities and make smart choices online and in life. Their award-winning K-12 Digital Citizenship Curriculum

- Addresses top concerns for schools;
- Prepares students with critical 21st-century skills;
- Supports educators with training and recognition; and
- Engages the whole community through family outreach.

#### Website(s): https://www.commonsense.org/education/digital-citizenship/curriculum

**Cybint:** Cybint is a global cyber education company with a commitment to reskilling the workforce and upskilling the industry in cybersecurity. With innovative and leading-edge education and training solutions, Cybint tackles cybersecurity's two greatest threats: the talent shortage and the skills gap.

#### Website(s): https://www.cybintsolutions.com/about/

**Scratch Animation:** Scratch is designed especially for ages 8 to 16 but is used by people of all ages. Millions of people are creating Scratch projects in a wide variety of settings, including homes, schools, museums, libraries, and community centers. Students can use Scratch to code their own interactive stories, animations, and games. In the process, they learn to think creatively, reason systematically, and work collaboratively — essential skills for everyone today. Educators are integrating Scratch across many different subject areas and age groups.

#### Website(s): https://scratch.mit.edu/projects/editor/?tutorial=getStarted

**Kids Code Jeunesse:** Kids code jeunesse (kcj) is a bilingual Canadian not for profit organization whose aim is to give every Canadian child access to digital skills education, with a focus on girls and underserved communities. They want children in Canada to have an opportunity to learn computational thinking through code.

#### Website(s): <a href="https://kidscodejeunesse.org/">https://kidscodejeunesse.org/</a>

**Code Club**: Code Club Canada is a bilingual nationwide network of free, volunteer-led coding clubs for children aged 8-12 to build and share their ideas and learning along the way. These clubs are run in schools, libraries, and community centres for 8 weeks.

#### Website(s): <a href="https://codeclub.ca/">https://codeclub.ca/</a>

**Digital Citizenship Education in Saskatchewan Schools:** Digital Citizenship Education in Saskatchewan Schools is a policy guide that was developed for school division officials to work with school administrators and teachers to help students build an understanding of safe and appropriate online behaviour. The guide offers: a roadmap for developing division wide digital citizenship policies and school-specific digital citizenship guidelines and procedures; tools and resources to support digital citizenship education; and a digital citizenship continuum for Kindergarten through Grade 12 students.



#### Website(s): https://iamstronger.ca/userdata/listings/e477b8dd63be20ea555fbdf569011698.pdf

**Technovation:** Technovation is a global tech education non-profit that empowers girls and families to become leaders, creators, and problem-solvers. They offer two programs – <u>Technovation Girls</u> and <u>Technovation Families</u> – which bring kids and adults together to solve big problems in their communities. Technovation also offers a French based program as well.

Website(s): <a href="https://technovationchallenge.org/">https://technovationchallenge.org/</a>, <a href="https://technovationchallenge.org/">https://technovationchallenge.org/</a>)

**Internet Safety for Kids & Families:** Internet Safety for Kids and Families (ISKF) program has provided education to parents, teachers, and youth to help prevent and address online risks and teach good digital citizenship.

Website(s): : https://www.trendmicro.com/en\_my/initiative-education/internet-safety-kids-families.html

**Le Centre Franco – Activity Sheets on Identity and Digital Citizenship (in French):** Three series of educational activities complement the quiz modules on identity and digital citizenship provided to school boards. These activities are intended for students from grades 3 to 10, as well as their parents. They do not require the use of technology since they focus on conversation, oral communication and sharing.

Website(s): https://www.lecentrefranco.ca/tactic/ressources/fiches-dactivites-sur-lidentite-et-citoyennete-numerique/

#### **2.2 GRADE 7 TO GRADE 12**

**Girls Who Code:** Girls Who Code Clubs are free programs that get girls ages 11-18 excited about coding and computer science. Clubs can run before, during or after-school, on weekends or over the summer. In Clubs, girls engage in fun and simple online coding tutorials, build community through interactive activities, learn about inspiring role models in tech, and work together to design solutions to real-world problems facing their communities. This is a bilingual course.

Website(s): <a href="https://ca.girlswhocode.com/">https://ca.girlswhocode.com/</a>

**Hackergal:** Hackergal is a charitable organization that inspires girls across Canada to explore the opportunities in code. With women vastly underrepresented in the tech industry, Hackergal strives to inspire a new wave of Canadian female coders to bring equality to the booming industry.

Website(s): <a href="https://hackergal.org/">https://hackergal.org/</a>

**Media Smarts:** Canada's Centre for digital and media literacy is home to one of the world's most comprehensive collections of digital and media literacy resources – in English and in French. It includes tip sheets, infographic for teachers to use and display to students in classrooms, and games to help the youth learn about good cyber hygiene. The infographics and other resources linked below are useful to teachers as well as parents to encourage good cyber hygiene practices.

Website(s): https://mediasmarts.ca/



Information and Communications Technology Council (ICTC) – CyberTitan: Canada's Cyber Security Education Initiative – is offered by the Information and Communications Technology Council (ICTC) in affiliation with the (US) Air Force Association's CyberPatriot Program which is presented by the Northrop Grumman Foundation. This collaboration of National Youth Cyber Education Programs seeks to promote education and awareness in technology education and foster excellence in middle and high school students pursuing careers in cyber security or other science, technology, engineering, and mathematics (STEM) areas.

#### Website(s): <a href="https://www.cybertitan.ca/">https://www.cybertitan.ca/</a>

**ICTC's FIT Program Concentration:** The Focus on IT (FIT) program encourages youth to learn information and communications technology (ICT) skills at the secondary school level. Their focus is on:

- Media includes web design and development, social and mobile media, interactive games, and ecommerce. Blend business, technology, and leadership skills to address exciting opportunities in the workplace;
- Software Design and Development includes solution design, integration, programming, and database development. Use your technical competencies to develop applications and systems to solve real-world problems;
- Business and Information Analysis includes business and information analysis or systems architecture.
   Use your technical and business skills to analyze and respond to business needs and recommend affordable ICT solutions;
- Network Systems and Operations includes technical and communications platform maintenance critical to the smooth operations of an organization. Use your skills to implement and maintain mission-critical hardware and software: and
- General Skills Business and Technical Skills helps students learn about the leadership, management style and operations of different organizations. Technical skills help students develop their ICT abilities to perform effectively in the workplace.

#### Website(s): <a href="https://www.digitalyouth.ca/hub/fit/">https://www.digitalyouth.ca/hub/fit/</a>

**Raspberry Pi Foundation**: The Raspberry Pi Foundation's mission is to put the power of computing and digital making into the hands of people all over the world. They do this so that more people can harness this power for their work, to solve problems that matter to them, and to express themselves creatively.

#### Website(s): <a href="https://www.futurelearn.com/partners/raspberry-pi">https://www.futurelearn.com/partners/raspberry-pi</a>

**CyberTaipan**: CyberTaipan is an Australian cyber security competition that is modelled on the US Air Force Association's <a href="CyberPatriot">CyberPatriot</a> program. This program has been running successfully for 11 years and has already expanded into Canada as <a href="CyberTitan">CyberTitan</a>, the UK as <a href="CyberCenturion">CyberCenturion</a> and Saudi Arabia as <a href="CyberArabia">CyberArabia</a>. The competition puts teams of high school aged students in the position of newly hired IT professionals, tasked with managing the network of a small company.

#### Website(s): https://www.austcyber.com/educate/competitions-and-challenges/cybertaipan

**CyberEdu Project (in French):** The CyberEdu project helps teachers promote digital security for their students through technical, organizational and governance concepts. It aims to incorporate cybersecurity in all computer science training, including engineering programs, universities, and private schools.



Website(s): <a href="https://www.ssi.gouv.fr/actualite/cyberedu-des-documents-pedagogiques-a-destination-des-enseignants-en-informatique/">https://www.ssi.gouv.fr/actualite/cyberedu-des-documents-pedagogiques-a-destination-des-enseignants-en-informatique/</a>

**Éduquer à la cybersécurité (in French):** The *Éduquer à la cybersécurité* training program helps teachers understand the importance of cybersecurity, learn how to stay safe online, find ways of introducing these new realities to students and ultimately include this knowledge in the planning and delivery of their learning activities. To find out more on this program, visit <u>cadre21.org</u>. Cadre 21 supports Francophone stakeholders in the education field through professional development as it relates to the main educational challenges of the 21<sup>st</sup> century.

Website(s): https://cursus.edu/formations/43532/eduquer-a-la-cybersecurite

**Canada en programmation (in French)**: Canada en programmation designs and implements technology learning programs and creates teaching partnerships for all Canadians.

Website(s): <a href="https://www.canadalearningcode.ca/fr/accueil/">https://www.canadalearningcode.ca/fr/accueil/</a>

**FIT for Educators**: The Focus on IT (FIT) program encourages youth to learn information and communications technology (ICT) skills at the secondary school level. The aim is to encourage young Canadians to pursue post-secondary education and enter the workforce equipped with high-demand digital and ICT skills that will help them achieve their career goals.

Website(s): https://www.digitalyouth.ca/hub/fit/

**Digital Youth's Student Learning Days:** Student Learning Days are opportunities for middle and secondary school students to develop digital skills they will need for their future professional lives. Students participate in a full or half-day of experiential learning activities geared toward information and communications technology (ICT) themes, such as Cybersecurity and Digital Citizenship.

Website(s): https://www.digitalyouth.ca/programs/

**Kids in the Know:** Kids in the Know is the Canadian Centre for Child Protection's interactive safety education program designed for students from Kindergarten to Grade 9. The purpose of the program is to help educators teach children and youth effective personal safety strategies in an engaging, age-appropriate, and interactive way that builds resiliency skills and reduces their likelihood of victimization in the online and offline world.

Website(s): https://www.kidsintheknow.ca/app/en/about

**Zoe and Molly Online**: Zoe and Molly Online is part of the Kids in the Know program, which helps kids learn how to stay safe online.

Website(s): https://cyberjulie.ca/app/en/index

**STEM Teacher Training Program:** This training program is offered to teachers from kindergarten to grade 12 and focuses on STEM skills. It includes professional development opportunities designed to help them to give kids the necessary skills and enhance learning outcomes.

Website(s): <a href="https://www.actua.ca/en/">https://www.actua.ca/en/</a>



# 3 POST-SECONDARY RESOURCES

**National Security Collaboration Center:** The goal of this initiative is to establish a National Security Collaboration Center (NSCC) at The University of Texas at San Antonio (UTSA) to advance research, education, and workforce development in the areas of cybersecurity, data analytics, and cloud computing. The NSCC will build a collaborative and impactful ecosystem engaging government, industry, and academia to solve the nation's greatest issues surrounding cybersecurity.

Website(s): http://www.utsa.edu/president/reporting-offices/nscc/

**Springboard's Guide to Cybersecurity Salaries:** A good accompaniment to CompTIA's <u>certification roadmap</u>, the guide is a helpful reference if you're toying with the idea of breaking into the field. It provides an overview of a career in the cybersecurity field, as well as a detailed breakdown of what you can expect to make as a professional, depending on the role, location, and the level of education or certification you achieve.

Website(s): https://www.comptia.org/content/it-careers-path-roadmap

**Cybrary's Glossary of Cybersecurity Terms:** IT is full of jargon and confusing terminology. You may want to turn to Cybrary's expansive glossary of cybersecurity vocabulary for help. The glossary covers basic cybersecurity language that non-IT folks would be familiar with—like phishing or <u>Trojan horse</u>—as well as more complex industry concepts, such as WHOIS and a <u>TCP full open scan</u>.

Website(s): <a href="https://www.cybrary.it/glossary/">https://www.cybrary.it/glossary/</a>

**Cybersecurity Education for Universities**: TrendMicro established the Cybersecurity Education for Universities (CEU) program to help address the gap by offering guidance, expertise, and support to college cybersecurity programs free of charge. TrendMicro works collaboratively with schools, typically focusing on one or more of the following areas:

- Faculty enablement and training;
- Curriculum alignment and course consultation; and
- Technical seminars & webinars.

Website(s): https://www.trendmicro.com/en\_my/initiative-education/cybersecurity-education-universities.html

**Center for Cyber Safety and Education:** The Center for Cyber Safety and Education is the non-profit, charitable foundation of (ISC)<sup>2</sup>, the sanctioning organization that educates and certifies cybersecurity. IT offers cybersecurity education and awareness programs for students, parents, teachers, and members of society across all age groups and demographics to secure their online life.

Website(s): <a href="https://iamcybersafe.org/s/">https://iamcybersafe.org/s/</a>

**Springboard's Foundations of Cybersecurity:** Whether you are new to the industry or you are looking for a refresher on the basics, Springboard's Foundations of Cybersecurity learning path is the perfect place to begin your journey. With 38 hours of free content and 40 resources across nine core modules, this free course will equip you with the fundamentals you will need to delve further into the field. You can view the curriculum and get started by clicking the link above.



#### Website(s): https://www.springboard.com/resources/learning-paths/cybersecurity-foundations/

**Cybrary's Free Training and Community Resources:** Whether you classify your information security experience as beginner, intermediate or expert, Cybrary will have courses and training tailored to your skill set. There are more than 150 courses in the catalog, including classes on cryptography, secure coding, advanced penetration testing, virtualization management, and more.

#### Website(s): <a href="https://www.cybrary.it/catalog/cybersecurity/">https://www.cybrary.it/catalog/cybersecurity/</a>

**SANS Cyber Aces Online:** Developed by the SANS Institute, this free course aims to help alleviate the shortage of cybersecurity professionals by introducing students and professionals to the field. It is designed to provide novices with many of the core security principles needed to kick off a cybersecurity career.

#### Website(s): <a href="https://www.cyberaces.org/">https://www.cyberaces.org/</a>

**Cyber Security Education:** CybersecurityEducation.org is an online directory of cyber security education and careers. They strive to be the finest resource available allowing prospective students to:

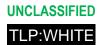
- Search for schools by location, degree, and/or subject area;
- Compare and research schools;
- Request free information from schools; and
- Explore education options and career paths.

#### Website(s): <a href="https://www.cybersecurityeducation.org/resources/">https://www.cybersecurityeducation.org/resources/</a>

**Cyber New Brunswick (NB):** CyberNB operates under four core pillars that focus on growing an integrated, internationally recognized cybersecurity ecosystem spanning education, careers, research, commercialization, and more. This bilingual resource has many resources to offer to teachers and students for enhancing cyber security knowledge and skills.

Website(s): <a href="https://cybernb.ca/">https://cybernb.ca/</a>

10 TLP: WHITE



## 4 GOVERNMENT BASED RESOURCES

#### 4.1 GOVERNMENT OF CANADA RESOURCES

**Learning Hub (LH):** The Learning Hub (LH) is a trusted source for leading-edge learning activities and programs for cyber security and <u>COMSEC</u> professionals working within the Government of Canada or with our domestic partners. The LH also provides services, guidance and advice on cyber security training and education to industry, academia, and other levels of government. This is a bilingual resource.

Website(s): https://cyber.gc.ca/en/learning-hub

**Get Cyber Safe:** GetCyberSafe is a national public awareness campaign to educate all Canadians about cyber security and the steps they can take to protect themselves online. This is the Cyber Centre's source of advice and quidance for those new to cyber security as well as the public. This is a bilingual resource.

Website(s): https://www.getcybersafe.gc.ca/index-en.aspx

**Employment and Social Development Canada**: Employment and social development programs and policies and activities related to their development to support the Government of Canada. This includes consultations, frameworks, plans and research. This is a bilingual resource.

Website(s): https://www.canada.ca/en/employment-social-development/programs.html

**Royal Canadian Mounted Police (RCMP):** One of the RCMP's strategic priorities is to reduce youth involvement in crime, both as victims and offenders. This is a bilingual resource.

Website(s): https://www.rcmp-grc.gc.ca/cycp-cpcj/is-si/isres-ressi-eng.htm and https://www.rcmp-grc.gc.ca/en/youth-safety/centre-for-youth-crime-prevention

#### 4.2 RESOURCES FROM CANADIAN ALLIES

**The Department of Homeland Security:** The Department of Homeland Security (DHS) works to secure the nation from the many threats Americans face. This requires the dedication of more than 240,000 employees in jobs that range from aviation and border security to emergency response, from cybersecurity analyst to chemical facility inspector.

Website(s): https://www.dhs.gov/be-cyber-smart/cyber-lessons#section-app-security

National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework: The National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework (NICE Framework), published by the National Institute of Standards and Technology (NIST) in NIST Special Publication 800-181, is a nationally focused resource that establishes a taxonomy and common lexicon to describe cybersecurity work, and workers, regardless of where, or for whom, the work is performed.

Website(s): <a href="https://www.nist.gov/itl/applied-cybersecurity/nice/nice-cybersecurity-workforce-framework-resource-center">https://www.nist.gov/itl/applied-cybersecurity/nice/nice-cybersecurity-workforce-framework-resource-center</a> and <a href="https://studentprivacy.ed.gov/topic/security-best-practices">https://studentprivacy.ed.gov/topic/security-best-practices</a>



**National Integrated Cyber Education Research Center (NICERC):** At NICERC, curriculum specialists travel across the country, leading professional development workshops for K-12 teachers. Their sessions give you the resources and information that you need to teach their curriculum in your classroom and to help your students to become aware of cyber issues, engage in cybersecurity education, and pursue cyber pathways.

Website(s): https://www.dhs.gov/be-cyber-smart/cyber-lessons#section-app-security

The National Cyber Security Centre (NCSC): The NCSC provides a single point of contact for SMEs, larger organisations, government agencies, the public and departments. They also work collaboratively with other law enforcement, defence, the UK's intelligence and security agencies and international partners. The infographics on this page cater to not only post-secondary students, but elementary, middle, and high school students as well. They also serve as a guideline to teachers to create their own cyber security tools for their classrooms and students.

Website(s): <a href="https://www.ncsc.gov.uk/information/resources-for-schools">https://www.ncsc.gov.uk/information/resources-for-schools</a> and <a href="https://www.ncsc.gov.uk/files/NCSC\_NEN-cards-english-home-print.pdf">https://www.ncsc.gov.uk/files/NCSC\_NEN-cards-english-home-print.pdf</a>

**AustCyber:** AustCyber aims to grow an Australian cyber security ecosystem, export Australia's cyber security to the world, and make Australia the leading centre for cyber education.

Website(s): https://www.austcyber.com/

**CySCA:** CySCA is a 'hacking' competition run by an alliance of Australian Government, business and academic professionals who are committed to finding the next generation of Australian cyber security talent.

Website(s): https://www.cyberchallenge.com.au/

**U.S. Department of Homeland Security's Virtual Training:** This site features free cybersecurity courses and training materials to those who want to broaden their knowledge of the security of industrial control systems. You can access 11 courses that cover subjects from operational security for control systems to current trends in cybersecurity vulnerabilities that put industrial control systems at risk. And if you are seeking an in-person experience, the agency also periodically offers instructor-led courses.

Website(s): <a href="https://ics-cert-training.inl.gov/learn">https://ics-cert-training.inl.gov/learn</a>

**FBI Safe Online Surfing (SOS):** FBI-SOS is a free, fun, and informative program that promotes cyber citizenship by educating students in third to eighth grades on the essentials of online security. For teachers, the site provides a ready-made curriculum that meets state and federal Internet safety mandates, complete with online testing and a national competition to encourage learning and participation.

Website(s): <a href="https://www.fbi.gov/fbi-kids">https://www.fbi.gov/fbi-kids</a>

# 5 ADDITIONAL RESOURCES

#### 5.1 BLOGS

**Springboard's Cybersecurity Blog Posts:** The blog continually breaking down topics on cybersecurity and sharing free information that professionals can use to advance their careers or <u>break into the field</u>. Whether it's advice about which <u>programming languages</u> to learn or pointers on <u>creating a cybersecurity resume</u>, the blog is frequently updated with new tips and articles to keep you informed.

Website(s): https://www.springboard.com/blog/category/cybersecurity/

**Schneier on Security Blog:** Schneier on Security consistently rates as one of the top cybersecurity personal websites in the blogosphere—and for good reason. Security expert Bruce Schneier is the author and is <u>renowned in his field</u>. He's currently the chief technology officer at IBM Resilient, a fellow at Harvard University's Berkman Center, and is constantly contributing to and <u>quoted in media outlets</u>.

Website(s): <a href="https://www.schneier.com/">https://www.schneier.com/</a>

**Krebs on Security:** Another consistently lauded cybersecurity blog, this one comes from Brian Krebs, who worked as a reporter for The Washington Post from 1995 to 2009 and authored more than 1,300 posts for the Security Fix blog. His interest in the topic grew after his home network was attacked in 2001. On his influential blog, recurring themes include online crime investigations, data breaches, and cyber justice.

Website(s): <a href="https://krebsonsecurity.com/">https://krebsonsecurity.com/</a>

#### 5.2 VIDEOS AND WEBINARS

**TED Talks on Cybersecurity:** TED Talks are known for their compelling delivery, informative nature, and 18-minute time limits. They are also completely free to watch. Platforms like YouTube and <a href="tel:theory.com/t

Website(s): https://www.springboard.com/blog/12-must-watch-cybersecurity-ted-talks/

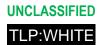
**Stanford University's Free Cybersecurity Webinars and Videos:** Stanford offers free <u>cybersecurity webinars</u> and a video talk series featuring some of the university's computer security experts. The school also has a deep bench of free videos on computer science and security on its YouTube channel.

Website(s): <a href="https://computersecurity.stanford.edu/free-online-videos">https://computersecurity.stanford.edu/free-online-videos</a>

**BrightTALK's Webinar Stream:** Hear from thousands of thought leaders and experts by tuning in to BrightTALK's comprehensive stream of cybersecurity-related webinars. Thousands of videos are available in the IT security stream, which is constantly being updated. Especially useful for professionals who are further along in their cybersecurity careers, BrightTALK's also includes options for non-English speakers.

13

Website(s): https://www.brighttalk.com/community/it-security



**BeyondTrust's Webinar Offerings:** Cybersecurity solution provider BeyondTrust provides a variety of products to help companies protect themselves against cyber threats. And it offers a wide breadth of educational resources like webinars, white papers, data sheets, and case studies. The firm's webinars examine best practices, expert tips for closing security gaps, and other applicable concepts that help organizations guard against attacks.

Website(s): https://www.beyondtrust.com/resources/webcasts

**InfoSec Institute's Introduction to Cybersecurity Careers:** Developed for grades K-12, this video explains the cybersecurity skills shortage and encourages students to pursue a career in this growing field. It tackles industry stigmas and stereotypes head-on by outlining what cybersecurity professionals do, and the wide variety of roles they can fill. The video also includes tips to help students prepare for a career in the field, including taking online courses, finding a mentor, and participating in competitions like the Global Cyber Olympics.

Website(s): https://www.youtube.com/watch?v=-AkuKKJ8dN0

**branchÉ** (in French): Three videos from branchÉ on Internet safety are available on this YouTube channel. branchÉ was a free online resource on Internet safety designed for students in grades 4, 5 and 6. Its goal was to help students develop safe and healthy online behaviours, such as netiquette, security, privacy and personal relationships (e.g., recognizing and managing cyberbullying), just as they would in everyday life. Unfortunately, the full resource is no longer available.

Website(s): https://www.youtube.com/playlist?list=PL-3fUblIRJtJULV8\_MZR4a1A7qHvqOVuu

#### **5.3 PODCASTS**

**Risky Business:** Consume cybersecurity-related content anytime, anywhere by plugging in this podcast when you are on the go. Launched in 2007, Risky Business stands out for its focus on current industry news and interesting guest interviews

Website(s): https://risky.biz/about/

**Security Weekly:** One of the longest-running cybersecurity podcasts, Security Weekly has been connecting the information security community since 2005. Each podcast is supplemented with detailed notes. And they are <u>broadcasted live</u> on YouTube and Facebook.

Website(s): <a href="https://securityweekly.com/">https://securityweekly.com/</a>

**Security Now:** Available in audio and video formats, Security Now is a weekly podcast hosted by TWiT Netcast Network founder Leo Laporte and Steve Gibson, who created the first anti-spyware program (and is credited with coining the word spyware). The show runs about two hours and focuses on helping the audience ramp up their personal security, with topics like password security, firewalls, and VPNs.

Website(s): <a href="https://twit.tv/shows/security-now">https://twit.tv/shows/security-now</a>

**Internet Storm Center StormCast:** If two-hour podcasts are not for you, check out the bite-sized daily updates from the SANS Internet Storm Center. These "StormCasts" distill the most important network security news of the day into five minutes or so, ideal for commuters.

Website(s): https://isc.sans.edu/podcast.html



**Exploring Information Security:** Host Timothy De Block began his IT career as an electronics technician in the U.S. Navy. After leaving the military, he discovered an interest in security, eventually becoming an information security officer for a South Carolina state agency. On his weekly show, he shares his expertise and talks to infosec industry leaders about the latest news and trends.

Website(s): http://www.timothydeblock.com/eis

**La French Connection (in French)**: This international podcast focuses on security and hacking and includes news and opinions from Quebec and Europe.

Website(s): https://securite.fm/

France culture (in French): Includes podcasts, shows, and articles that shed light on cybersecurity.

Website(s): https://www.franceculture.fr/theme/cybersecurite

#### **5.4 ONLINE GAMES**

**Interland:** Be Internet Awesome teaches kids the fundamentals of digital citizenship and safety so they can explore the online world with confidence.

Website(s): https://beinternetawesome.withgoogle.com/en\_us/interland

**Cybersafe Care**: Cybersafe Care is a public education campaign for parents, caregivers, and educators to learn how to help keep kids safe online and teach safe use of technology while enjoying social media and technology. It is designed to be a supportive information resource for parents, caregivers, and educators. The goal is to provide reliable information (including PEI specific info) to caregivers in their journey to keep youth cybersafe and cybersmart.

Website(s): <a href="https://www.cybersafecarepei.ca/">https://www.cybersafecarepei.ca/</a>

15 TLP: WHITE